BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

WESTERN ZONE BENCH AT PUNE

APPEAL NO. 144 of 2025

IN THE MATTER OF:

Vijaykumar Karsanbhai Gadhavi &Ors. ... Appellant (s)

- Versus -

Union of India & Ors. ... Respondent (s)

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Date: 10.09.2025
Place: Pune

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

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REPLY AFFIDAVIT ON BEHALF OF GREENFIELD CHEMICAL COMPLEX, GHCL LTD. (RESPONDENT NO. 5) TO THE ORIGINAL APPLICATION

1. That this Hon'ble Tribunal is currently seized of the above-mentioned appeal challenging the legality and correctness of the Order granting commencement of work dated 21.03.2025 by the Deputy Secretary of Forest, Gandhinagar, as well as the Grant of Stage I Forest Clearance dated 18.07.2023 and Stage II Forest Clearance dated 04.01.2024 by Ministry of Forrest and Environment and Climate Change (hereinafter referred to as 'MoEF&CC') under the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 (hereinafter referred to as 'VSSA 1980'), for the diversion of 0.9689 ha of forest land for laying part of the seawater intake and effluent disposal pipeline and passage for related construction equipment movement in Mandvi Village, Kachchh District, Gujarat in favor of the Respondent No. 5, Greenfield Chemical Complex Ltd. (hereinafter referred to as 'Answering Respondent or GHCL Ltd.').

2. That it is alleged, albeit wrongly, that the Stage I Forest Clearance dated 18.07.2023, Stage II Forest Clearance dated 04.01.2024 and the Order granting commencement of work dated 21.03.2025 by the Deputy Secretary of Forest, Gandhinagar, are not in accordance with the Forest Conservation Rules 2022, which has been replied to in the subsequent paragraphs.

3. That on 27.06.2025, this Hon'ble Tribunal directed the Appellants to file an additional affidavit clarifying the distance of the turtle nesting site from where the pipelines through underground micro-tunnelling are proposed. This Hon'ble Tribunal also noted the objections of the Answering Respondent to the admissibility of the Appeal in view of expiration of the Limitation period for challenging Stage I and Stage II Forest Clearance, reliance on the Forest Conservation Rules, 2022 which have been superseded by the Van Sanrakshan Evam Samardhan Adhiniyam, 2023 and allegations of impact on marine and coastal biodiversity without challenging the Coastal Regulation Zone Clearance, which was granted on 26.12.2023.

4. That subsequently the Appellants herein filed an Additional Affidavit on 31.07.2025 and the matter was listed for admission on 01.08.2025. Based on the preliminary submissions of the Appellant herein on 01.08.2025, this Hon'ble Tribunal issued Notice and granted two weeks to the Answering Respondent herein to submit its Reply Affidavit to the Appeal. The formal Notice and Order was uploaded only on 04.09.2025 by this Hon'ble Tribunal. Hence the delay in filing this Reply.

5. That Answering Respondent has been arrayed as Respondent No. 5 in the present Appeal and is submitting the instant Reply to the Appeal as well as the Additional Affidavit dated 31.07.2025. The Answering Respondent is the Project Proponent, who is establishing a state of the art soda ash plant in Mandvi Village, Kachchh District, Gujarat with an estimated investment of Rs. 7000 crores. The answering Respondent is one of the leading manufacturers of soda ash which serves the glass, ceramics, baking soda and detergent industries. Apart from other industrial applications, it is also used for solar glass and lithium-ion batteries. Its products also are an important raw material for industries such as fire extinguishing, bakeries, cleaning agents

among others. One of the statutory clearances namely the FCA 1980 clearance was obtained through a detailed process and scrutiny by the MoEF&CC. Consequently, the impugned Work Order dated 21.03.2025, Stage I Forest Clearance dated 18.07.2023 and Stage II Forest Clearance dated 04.01.2024 were obtained by the answering Respondent under the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and Van (Sanrakshan Evam Samvardhan) Rules, 2023, for diversion of 0.9689 ha of forest land, only for establishing seawater intake and outfall effluent disposal pipeline, 15 meters below the ground/forest land, for the soda ash plant. It is pertinent to mention that the said Forest Clearance does not involve any felling of trees on forest land, and the Answering Respondent will be utilising non-forest land for the movement of the construction equipment for the seawater intake and outfall pipeline and for future maintenance activities.

6. That the Answering Respondent, at the outset, submits that all those averments in the present Reply Affidavit that have not been specifically admitted are herewith denied and are not to be construed as having been accepted by the Answering Respondent as if traversed seriatim.

7. That before averting to the para wise reply on the merits of the Appeal, Answering Respondent seeks to place on record its Preliminary Submissions and Objections which in its humble opinion are crucial for a holistic adjudication of the present matter.

I. Preliminary Objections on Maintainability of the Appeal.

A. Appeal is barred by Limitation

8. That the Appellant has relied upon the Judgments of this Hon’ble Tribunal in Vimal Bhai & Ors. v. Union of India and Ors. (Appeal No. 07 of 2012), Milind Pariwakam & Anr. v. Union of India and Ors (O.A. No. 52 of 2015) and the Judgment of the Hon’ble Supreme Court in Citizens for Green Doon v. Union

of India & Ors. (2021 SCC OnLine SC 1074) for submitting that the present Appeal is not time-barred as Stage I and Stage II Forest Clearance cannot be challenged and only the Section 2 Order of the State Government can be challenged in an Appeal under Section 16(e) of the National Green Tribunal Act, 2010.

9. That this Hon'ble Tribunal, as well as the Hon'ble Supreme Court, in a catena of cases, have admitted and heard a challenge to Stage II Forest Clearance under Section 16(e) of the National Green Tribunal Act, 2010. Thus, there is no bar to challenge the Stage II Forest Clearances. Stage I Forest Clearances are not appealable and in any case, they merge with Stage II and the subsequent State Order of Forest Clearance under Section 2 of the FCA. It must be emphasised that a plain reading of Section 2, which is appealable under the NGT Act, 2010 includes the component of prior approval by the Central Government as a necessary pre-requisite. Therefore, it is submitted that a Stage II, which is the most important prerequisite for the diversion of forestland, can also be challenged and there have been judgments prior to that of *Vimal Bhai* as relied upon by the Appellant, where such Section 2 has been challenged and adjudicated upon. Further, any decision of any coordinate Bench is not binding on this Bench, as it has been adjudicated in a catena of cases. It is also pertinent to note that in the case of Citizens for Green Doon v. Union of India & Ors. (2021 SCC OnLine SC 1074), the Appellants therein had challenged the tree felling permission after the grant of Stage I or In-principle approval, even before the Stage II Forest Clearance was granted. However, the Appellants in the present Appeal have remained quiet for more than one year and have now, at a very belated stage, challenged the Stage I Forest Clearance dated 18.07.2023 and Stage II Forest Clearance dated 04.01.2024. The same counsels in both cases could be a mere coincidence! This Hon'ble Tribunal in

the case of Vimal Bhai has clarified that the date of communication of the clearance will be from the date on which it is uploaded. Thus, the Appellants had more than a year from 04.01.2024 to challenge the Stage II Forest Clearance, however, the Appellants chose to remain silent and have now approached this Hon'ble Tribunal by challenging the Section 2 Order dated 21.03.2025, which is only a commencement of work Order by the State Government, to avoid limitation. In fact, the Appellants were well-aware of the grant of Stage I and Stage II Forest Clearance, as the same has been referenced by the Ministry of Environment, Forest and Climate Change in the Environmental Clearance dated 12.12.2024, which has been challenged by the Appellants in Appeal No. 19/2025. It is only when the Answering Respondent raised a preliminary objection to the allegations of diversion of forest land by the Appellants in its Counter Affidavit dated 22.03.2025 in Appeal No. 19/2025 and brought on record the Section 2 Work Order dated 21.03.2025, the same Appellants moved the present Appeal on 19.04.2025 challenging the said Order along with Stage I and Stage II Forest Clearance. Furthermore, the Applicants in the Appeal and the Additional Affidavit have relied upon responses dated 16.08.2022 to an RTI application, with regard to the presence of turtles in Village Mandvi, filed by one Valji Jashraj Charan, who is not related to this case nor is an Appellant and neither his bonafides are established in any manner. This issue of turtles is already a subject matter of the EC in the Appeal No. 19 of 2025 and therefore may not be reagitated in a Forest Clearance proposal. The second RTI submitted by way of Additional Affidavit dated 31.07.2025 filed by the Appellants is again by some Mitrajit Vijaykumar Gadhvi, who is an Advocate and is neither a party to this case nor there is any material to show how he was affected by such Forest Clearance. Such practice has been deprecated by this Tribunal as well as the Constitutional Courts in a

catena of cases. There is no material on record to establish the connect between the Appellants and the Advocate whose RTI is being used. There is no material to show whether there is any permission was sought from the Advocate to use this information, which could be for a very different purpose than this Appeal. This smacks of a larger connivance between a variety of stakeholders who may or may not be associated either with this appeal or this project. There is no primary material which has been produced by the Appellant to suggest the Bonafide of such RTI applicants. Not a single representation or complaint has been shared, highlighting their grievance to the Divisional Forest Officer or the Conservator Forest. It is also pertinent to mention that the report of the Divisional Forest Officer was also uploaded in November 2021 on the public portal of Parivesh. Thus, the Applicants herein had ample opportunity to approach this Hon'ble Tribunal, however, the Applicants in an after-thought , only using a material in another case on EC, has decided challenge the permission for commencement of work Order by the State for reasons best known to them. True copy of the Screenshot of the Parivesh portal of the Application for forest clearance is marked and annexed herein as **ANNEXURE R/1.**

B. Appellants are barred from alleging plural remedies under Rule 14 of the National Green Tribunal (Practice and Procedure) Rules, 2011

10. That it is further submitted that the Appellants under the garb of challenging the Forest Clearance, have also alleged violation of Coastal Regulation Zone Notification of 2011 by misrepresenting that the project falls within the CRZ IA and alleging that the adverse impact on the ocean and marine life due to the intake and outfall pipeline has not been considered at the time of grant of

Forest Clearance by the Ministry of Environment Forest and Climate Change. This Hon'ble Tribunal in a catena of cases [DV Girish & Ors. vs the Secretary to Government & Ors. (Application No.154 of 2014 (SZ) AND M.A. No. 284 of 2014 (SZ)**)**, Vikas K. Tripathi Mumbai Vs. The Secretary, MoEF reported in 2014 ALL (I) NGT Reporter (3) (Pune) 95] has held that an application or appeal shall be based upon a single cause of action. True copy of the Judgments of this Hon'ble Tribunal in DV Girish & Ors. vs the Secretary to Government & Ors. (Application No.154 of 2014 (SZ) AND M.A. No. 284 of 2014 (SZ)**)**, Vikas K. Tripathi Mumbai Vs. The Secretary, MoEF reported in 2014 ALL (I) NGT Reporter (3) (Pune) 95] are marked and annexed as **ANNEXURE R/2 [Colly].**

C. **The Appellants have challenged Forest Clearance based on a repealed law i.e. Forest Conservation Rules, 2022**

11. That further, the Appellants have challenged the Section 2 Order dated 21.03.2025 regarding commencement of work along with Stage I and Stage II Forest Clearance by alleging violation of Forest Conservation Rules, 2022, specifically Rule 9, sub-rule 5(e)(ii)(C) to state that the direct and indirect impacts on forest land, wildlife and environment have not been considered by the Ministry of Environment, Forest and Climate Change while appraising the application for Forest Clearance of the Answering Respondent herein.

12. That the Appellants have repeatedly cited the Forest (Conservation) Rules, 2022, although the said Rules have been repealed and superseded by the Forest (Conservation) Rules, 2023 or the Van Sanrakshan Evam Samvardhan Rules, 2023. The said Rules of 2023 consolidate and clarify the procedural and substantive obligations for Forest Clearance, and

importantly, all actions taken by statutory authorities have been in strict compliance with the law in force. Any challenge based solely on the specifics of the Forest Conservation Rules, 2022, which no longer have a legal standing, is not legally untenable.

13. That in the case of Pernod Ricard India (P) Ltd. v. State of Madhya Pradesh, The Supreme Court of India on April 19, 2024, observed

"The process of substitution consists of two steps – first, the old rule is repealed, and next, a new rule is brought into existence in its place. Even if the new rule be invalid, the first step of the old rule ceasing to exist comes into effect, and it was for this reason that the court held that, on declaration of the new rule as invalid, the old rule could not be held to be revived. The operation of repeal or substitution of a statutory provision is thus clear, a repealed provision will cease to operate from the date of repeal and the substituted provision will commence to operate from the date of its substitution. Section 6 of the General Clauses Act, 1897, has no application to subordinate legislation. However, state General Clauses Acts, or other enactments may extend similar effect to repeal and substitution of rules, unless repugnant to the subject or context".

In view of the abovementioned position of law, it is clear that the present Appeal is not sustainable as the main ground for challenge is the Forest Conservation Rules, 2022.

14. That arguendo, the Forest Conservation Rules, 2022 were applicable during the grant of Stage I Forest Clearance, it is pertinent to note that the application for the grant of Stage I Forest Clearance was submitted in 2021, i.e. prior to the said Rules, 2022 and when the Forest Conservation Rules of 2003 were applicable. Thus, Stage I Forest Clearance dated 18.07.2023

has been granted under the Forest Conservation Rules, 2003 and not the Forest Conservation Rules, 2022. Further, it is important to mention that Rule 9(5)(e)(ii)(C) of the repealed Rules,2022 which has been relied on the Appellant, albeit wrongly, relates to In Principle (Stage I) approval of the Forest Conservation Rules, 2022. Even the new Forest Rules where there is no Rule 9(5)(e)(ii)(C), the aspect of a direct and indirect impact on forest and wildlife is with regard to the in principle approval only.

15. That on 18.07.2022, the Ministry of Environment, Forest and Climate Change issued a clarification with respect to the applicability of the Forest Conservation Rules, 2022 including the aspect of in principle approval, and it was clarified that provisions of Forest Conservation Rules, 2003, shall apply to proposals submitted online through the Parivesh portal and which have been accepted by the Nodal Officer before 28.06.2022. In this regard, it is pertinent to note that the Nodal Office had accepted the proposal of the Answering Respondent on 31.01.2022. The true copy of the Forest Conservation Rules, 2003 along with Van Sanrakshan Evam Samvardhan Rules, 2023 is marked and annexed as **ANNEXURE R/3**.

    The true copy of the Letter dated 18.07.2022 is marked and annexed as **ANNEXURE R/4.**

    The true copy of the Approval of the Nodal Officer dated 31.01.2022 is marked and annexed as **ANNEXURE R/5 [Colly].**

16. That it is further submitted that the application for Forest Clearance of the Answering Respondent, was processed under the Forest Conservation Rules, 2003. In this regard, it is clarified that Rule 6(I)(3) read with Rule 7(2)(a) of the Forest Conservation Rules, 2003 prescribes the procedure for processing of proposals of Forest Clearance. The said Rules clarify that proposals received by the Nodal Officer shall be forwarded to the DFO for examination

of factual details and feasibility. The DFO thereafter shall submit his findings to the Conservator of Forest within a period of 30 days. Thereafter, specifically Rule 7(2)(a) states that the Regional Office will examine proposals involving forest land up to five hectares and after further enquiry, as considered necessary, grant In Principle Approval subject to fulfilment of stipulated conditions and communicate the same to the State Government. Further, Rule 7(3)(c) states that prior clearance from MoEF&CC is required if there is felling of trees involving forest land having a crown density above forty percent. It is pertinent to mention that as per the procedure prescribed, the DFO conducted the site inspection and submitted a Report on 27.12.2021. Thereafter, the Nodal Officer and then the Regional Office have examined the proposal and found it complete in all aspects before recommending for diversion of 0.986 ha of forest land on 18.05.2023. Since, there is no felling of trees by the Answering Respondent herein hence Rule 7(3)(c) is not applicable vis-à-vis the present case. Hence, the submissions of the Appellants are without any merit in law as the permission for Stage I Forest Clearance was granted in accordance with law and the submissions of the Appellant has no merit.

17. That it is also pertinent to note that the Forest Conservation Rules, 2003, specifically Rule 6(4)(b) read with Rule 7(4)(e)(vi) mandates assessing the direct and indirect impact for diversion of forest land only with respect to projects that are seeking diversion of an area of more than 40 ha. It is only now in the Van Sanrakshan Evam Samvardhan Rules of 2023 that a requirement exists for the Division Forest Officer to assess the direct and indirect impact of projects seeking diversion of forest land under 5 ha as well. Thus, if any parity has to be drawn by the Hon’ble Tribunal between the Rules, it can only be between the Forest Conservation Rules, 2003 as well as the Van Sanrakshan

Evam Samvardhan Rules of 2023 as the applications were processed under the said Rules.

18. That further, even Stage II Forest Clearance dated 04.01.2024 has been processed under the Forest Conservation Rules, 2003 in view of the Letter dated 18.07.2022 of the Ministry of Environment, Forest and Climate Change which simply states that the proposals which have obtained approval of the Nodal Officer prior to 28.06.2022 ***shall*** be processed under the Forest Conservation Rules, 2003 instead of Forest Conservation Rules, 2022. In the humble submission of the Answering Respondent, subsequent provisions of the law cannot be applied retrospectively to a proposal that was processed under the erstwhile Forest Conservation Rules, 2003. However, it is pertinent to mention that as a matter of abundant precaution, the Divisional Forest Officer in his inspection report of December 2021 had recommended the diversion subject to Study/Assessment of Sea Turtle in 10km surrounding the project area as well as preparation and implementation of a holistic conservation plan for mitigation of any negative effects to the sea turtle. Further, the DFO had also assessed the presence of nearby Eco Sensitive Areas. Thus, the proposal has holistically considered including the direct and indirect impacts, which have been hidden by the Appellants herein for reasons best known to them. The same has been complied with and described in the paragraphs below.

D. **The Appellants have misrepresented the 10km study area for the Environmental Clearance Form as a criterion for the distance in the Form for Forest Clearance**

19. That further, with respect to the In-Principle/Stage I Forest Clearance, the Appellants have alleged submission of incorrect and misleading information

by the Divisional Forest Officer in Form A, Part II of the Forest Clearance Application of the Answering Respondent by wrongly relying upon Form I, Part C of the application for Environmental Clearance. At the outset, an information of another separate and independent case which is already sub-judice and being adjudicated by this Hon'ble Tribunal may not be used by the Appellant herein. The merit is such information shall be examined that Appeal.

20. Arguendo, it is pertinent to note that the Appellants have submitted incomplete information even with respect to the requirements of appraisal in the Form I for Environmental Clearance. Form I has three parts, Part A, Part B and Part C. The Form I, Part A clearly requires details of environmentally sensitive areas within 10 km which includes areas utilized by protected species. Accordingly, Form I Part C of the application for Environmental Clearance requires details of flora and fauna in Part C as well. The requirement of a 10km study area has also been mentioned in the Technical Guidance Manual for Soda Ash Plants. However, no such distance requirement or study area has been included in the Forms for Forest Clearance, either for the project proponent or for the Divisional Forest Officer in Form A, Part II. Thus, in the humble submission of the Answering Respondent, the procedural requirements under the Environment Impact Assessment Notification, 2006 and the Van Sanrakshan Evam Samvadhan Adhiniyam, 1980 cannot be compared as the objectives and parameters of both the laws are different. True Copy of Form I under the Environmental Impact Assessment Notification, 2006 and Form A, Part I under the Forest Conservation Act, 1980 is marked and annexed herein collectively as **Annexure R/6 [Colly].**

E. The Appellants are not "Aggrieved Persons" under Section 18 of the National Green Tribunal Act, 2010.

21. That at the outset, the present Appeal has challenged the Stage I dated 18.07.2023, Stage II Clearance dated 04.01.2024 and the order granting the commencement of work issued on 21.03.2025 by submitting incomplete and fictitious information and misled the Hon'ble Tribunal to admit the Appeal on 19.04.025. Thus, the antecedents of the Appellants under Section 16(e) of NGT act are clearly questionable and merit serious consideration of this Hon'ble Tribunal.

22. That it is evident from the material found by the Answering Respondent that the Appellants herein are proxies of one Vipasana Meditation Centre, which has established one of its centers at Dham Sidhu, Bada Village on approximately 35 acres of land at a distance of 1.8 from the main project of the Greenfield Chemical Complex of the Answering Respondent. The RTI Application dated 23.03.2022 by Vipassana Kendra through one Samatsinh K. Sodha, who is apparently a Trustee of Vipassana, seeking information on lands allotted by the Government for the Seawater intake and effluent disposal pipeline and passage for related construction equipment would show the direct interest and involvement of Vipassana Meditation in protesting against the Project of GHCL Limited. A copy of the said RTI application is annexed herewith as **ANNEXURE R/7.**

23. That it has come to the knowledge of the answering Respondent that the Vipasana Meditation Centre, is the real opponent of the proposed “Greenfield Chemical Complex” of GHCL as the Centre is near the said Project and is visited by influential people. Copy of the letter being circulated by Vipassana on its Website is annexed herewith as **ANNEXURE R/8.**

24. That infact when all their attempts to scuttle the Soda Ash Project were foiled and the Appellants realized that the Soda Ash Project of the Answering Respondent is being established in total compliance with all statutory

clearances including the EIA Notification, 2006, the Appellants, in their desperation to scuttle the Soda Ash Project, chose to go ahead and purchase 21.19 Acres of land in Survey No.426 of Village Bada, Taluka Mandvi identified and earmarked for the said "Soda Ash Project" by entering into a criminal conspiracy with the Consolidators appointed by the Answering Respondent. The Appellants went on to acquire lands of the "Soda Ash Project" with full knowledge of the fact that the said lands measuring 21.19 Acres in Survey No.426 of Village Bada, Taluka Mandvi, District Kutch was the subject matter of an open ended Agreement to Sell (ATS) dated 23.12.2021 between the Consolidators of the Answering Respondent Viz., GHCL Limited and the Owners of the said land (hereinafter referred to as the "Disputed Land"). The said ATS without any time limit for completion and execution of sale deed in view of the fact that acquisition of land for the Soda Ash Project was to be subject to several clearances and permissions required by law and was likely to take more time than under normal circumstances. It is also significant to note that the Disputed Land was the subject matter of the Approval granted by the Industrial Commissioner, Gandhinagar on 27.07.2021 i.e., even before the open-ended Agreement to Sell dated 23.12.2021 between the Consolidators of the Answering Respondent and the owners of the Disputed Land. This clearly establishes that there is something more than what meets the eye, and the Appellants herein have not approached this Hon'ble Tribunal with clean hands. It is evident that no prudent businessman would purchase a land that is the subject matter of an Agreement to Sell by paying a consideration of Rupees Twenty Six Lakhs and that too, with full knowledge that the Disputed Land is part of the Soda Ash Project of the Answering Respondent. Copy of the sale deed dated 09.12.2024 is marked and annexed as **ANNEXURE R/9.**

25. That further the Appellants have misrepresented before this Hon'ble Tribunal by quoting violation of Forest Conservation Rules, 2022, which are not even applicable to the Answering Respondent and wrongly imputing the study area distance under the Environment Impact Assessment Notification to the study area under the Van Sanrakashan Evam Samvardhan Adhiniyam, 1980.

26. The Hon'ble Supreme Court in the case of State of Uttar Pradesh & Ors. Etc. Etc. vs. Uday Education and Welfare Trust & Anr.[2022 SCC OnLine SC 1469] has clearly held that –

> "*When the credentials and bonafides of a litigant approaching the NGT are seriously raised, the same cannot be ignored Before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and bonafides of the applicants must be tested.*"

Thus, the credentials of the Appellants herein are clearly questionable given that a wrong position of facts as well as law has been presented before this Hon'ble Tribunal leading to the admission of the present Appeal. This itself is ground for dismissal of the present Appeal in limine with huge costs.

27. That further, this Hon'ble Tribunal in a catena of cases dismissed Appeals due to the failure of the Appellants to satisfy the test of Section 18 of the National Green Tribunal Act, 2010. [Anand Kumar Jha v. Union of India & Others (Appeal No. 05/2021), Satyabrata Sanjeev Kumar Mahanta v. Ministry of Environment and Forest and Others, Rana Sengupta v. Union of India and Others (2013 SCC OnLine NGT 31)]. Copy of the Judgments of the Hon'ble Supreme Court and this Hon'ble Tribunal are marked and annexed as **ANNEXURE R/10 [Colly].**

II. Preliminary Submissions

A. The Forest Clearance has been obtained by the Answering Respondent in accordance with the law.

28. That the Application for Forest Clearance of 0.9689 ha of forest land was submitted by the answering Respondent on 21.09.2021 under the erstwhile Forest Conservation Act, 1980 and the Forest Conservation Rules, 2003. It is pertinent to mention that the said Forest Clearance is being sought only with respect to 0.9689 ha of forest land for laying down intake and outfall pipelines for the Soda Ash Plant. Soda Ash Plants require large quantity of Seawater for cooling as well as desalination plant i.e. RO/DM plant, for production of soda ash and the process effluent is discharged through the outfall pipeline. Since, Unclassed Forest land of Village- Bada, [Survey o. 633 Pt. (New) and Survey No. 526 Pt. (Old)] is located between the Arabian Sea and the Project site, it is not possible to avoid forest stretch. However, for ensuring that there is no impact on forest land, the Answering Respondent is establishing the pipelines 15 mts underground and has submitted that no felling of trees will be undertaken during the establishment of the pipelines. Copy of the Application dated 21.09.2021 is annexed at Annexure R/6.

29. That the proposal was recommended at the Division level on 06.10.2021. Thereafter, a site inspection was undertaken by the Deputy Conservator of Forest on 29.11.2021 and the Report noted that the legal status of forest is unclassed. The demarcation of the area was completed, and mandated pipelines are required to be established at a depth of 15m through underground tunnels to protect the sand dunes. The report also demanded a passage route for movement of man, material and equipment through the treeless riverbed to prevent tree felling and cutting. A true copy of the Site Inspection Report dated 29.11.2021 is annexed herewith as **ANNEXURE R/11**.

30. That subsequently, the Deputy Conservator of Forest submitted Part II recommending the proposal for Stage I Forest Clearance of the Answering Respondent and in addition to the abovementioned Site Inspection Report recommendations also recommended the Forest Clearance subject to preparation of study/assessment of sea turtle in 10 km surrounding the project area and preparation and implementation of a holistic Conservation plan for mitigation of any negative effects to the Sea Turtle. The same has been complied and described below after other hierarchical approvals. Specifically with respect to compensatory afforestation, a proposed 2.00 ha of degraded reserved forest land was identified for at Village Dhokda, Taluka Mandvi, Kutch. A detailed compensatory scheme, including species to be planted, time schedule, implementing agency, cost structure, among others, was incorporated, and a total of Rs. 21,71,521 to CAMPA (Rs. 12,43,528 for Compensatory Afforestation + Rs. 9,27,993 for Net Present Value) was deposited by the agency on 11.10.2023 for complying with the compensatory afforestation scheme, which was also submitted in the compliance report on 27.12.2021. The Form Part II filled by the DFO also includes clarifications with respect to nearby eco sensitive and historical/archaeological areas and clarifies the distance of the project from the same. The complete Form II has been conveniently missed out by the Appellants in their Appeal. The true copy of the Form II dated 27.12.2021 is marked and annexed as **ANNEXURE R/12.**

31. That on 07.01.2022, the Circle Officer Kutch recommended the proposal. Thereafter on 28.01.2022 also recommended the Forest Clearance and reiterated the condition of the preparation of a holistic Conservation Plan for the mitigation of any negative effects on the sea turtles. The Nodal Officer under the Forest Conservation Act, 1980 also recommended the Forest Clearance on 31.01.2022. Based on the recommendation of the Deputy

Conservator of Forest, the Chief Conservator of Forest and the Nodal Officer, the State Government also recommended the proposal for Forest Clearance on 04.02.2022. Copy of the approvals and recommendations for forest clearance are annexed above as Annexure R/5.

32. That subsequently on 09.11.2022, a Conservation Plan for Schedule-I species of Rs 136.50 lakhs was prepared to mitigate potential ecological and biodiversity impacts. This plan was reviewed and approved by the Principal Chief Conservator of Forests (PCCF) and Chief Wildlife Warden of Gujarat, facilitating the necessary approvals for M/s. GHCL Limited. The Conservation Plan encompasses the conservation of various Scheduled species which includes marine and terrestrial biodiversity and sea turtles. Copy of the Conservation plan along with approval of the PCCF is marked and annexed as **ANNEXURE R/13.**

33. That pending the consideration of the proposal for Stage I Forest Clearance by the Regional Officer, Ministry of Environment, Forest and Climate Change, the Forest Conservation Rules, 2022 superseded the Forest Conservation Rules, 2003. It is pertinent to note, in the erstwhile Forest Conservation Rules, 2003, the details sought from the Divisional Forest Officer did not include Form A, Part II and neither did it specify the study area distance. Further, as stated earlier, the requirement of ascertaining the direct and indirect impacts of projects under the Forest Conservation Rules, 2003 was applicable only with respect to projects seeking diversion of more than 40 hectares. The project of the Answering Respondent requires only 0.9689 ha of forest land, and in view of the same the Divisional Forest Officer was not required to assess the direct and indirect impact of the project on the environment or wildlife. Copy of the Forest Conservation Rules, 2003 is annexed above as Annexure R/3.

34. That it is pertinent to mention, the Essential Details over the proposal were sought sixteen (16) times by different officers/departments internally and responded by the Answering Respondent over a period of almost two years. Only after comprehensively appraising the proposal, the Stage I In Principle Forest Approval was granted on 18.07.2023. Copy of the timeline details are marked above as Annexure R/5.

35. That it is pertinent to note that the Stage I In Principle Approval also contains detailed conditions *inter alia* with respect to the compliance with the requirement of CRZ Clearance, Environmental Clearance. Further, the conditions also stipulated that no damage should be caused to the Flora and Fauna of the adjoining area, which the Answering Respondent is bound by. The Answering Respondent accordingly also were granted the CRZ Clearance on 26.12.2023 and the EC on 12.12.2024.

36. That after obtaining the Stage I Forest Clearance on 18.07.2023, the Answering Respondent submitted compliance with the conditions stipulated therein on 07.11.2023. After perusal of the submissions and undertakings in the compliance report of the Answering Respondent by the Nodal Officer on 04.12.2023, Stage II, Final Approval was granted on 04.01.2024 by the Ministry of Environment, Forest and Climate Change. True copy of the compliance report dated 07.11.2023 and the Report of the Nodal Officer dated 04.12.2023 is marked and annexed as **ANNEXURE R/14 [Colly].**

37. That in view of the abovementioned facts and position of law, it is humbly submitted that the Ministry of Environment, Forest and Climate Change has thoroughly examined and considered all issues, including any direct & indirect impacts of forest clearance on the forest, wildlife and the environment by way of abundant precaution and in line with the recommendations of the Forest

Officers, although it was exempted as per the Forest Conservation Rules, 2003 for proposals seeking diversion of less than 40 ha of forest land.

38. That further, the impact of the pipelines was also considered by the Ministry of Environment, Forest and Climate Change prior to the grant of the Stage II Forest Clearance on 04.01.2024 as the CRZ Clearance had been recommended by the Coastal Zone Management Authority on 04.08.2023 in Minutes of Meeting of 67th GCZMA Committee meeting and final recommendation letter from GCZMA dated 26.12.2023. However, the Appellants herein, for reasons best known to them, have conveniently concealed material facts and approached the Hon'ble Tribunal to challenge the Forest Clearances including the Stage I Forest Clearance dated 18.07.2023 and Stage II Forest Clearance dated 04.01.2024, at a belated stage and the Order granting commencement of work dated 21.03.2025 by the Deputy Secretary of Forest, Gandhinagar. It is reiterated that this appeal was only filed as an afterthought when the Commencement of Work Order was supplied in the Reply Affidavit dated 22.03.2025 of the Respondent herein in the EC Appeal No. 19/2025. The timing of the present Appeal and the complete inaction when stage II clearance was granted by the MOEF&CC is a testimony to their conduct. A true copy of the Coastal Regulation Zone Clearance is annexed herewith as Annexure R/15.

39. The allegations raised of "false statements," "mechanical recommendations," "failure to assess direct and indirect impacts" are speculative and unsupported by definitive government findings or judicial determinations. The mere existence of alternative data or scientific literature does not, under the law, vitiate statutorily verified findings or override the principle of reasoned administrative finality.

40. That the judicial precedents including Chhugamal Rajpal v. S.P. Chaliha, Central India Electric Supply Co. Ltd. v. ITO, and Capital Broadways Pvt.

Ltd., cited by Appellants concern summary endorsements without supporting record or independent review. Here, the recommendations are informed by the entire record, detailed discussion, and explicit imposition of conditions, a process confirmed as legally sound by these very precedents and hence not applicable herein. The Hon'ble Supreme Court in Rajeev Suri v. DDA and others [2021 SCC OnLine SC 7] has held that once an expert committee has duly applied its mind, any challenge must be based on concrete material which reveals total absence of mind.

41. That the RTI replies, and Google images relied upon by appellants reflect isolated incidents or general area data, not specific, continuous, or unmitigated presence of threatened species at the specific project footprint. The isolated presence does not establish a basis for denying clearance in absence of government verified habitat mapping.

B. There is no impact of the diversion of Forest land on marine biodiversity , sand dunes as well as turtle nesting sites.

42. That the Appellants have alleged, albeit wrongly and without any backing in law, that the diversion of forest land will adversely impact the marine biodiversity, sand dunes, coral reefs, sea water temperature and the turtle nesting sites. It is pertinent to mention that the same contentions have been used, verbatim, for challenging the Environmental Clearance of the Answering Respondent in Appeal No. 19/2025 and this is clearly another case filed by the Appellants, under the garb of challenging the Forest Clearance, merely to delay the Project and impact finances and loans that are to be secured for the project. It is further submitted that the project site for setting up the soda ash plant as well as the forest land sought to be used for the underground pipeline at the depth of 15 metres of the forest land does not have any wildlife or turtle nesting sites and the coastal stretch beyond the forest land into the sea is neither

feasible for turtles to nest due to a rocky beach and high tide that reaches till the forest land . True copy of the photographs the said site and the rocky beach taken in the month of June 2025 are marked and annexed as **ANNEXURE R/16.**

43. That further, the Answering Respondent had engaged six different experts of national and international repute to undertake detailed studies including the environment impact assessment, the marine impact assessment, presence as well as possible impact on turtle nesting, coral reefs as well as impact on sand dunes. The list of expert institutions and individuals who have undertaken detailed studies since 2018 till 2024 (over a period of six years) include –

i. Council of Scientific and Industrial Research- National Environmental Engineering Research Institute ('CSIR-NEERI') - prepared the Environment Impact Assessment Report containing comprehensive assessments and studies on the impact of the project on nearby wildlife, sand dunes, marine biodiversity.

ii. Council of Scientific and Industrial Research -National Institute of Oceanography ('CSIR-NIO') – prepared the Marine Impact Assessment, which has analyzed in detailed any impact which the underground inflow and outfall pipelines might have on marine biodiversity, including sand dune mapping.

iii. The Zoological Survey of India ('ZSI') prepared a specific report on status of survey and conservation plan for sea turtles.

iv. The Gujarat Institute of Dessert Ecology ('GUIDE') has prepared a detailed plan for the conservation of significant species & GUIDE report Status survey and Site-specific Conservation Plan for Sea Turtles for entire year.

v. TR Associates have prepared an addendum to the EIA Report prepared by CSIR NEERI and reconfirmed the findings of CSIR – NEERI

vi. Dr. Bharat Jethwa from Bhagwati Enviro Care Private Ltd., a functional area expert for ecology and biodiversity, also prepared a ecological study and wildlife conservation plan.

It is pertinent to mention that many of the abovementioned Institutes are relied upon by this Hon'ble Tribunal as well as the Hon'ble Supreme Court for fact checking and confirming allegations of pollution as well as remedial measures.

44. That specifically on the allegations of turtle nesting sites and the impact on turtles due to the inflow and outfall pipelines, it is pertinent to mention that the Appellants themselves have admitted that the turtle nesting sites are 2.6 to 6 km away from the project of the answering Respondent, thus contradicting their own submissions of alleged finding of turtle nesting sites in the forest land. It is also humbly submitted that the Zoological Survey of India Report, the Gujarat Institute of Dessert Ecology Report, TR Associates, CSIR NIO as well as NEERI reports confirm that there are no turtle nesting sites present the site of the project, given that the site is not suitable due to a rocky beach. Narrow beach width, vegetation cover, slope, presence of pebbles and rubbles and presence of predators on the beach. Any sporadic nesting happens in the 7 km stretch between Rukmavati river mouth (about 20 km from the proposed project site) and Mandvi Palace (about 16 km from the project site). True copy of the relevant extracts from the reports of ZSI, CSIR-NIO, CSIR NEERI, TR Associates, Dr. Bharat Jethwa and GUIDE with observations on turtle are marked and annexed as **ANNEXURE R/17 [Colly].**

45. That however, as a matter of abundant precaution, a detailed conservation plan has been prepared by GUIDE and Dr. Bharat Jethwa, of Rs 136.50 lakhs has

been prepared to mitigate potential ecological and biodiversity impacts and has also been approved by the Principal Chief Conservator of Forests (PCCF) and Chief Wildlife Warden of Gujarat. The Conservation Plan encompasses the conservation of various Scheduled species which includes marine and terrestrial biodiversity. The application for approval of the conservation plan, dated November 9, 2022, submitted to the PCCF, underscores a proactive approach toward wildlife and biodiversity conservation. This plan will play a crucial role in ensuring the protection of marine species, including turtles, reinforcing the commitment to ecological preservation while facilitating sustainable development.

46. That further, specifically with respect to impact on coral reefs, algal communities, sea water temperature, the EIA Studies prepared by CSIR NEERI as well as TR Associates duly capture these impacts, including the impact of seawater intake and outfall. Infact, an Addendum to the report was prepared by CSIR NIO to prescribe conservation measures to mitigate any impact of outfall on the seawater. The methodology adopted by the answering Respondent would ensure that the constituents of the treated water quality after dilution being discharged is the same as that of the sea within 300 mtrs at discharge point and will be well within CPCB/GPCB norms, thus minimizing any adverse impact on the marine ecology. The same is duly captured in the EIA Studies, however, the Appellants for reasons best known to them have conveniently failed to apprise this Hon'ble Tribunal of the same. The CSIR-NIO report also clearly states that there are no corals present in the project area or areas near the site of the proposed project. The true copy of the relevant extracts of the CSIR NIO, CSIR NEERI and TR Associates report impact on coral reefs is marked and annexed herein as **ANNEXURE R/18 [Colly].**

47. That the allegations of the Appellants with respect to the adverse impact of the project on sand dunes is without any merit in facts and in law. In August 2020, CSIR-NIO submitted the report on studies on sand dune mapping and morphological changes of the river mouth at the proposed greenfield chemical complex at District Kutch, Gujarat. An Addendum to the Marine EIA/EMP for Seawater Intake and Effluent Disposal /Outfall for Greenfield Chemical Complex off Bada coast, Arabian Sea EIA Study was also prepared by CSIR -NIO in March 2022, specifically for Seawater Intake and Effluent Disposal/Outfall which includes measures for the conservation of sand dunes near the coastline during the construction and operation of the intake and outfall pipeline of the answering Respondent. Apart from CSIR -NEERI, the Gujarat Institute of Desert Ecology (GUIDE) was specifically hired for undertaking an analysis of the impact on sand dunes from the project activities of the answering Respondent. The GUIDE in its report has clearly stated that the project activities per se will not impact the sand dunes. However, for abundant precaution, the GUIDE has prepared a sand dune conservation plan, which requires the answering Respondent to monitor the sand dunes and revegetate it, apart from removing the debris to ensure their maintenance. The same will be undertaken by the answering Respondent during construction and post operations of the Soda Ash Plant. The Tunnelling is also proposed to be extended beyond the intertidal zone, and hence there will be no impact on the shoreline or on the sand dunes. True copy of the relevant extracts of the CSIR NEERI, CSIR- NIO and GUIDE Report is marked and annexed herein as **ANNEXURE R/19 [Colly].**

48. That in view of the abovementioned facts and position of law, it is humbly submitted that there is no evidence of suppression or omission by the Answering Respondent and that at every stage, the project underwent layered

and detailed scrutiny, including but not limited to field inspections, record verifications, and mandatory recommendations by the Chief Conservator, Nodal Officer, and Secretary in consonance with the applicable law for prior approval of the proposed project by the Ministry of Environment, Forest and Climate Change. Nowhere in government records or proceedings has any competent authority detected willful concealment or material falsehood in the clearance process. The present Appeal has been filed with ulterior motives, without any basis in facts and law and deserves to be dismissed for want of merit with huge costs.

III. PARA WISE REPLY ON MERITS TO THE SUBMISSIONS IN THE APPEAL

49. That Para I-II are matters of record and to that extent do not require any response.

50. That in response to Para III, it is submitted that the Appeal has attempted to challenge Stage I and Stage II Forest Clearance at a belated stage, after more than a year has lapsed, despite being aware of the said permissions. The present Appeal is another attempt by the Answering Respondent to delay the establishment of the project for reasons best known to them. The reply in Paras 8-9 of the Preliminary Objections may be read as part of the present reply and is not being reiterated for the sake of brevity.

51. That the contents of para IV (i) to (vii) are denied as wrong, false and devoid of all merit. The Appellants have alleged non-compliance by the Divisional Forest Officer and the Regional Officer with the provisions of the Forest Conservation Rules, 2022, specifically Rule 9(5)(e)(ii)(C). However, the said allegation is baseless as the Stage I Forest Clearance was being processed as per the Forest Conservation Rules, 2003 and not the Forest Conservation Rules, 2022. It is reiterated that the Forest Conservation Rules, 2003 require

assessment of the direct and indirect impact only with respect to diversion of more than 40 ha of forest land. The contents of preliminary submissions in paras 11-15 are reiterated and are not being repeated for the sake of brevity. However, the indirect and direct impact of the entire project, including the impact of the pipelines has been duly appraised by the Expert Appraisal Committee of the Ministry of Environment, Forest and Climate Change at the time of grant of Environmental Clearance as well as by the Gujarat Coastal Zone Management Authority. Specifically, the recommendation of the Gujarat Coastal Zone Management Authority was granted on 07.08.2023 and duly submitted to the Regional Officer of the Ministry of Environment, Forest and Climate Change prior to the grant of Stage II Forest Clearance. The Appellant has been alleging impact on the coastal marine and biological diversity, failure of the Regional Office to consider when in fact the same has been examined in detail prior to the grant of Stage II Forest Clearance by the Coastal Zone Management Authority and thus cannot be a ground for challenging the Forest Clearance. The Appellants have failed to establish any adverse impact from the diversion of forest land, which, in fact, does not involve any felling of trees on the ground or utilisation of the said land for the movement of the machinery. Moreover, the pipelines are being established 15 mts below the ground level and will not impact the forest land. Not even a blade of grass shall be removed from the forest land in question in this exercise. Infact, the allegations of the Appellant seem to suggest that under the garb of challenging the Forest Clearance, the Coastal Regulation Zone Clearance is being challenged. It is a settled principle of law that multiple remedies cannot be alleged in an Appeal under Section 16(e) of the National Green Tribunal Act, 2010. The National Marine Turtle Action Plan referred to by the Appellant itself does not record Kachchh as an important turtle habitat. The True Copy of the relevant extracts

of the National Marine Turtle Action Plan is marked and annexed as **ANNEXURE R/20.**

Response to Array of Parties

1. That in response to para 1, it is submitted that the bona fides of the Appellants No. 1 to 5 are questionable. This is the third petition/case by the Appellants against the same project, and the same has been filed again by suppressing material facts and misrepresenting the correct position of law. This is despite the allegation of the presence of sea turtles being verified by the site visit of the Expert Appraisal Committee, which consisted of officials from the State Pollution Control Board, representatives from the Coastal Zone Management Authority, apart from the Ministry of Environment, Forest and Climate Change. Further, at least three of the Appellants do not reside in Bada village. The conduct of one of the Appellants who attempted to disrupt the public hearing has been well documented by the Hon'ble High Court which has been suppressed by the Appellants herein. The preliminary objections are reiterated as a response to the said para and are not being repeated for the sake of brevity. The contents of para 8-9 in the Preliminary Objections are reiterated and are not being repeated for the sake of brevity.

52. That the contents of para 2, to the extent that they are matters of record, do not merit any response.

Response to Brief Facts of the Case

53. That in response to the contents of para 3, it is reiterated that the present Appeal is the third attempt by the Appellants herein to derail and delay the project of the Answering Respondent by submitting half-baked facts and an incorrect position of law. The contents of para.. are reiterated and are not being repeated for the sake of brevity.

Response to brief description of the Project

54. That in response to the contents of para 4 and 5 , it is submitted that the Appellants have raised allegations pertaining to the CRZ Notification, 2011 in view of the grant of the permissions for the establishment of the project in CRZ 1A and Critically Vulnerable Coastal Area. It is surprising that in an appeal challenging the Forest Clearance, the Appellants are raising grievance against the presence of the project in CRZ 1A and Critically Vulnerable Coastal Area as well as the impact of the pipelines on the sand dunes. This is nothing but a disguised attempt to challenge the Coastal Regulation Zone Clearance dated 26.12.2023, which the Appellants today are time-barred from challenging as per Section 16 of the National Green Tribunal Act, 2010. This Hon'ble Tribunal may take strict note of the conduct of the Appellants, who have approached this Hon'ble Tribunal by raising the same grounds as those in the Environmental Clearance, merely to protract the proceedings against the project of the Answering Respondent and cause financial harm, and is therefore a clear misuse of the procedure established by the law. The Google Earth images annexed in the Appeal are denied in view of the observations of Hon'ble Supreme Court in the case of Okhla Bird Sanctuary, wherein it has been clearly noted that google images do not always provide the complete picture. [In Re: Construction of Park At Noida Near Okhla Bird Sanctuary 2011 1 SCC 744].

RESPONSE TO - FALSE AND MISLEADING INFORMATION IN FORM A PART C

55. That the contents of para 6 to 12 are denied as wrong, false and devoid of all merit. The Appellants have failed to consider that the study area for submitting

the application for Environmental Clearance is clearly specified as 10km by the Ministry of Environment, Forest and Climate Change in the Form as well as in the EIA Technical Guidance Manual Industry, 2010, which has been conveniently hidden by the Appellants herein. However, there is no such distance requirement or study area with respect to an application for obtaining the Forest Clearance. Thus, the Appellants, without any backing in law, have imposed the study requirements for an Environmental Clearance Application on the Forest Clearance Application. It is pertinent to mention that the Divisional Forest Officer has concluded that there is no presence of wildlife in and around the 0.9689 ha of forest land sought to be diverted by the Answering Respondent.

56. That, however, wherever distance requirements are mentioned, the Divisional Forest Officer has duly responded to the same. Thus, Form A Part II specifically highlights that there is no wildlife present, the land is not located within Eco-Sensitive Zone and not within 10 KM distance from the boundary of any protected area. It also highlighted that 'No Rare/Endangered /Unique species' are present and the requirement of the forest land is unavoidable and bare minimum for the project. The said Report was prepared by the Divisional Forest Officer after site inspection and has been prepared in adherence to the Forest Conservation Rules, 2003 (as applicable at that time). The specific recommendations of the Divisional Forest Officer, Chief Conservator of Forest, and Nodal Officer, were accepted by the Conservator of Forest only after noting that the proposed pipelines will be laid through underground tunnels at an approximate depth of 15 meters so as to safeguard the sand dunes and forest areas and the movement of manpower, materials, and equipment be restricted to the treeless riverbed side to provide a passage; and that no tree-felling or cutting be undertaken.

57. That further, the recommendation of Chief Conservator of Forest, acknowledged the possible presence of Schedule I species and further imposed the mandatory condition of preparation of a detailed mitigation and a Holistic Turtle Conservation Plan, thereby going beyond the mandate of the law and prescribing additional mitigation measures as a matter of abundant precaution. The same was complied with by the answering Respondent and a detailed Conservation Plan with a budget of 136.50 lakhs was approved by the Principal Chief Conservator of Forest for the protection of Scheduled I species. This Hon'ble Tribunal may take strict note of the conduct of the Appellants, who have alleged misrepresentation by submitting incomplete information and by comparing the procedure under two different statutes. The Appellants are put to strict proof for comparing the procedure under two different statutes without any backing in law. The submissions in the Preliminary Submissions at para 28-48 are reiterated and are not being repeated for the sake of brevity.

58. That further, the Appellants in para 10 to 11 have relied upon the IUCN portal for demonstrating the Red List of certain species as well as the Form 1 of the application for Environmental Clearance of the Answering Respondent herein to state that the Divisional Forest Officer has misrepresented the presence of wildlife, especially olive ridley turtles. The Appellants themselves in their Additional Affidavit have annexed google image maps stating that the alleged turtle nesting sites are 3-6 km away from the project of the Answering Respondent and are not present at the site of the Answering Respondent. Further, the Ministry of Environment, Forest and Climate Change's National Action Plan has not identified Kacchh as an important turtle habitat. Thus, the allegations of the Appellants herein are mere conjecture without any backing in facts as well as law. The reliance on the information submitted by the Answering Respondent in its form for Environmental Clearance was due to the

study distance being 10 km unlike the information sought to be filled by the Divisional Forest Officer where no study distance has been prescribed. Although a study for a distance of 10 kms has been carried out for abundant precaution and in accordance with the conditions of the Stage I Approval. The contents of Paras 42-48 of the Preliminary Submissions may be read as a part of this reply.

59. That further the reliance on the cited judgment including Hanuman Laxman Aroskar v. Union of India in Para 12 and Sreeranganathan K.P. v. Union of India, quash clearances for proven gross suppression, lack of any assessment, or denial of critical habitats with no remedial action. In the present case, all identified impacts are subject to express monitoring, mitigation, and conservation planning. This is consistent with the legal threshold established by Ld. NGT and the Hon'ble Supreme Court that requires not just *scrutiny* but also *actionable safeguards* and *precautionary compliance*. No authority has found fraud, mala fide, or fundamental misapplication in the project record and hence the judgements herein are untenable. Further, the Hon'ble Supreme Court has distinguished the Hanuman Laxman judgment in the case of Rajeev Suri to clarify that the expertise of expert bodies such as the Expert Appraisal Committee cannot be undermined in a light manner and due deference must be accorded if their decisions are not tainted with legal unjustness.

RESPONSE TO – EVIDENCE INDICATING THE PRESENCE OF GREEN SEA TURTLES AND OLIVE RIDLEY AS WELL AS THEIR NESTING ACTIVITY WITHIN THE PROPOSED PROJECT AREA

60. That the contents of para I-III are denied as wrong , false and devoid of all merit. At the outset, it is pertinent to note that the RTI replies collected from individuals who are neither Appellants nor associated with the Appellants or

connected with the project whatsoever and which are generic to Mandvi Taluka or Modhwa or Dharbadi or Kathada village(s), and do not specifically pertain to the location of the answering Respondent. Further, generic responses cannot be considered over field assessments, and government procedures, under the Rules, whereby clarificatory reports and supplemental inspections have been undertaken before Clearances under different statutes were granted by different authorities. There is no evidence of 'deliberate concealment.' Any wildlife presence, where relevant, has been addressed evidently and reflected by requiring a Holistic Conservation Plan for turtles as a precondition to land diversion.

61. That by the Appellants' own admission in their Additional Affidavit, the alleged turtle nesting sites are 3-6 km away from the project of the answering Respondent. No material has been put on record to showcase the impact of forest clearance on sites 3-6 km away from the project of the answering Respondent. The submissions in the preliminary submissions in para 42-48 with respect to numerous reports and field visits clarifying absence of turtles in the project area of the answering Respondent may be read as a response and is not being reiterated for the sake of brevity. Arguendo, the said project might impact the marine biodiversity or presence of turtles in nearby villages, a comprehensive wildlife conservation plan along with an Environmental Management Plan. Further, additional safeguards have also been imposed in the conditions of Environmental Clearance dated 12.12.2024 as well as the CRZ Clearance dated 26.12.2023 (never challenged) of the answering Respondent.

62. That further, the reliance by the Appellant in Para III(i) on a Chapter from the UNDP-WII Book titled Marine Turtles of the Indian Subcontinent again does not specify the area of the answering Respondent. The linkages mentioned in

the Chapter pertain to an area beyond the 1.5km stretch which will be utilized by the answering Respondent for establishing the underground pipelines. The reliance on the MOU of the United Nations also fails to establish any presence of turtles in the project location of the answering Respondent. The Appellants have also relied upon a paper by Satish Bhaskar which was published in 1984 and rely on data which is more than 40 years old. Further, the paper refers to presence of nesting locations on Bhaidar Island, which is approximately 40-50 km away from the project location of the Answering Respondent. The map showcasing the distance is marked and annexed herein as **ANNEXURE R/21.** That this Hon'ble Tribunal may note the conduct of the Appellant, who has merely quoted belated sources or referenced locations that are not the location of the answering Respondent to mislead this Hon'ble Tribunal with respect to the presence of turtle nesting sites. Not a single map, government document or record has been produced to clarify the presence of turtles in the forest land where Forest Clearance has been obtained by the Answering Respondent. The reliance by the Appellant on Save Mon judgment is not applicable in the present case as the Answering Respondent has duly submitted all the requisite information vis a vis the presence of wildlife on forest land and the information has been verified through site inspections.

RESPONSE TO- FALSE AND MISLEADING SITE INSPECTION BY DEPUTY CONSERVATOR OF FOREST

63. That the contents of paras 16 to 26 are denied as wrong, false and devoid of all merit. The contents in the preliminary submissions in Paras 28-41 along with the contents of para 51 in the para-wise reply are reiterated and are not being repeated for the sake of brevity. This Hon'ble Tribunal may take strict note with respect to the reliance by the Appellant on the Forest Conservation

Rules, 2022, when in fact the same are no longer in existence. Further, at the time of processing and grant of Stage I Forest Clearance, the Forest Conservation Rules, 2003 were in existence. Thus, all allegations of violation pertaining to Forest Conservation Rules, 2022 are baseless and without any merit. However, as matter of abundant precaution, the DFO has given due regard has been given to the direct and indirect impact of the project by imposing conditions for the preparation of a holistic turtle conservation plan. Additionally, the Answering Respondent also got the wildlife conservation plan prepared, a detailed environment management plan, as well as sand dune morphological studies, where adequate mitigation measures are incorporated by experts of national repute. This is in addition to the mitigation measures incorporated in the Environmental Clearance dated 12.12.2024, Forest Clearances, the Coastal Zone Regulation Clearance dated 26.12.2023, among other permissions. The inclusion of explicit mitigating conditions such as turtle conservation plans, monitoring, and reporting obligations further substantiates that the project screening committee has duly followed the procedural requirements in accordance with the Forest Conservation Rules 2022. The Sandeep Desai case is not applicable to the present case as detailed information was provided by the Answering Respondent as per the procedure established by the law and the Appellants have failed to prove any misrepresentation leading to inadequate assessment. Infact, there cannot be any turtle nesting on forest land as is evident from the photographs annexed at Annexure R/16 due to the presence of a steep slope connecting the forest land with the coast.

RESPONSE TO – LACK OF REASONED JUSTIFICATION IN THE RECOMMENDATIONS FOR THE PROPOSED DIVERSION

64. That in response to para 27-32, it is submitted that a detailed report was prepared by the Divisional Forest Officer, based on which the subsequent

recommendations have been obtained. Thus, it cannot be said that the recommendation is mechanical and without any application of mind. In fact there were a total of 16 EDS before the Project was granted Stage II Clearance. The Conservator of Forest additionally recommended preparation of the Turtle Conservation Plan, as a matter of abundant precaution, and the same clearly highlights the application of mind with respect to the grant of Forest Clearance. Furthermore, the final Stage II Forest Clearance was granted only after the compliance was verified by the Regional Office with the conditions of Stage I Forest Clearance.

RESPONSE TO – WORK PERMISSION ORDER GRANTED IS NOT IN CONSONANCE WITH RULE 5 (e) (ii) (c)

65. That the contents of para 33 to 38 are denied as wrong, false and devoid of all merit. At the outset, it is humbly submitted that the referenced Sub Rule 5(e)(ii)(c) of the Forest Conservation Rules, 2022 is with reference to the grant of In-Principle Approval and not with reference to the Work Permission Order. Further, the Work Permission Order has been granted under the Van Sanrakshan Evam Samvardhan Rules, 2023 and is in consonance with provisions of Rule 11(7) of the said Rules. The contents of para 28-42 of the preliminary submissions are reiterated and are not being repeated for the sake of brevity.

RESPONSE TO - LACK OF CONSIDERATION FOR THE ECOLOGICAL EFFECTS OF SEAWATER INTAKE AND THERMAL DISCHARGE ON CORAL REEFS AND SEA TURTLES

66. That in response to the contents in para 39 to 40, the submissions of para…. are reiterated and are not being repeated for the sake of brevity. The allegations in the said paragraphs are not a direct or indirect impact of Forest Clearance.

The presence and impact of intake and outfall pipelines has been duly addressed and looked into by CSIR NEERI along with CSIR NIO as well as EAC and Gujarat CZMA. The mitigation measures to reduce the impact, if any, have been incorporation in the Environment Management Plan as well as the Environmental Clearance and the Coastal Zone Regulation Clearance. The submissions of the Appellants are mere conjecture without any backing in facts or law.

RESPONSE TO – NON-CONSIDERATION OF ENVIRONMENTAL AND ECOLOGICAL IMPACT UPON CORAL REEFS AND SEA TURTLES IN GRANT OF WORK PERMISSION ORDER

67. That the contents of para 41 to 48 are wrong, false and devoid of all merit. It is reiterated that the Appellants are raising grounds with respect to the alleged violation of Coastal Regulation Notification, 2011 and the said allegations have no bearing with respect to the Forest Clearance. The reliance on the Forest Conservation Rules, 2022 and the adjudication of direct and indirect impact is only vis a vis the In Principle Approval , which was granted under the Forest Conservation Rules, 2003.Furthermore, the impact of the entire project has been duly appraised by the Expert Appraisal Committee as well as specifically by the Gujarat Coastal Zone Management Authority. The Appellants are barred from raising issues beyond the scope of the Appeal as per Rule 14 of the NGT Rules, 2011.

RESPONSE TO OVERLOOKING THE ECOLOGICAL IMPORTANCE OF THE ALGAL COASTAL AREAS AS PRIME FORAGING SITES FOR TURTLES

68. That in response to the contents of para 49-50, the contents of the preliminary submissions are reiterated and are not being repeated for the sake of brevity.

The Presents of algal in marine environments is common, however the discharge of effluent is being inorganic and released at a designated deep sea discharge point minimize its potential impact on algal growth due to dilution and depth. As per standard norms, the treated effluent discharged is clear and complies with environmental quality parameters, thereby posing no significant risk to algal or marine ecosystem.

69. That the submissions in the Preliminary Submissions and Para wise response may be read as a response to the grounds and in view of the same, the grounds may be summarily rejected.

III. RESPONSE TO THE SUBMISSIONS IN THE ADDITIONAL AFFIDAVIT

70. That in the Additional Affidavit dated 31.07.2025, the Appellants, in pursuance of the Order dated 27.06.2025, were required to submit additional details clarifying the status of the turtle nesting sites with respect to the project of the Answering Respondent. However, the Appellants have instead submitted a 103 page Affidavit, amending the original Appeal, without seeking leave of this Hon'ble Tribunal as per the National Green Tribunal Rules, 2011.

Response to RTI Response from Forest Department confirms presence of turtle nesting sites around proposed project area

71. That the contents of para 4 to 6 state that the Forest Department in the RTI response has clarified the number of eggs that hatched in the Mandvi Range from 2011/2012 to 2023/2024 and the number of turtles which were found dead from 2011/2012 to 2023/2024, a period of twelve years. However, the RTI response of 15.05.2025 of the Forest Department refuses to share the geocoordinates of the turtle nesting sites due to the risk of poaching. At the outset, it is pertinent to highlight that the said RTI response was with the Appellant since May 2025 however the same was not submitted before this

Hon'ble Tribunal, for reasons best known to the Appellant. It is also pertinent to mention that the Appellant had geo coordinates of the project of the Answering Respondent, and an RTI response could have been accordingly framed by giving a specific reference of Bada village. However, the Appellant has instead raised a general query regarding Mandvi range, which clearly highlights that there is something more than what meets the eye and the Appellants herein are utilizing generic information regarding turtle nesting sites to mislead this Hon'ble Tribunal.

72. That further, the sporadic presence of turtles in other villages and areas of Mandvi Range cannot be a ground for alleging the presence of turtles on the project area of the answering Respondent. This is especially so when there are numerous reports of experts, field visits by the expert appraisal committee which confirm that there are no nesting sites present at the project of the answering Respondent. Specifically in the intertidal zone, the pipeline is underground and there will be no impact even if there is some sporadic presence of turtles. The proposed seawater intake and effluent disposal pipelines are to be laid with underground of the Forest area through micro tunnelling, much below the Forest Land (approx. 15 m below) thus avoiding the disturbance to existing Forest Land. Effluent discharge into sea will be as per the standard prescribed by CPCB/GPCB and therefore, there will be no significant adverse impact on Flora and Fauna. However, as a matter of abundant precaution, the answering Respondent has been directed to prepare detailed conservation plans as well as set aside 1.36 crores specifically for the conservation of turtles. The submissions in the Preliminary Submissions at paras 28-48 are reiterated and are not being repeated for the sake of brevity.

Response to Letter Forest Department requesting location details, map and geo-coordinates of turtle nesting sites in Mandvi Taluka

73. That in response to para 7 , it is submitted that the Appellant clearly has a lackadaisical attitude towards the present proceedings as the RTI application was sent to the Forest Department almost after three weeks on 18.07.2025, barely fifteen days before the date of hearing on 01.08.2025. Further, again the query of the Appellants has been general instead of specifying whether any turtle nesting sites are present in the project area of the Answering Respondent, which has been the primary contention of the Appellants in the Appeal No. 19/2025 challenging environmental clearance as well as the present Appeal.

Response to Maps Depicting Distances based on Appellants Personal Knowledge of Nesting Site Locations which are fenced and protected by the Forest Department

74. That the contents of para 8-9 are denied for want of merit and documentary proof of the presence of turtle nesting sites. The photographs annexed are belated from 2022 and are of coordinates from a location 3-6 km away from the project of the answering Respondent, as admitted by the Appellants themselves. Moreover, it is not clear whether the said photographs are turtle nesting sites or hatcheries maintained by the Forest Department. From the said photographs and google earth images, it is clear that there are no turtle nesting sites within the project area of the answering Respondent and neither has the Appellant been able to establish the prohibition in law to undertake establishment of projects situated at a distance of 3-6 km away from the nesting sites as well as the impact of such projects on the far away nesting sites , if they exist at all.

75. the DCF's entries in Form A Part II were based on accurate site-specific inspections and supported by scientific field studies. DCF assessment was correct and based on site-specific observations within the forest area for the proposed project under the DCF's jurisdiction. No turtle nesting sites, fencing,

or any other wildlife activity were found at or near the proposed project site. The Forest Department itself has never identified or fenced any turtle nesting area within the project boundaries all known and sporadic nesting sites are located 2.6 km to 6 km away as evidence provided by the appellant.

76. Contrary to this, the Appellants are attempting to rely on generic Mandvi Range turtle egg data (covering a 50–55 km coastline) obtained via RTI over a period of twelve years, which is not site-specific and does not relate to the 1.5 km coastal stretch of the project area. Presenting this broad range-level data as if it applies to the project site is misleading, particularly when no single piece of credible evidence shows turtle nesting within the project site itself. It must be emphasised that the number of eggs mentioned over a period of twelve years (8682) and number of eggs that nest per turtle ranging from 100 to 200 per turtle can at best be described as miniscule with little or no impact on turtles. The Appellants' attempt to substitute non-site-specific data for this requirement does not meet the NGT's directive for site-specific evidence and appears intended to misrepresent the actual conditions at the project site.

Response to Form A Part II filed by the DCF is required to disclose presence of wildlife/rare/endangered /unique species and the State Government must consider Direct and Indirect impacts on their habitat as per Rule 9(5)(e)(ii)(c) of the Forest Rules, 2022

77. That in response to para 10 to 15 it is submitted that the Forest (Conservation) Rules, 2022, although the said Rules have been repealed and superseded by the Forest (Conservation) Rules, 2023 or the Van Sanrakshan Evam Samvardhan Rules, 2023. Further, the application for Forest Clearance of the Answering Respondent was processed under the Forest Conservation Rules of 2003. The requirement of assessing the direct and indirect impact under the

Forest Conservation Rules, 2022 by the Divisional Conservator of Forest cannot be applicable for a clearance which was initiated under the erstwhile Forest Conservation Rules, 2003, especially when the said Rules of 2003 require assessment of the impact only for projects of 40 ha or more.

78. That as a matter of abundant precaution, the Divisional Forest Officer in his inspection report of December 2021 had recommended the diversion subject to Study/Assessment of Sea Turtle in 10km surrounding the project area as well as preparation and implementation of a holistic conservation plan for mitigation of any negative effects to the sea turtle. Further, the DFO had also assessed the presence of nearby Eco Sensitive Areas. Thus, the proposal has holistically considered including the direct and indirect impacts, which have been hidden by the Appellants herein for reasons best known to them. The same has been complied with and described in the paragraphs below. The submissions in the Preliminary Submissions at paras 28-41 is reiterated and is not being repeated for the sake of brevity.

Response to purposive construction must be taken to interpret the phrase "in and around" under Serial No. 8(i) & "in the area" under Serial No. 8 (v) in Form A Part II

79. That in paras 16 to 24, the Appellant has submitted that the language of Form A Part II of the Forest Conservation Rules, 2022, highlights the intention of the legislature to look into the impact on wildlife or any rare/endangered/unique species where the forest land is being diverted. The Appellants have emphasized on the application of purposive construction of the Forest Conservation Act, 1980 and the Forest Conservation Rules, 2022 for submitting the correct information about the direct and indirect impacts of Forest Clearance by the State Government. At the outset, it is pertinent to

reiterate at the cost of repetition, that the erstwhile Forest Conservation Rules, 2022 have been superseded. Hence, any submissions for the enforcement of the said Rules today cannot be admitted in an Appeal without a formal amendment of the pleadings. Further, assuming that there has been no substantive change vis-à-vis the provision for ascertaining the direct and indirect impact of a proposal for forest clearance under the Van Sanrakshan Evam Samvardhan Adhiniyam, 2023, it is humbly submitted that the Conservator of Forest, by recommending the preparation of a holistic turtle conservation plan has looked into the direct and indirect impact of the project. The grievance of the Appellants that the grant of Forest Clearance is based on misleading information is baseless as the area of forest land is less than 1 ha and does not impact the flora of fauna on the ground.

80. That further, the doctrine of purposive interpretation cannot be applied to rewrite the provisions of the law. The direct and indirect impact of a project has to be ascertained at the time of granting In-Principle Approval. The same cannot be read as an additional condition at the time of grant of Stage II by the Central Government or Section 2 Order by the State Government. The same has been clarified by the Hon'ble Supreme Court in the case of Sri Ram Saha v. State of West Bengal [2004 11 SCC 497] and Others and Rananjaya Singh v. Baijnath Singh & Others [(1954) 2 SCC 31]. In the present case as well, purposive interpretation cannot be given to the words "in and around" to expand the scope of the meaning to include assessments pertaining to impact on coastal areas or areas 3-6 km away , which are not part of the forest land sought to be diverted. This, in essence would lead to rewriting the provisions and the intent of the statute, expanding its scope beyond what has been intended behind the Forest Conservation Act, 1980 and the Rules issued thereunder. Copy of the Judgments of the Hon'ble Supreme Court in Sri Ram

Saha v. State of West Bengal [2004 11 SCC 497] and Others and Rananjaya Singh v. Baijnath Singh & Other is marked and annexed herein as **ANNEXURE R/22**.

81. That arguendo, in and around has to be interpreted broadly and in accordance with the objective of the Forest Conservation Act, 1980, it is humbly submitted that the said impact has been duly accounted for in the Environmental Clearance and the Coastal Zone Regulation Clearance, apart from numerous other legal compliances such as Consent to Establish, which have been granted to the answering Respondent in accordance with the law. Stage I and II Clearances are conditional upon ongoing ecological monitoring, compliance reporting, and capacity for modification or additional mitigation based on real impacts observed on the ground. This satisfies the "*precautionary principle*" and "*adaptive management*" as recognized by the Hon'ble Supreme Court Godavarman Case, (2012) 3 SCC 277).

82. That it is pertinent to mention that the Hon’ble Supreme Court in the case of Lafarge Umiam Mining Pvt. Ltd. [2011 7 SCC 338], emphasized on the principle of proportionality and clarified that environment has different facets and care of the environment is an on-going process. Thus, the concept rules out formation of across-the-board principles as it would depend on the facts of each case whether Forest Clearance in a given case should be permitted or not. Further, once the court has confirmed that the decision-making process is fair, fully informed and free from any bias, the doctrine of margin of appreciation in favour of the decision maker will come into play. Thus, purposive interpretation cannot be applied as a uniform rule, without taking into consideration the facts and circumstances of a particular case. In the present case, the Forest Clearance for 0.9689 ha of forest land, without any felling of trees, is not bound to impact any wildlife or flora in the area. Moreover, the

"in and around" impact has been duly taken into consideration in accordance with the law by six external expert agencies after undertaking detailed studies over a period of six years, including a site visit by different officials from the Forest Department as well as the Expert Appraisal Committee, the Coastal Zone Management Authority and the Gujarat Pollution Control Board. Thus, the allegations of the Appellants herein are mere conjecture, without any basis in facts and law and have clearly been filed for delaying a nationally important project. That in view of the above, the Appeal may be dismissed with huge costs.

Date: 10.09.2025
Place: Pune

DRAWN AND FILED BY:



Eisha Krishn, Mansi Bachani & Gitanjali Sanyal
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SETTLED BY:
Shri. Sanjay Upadhyay
[Senior Advocate]

IN THE HON'BLE NATIONAL GREEN TRIBUNAL

WESTERN ZONE BENCH, PUNE

APPEAL NO. 144 OF 2025

IN THE MATTER OF:

Vijaykumar Karsanbhai Gadhavi ...Appellant(s)

-Versus-

Union of India & Ors. ...Respondent (s)

AFFIDAVIT

I, Ranjan Tiwari S/o Late Shri H.C. Tiwari aged about 55 am the Authorized Signatory for GHCL Ltd., B-38, Institutional Area, Sector - 01 Noida, Uttar Pradesh - 201301, presently at New Delhi, do hereby solemnly affirms and declares as under:

1. That I am fully conversant of the facts and circumstances of the matter and am competent to swear this affidavit.
2. The contents of the accompanying Reply Affidavit are true and correct to the best of my knowledge and have been drafted by the counsel on my instructions and nothing material has been concealed therefrom.
3. That the Annexures in the accompanying Reply Affidavit are true and correct to the best of my knowledge.

Abba Tomar Advocate New Delhi Regn. No. 8513 GOVT. OF INDIA

For GHCL LIMITED

Authorised Signatory

DEPONENT

Identify the deponent/executant who has signed in my presence

VERIFICATION:

19 AUG 2025

Verified at New Delhi on this.....day of....., 2025 that the contents of the above affidavit are true and correct to my knowledge and belief and nothing material has been concealed there from.

NOTARY Abba Tomar Advocate New Delhi Regn. No. 8513 GOVT. OF INDIA

Certified that the foregoing statement was declared on solemn affirmation before me which has been read over to the deponent who has admitted it as correct

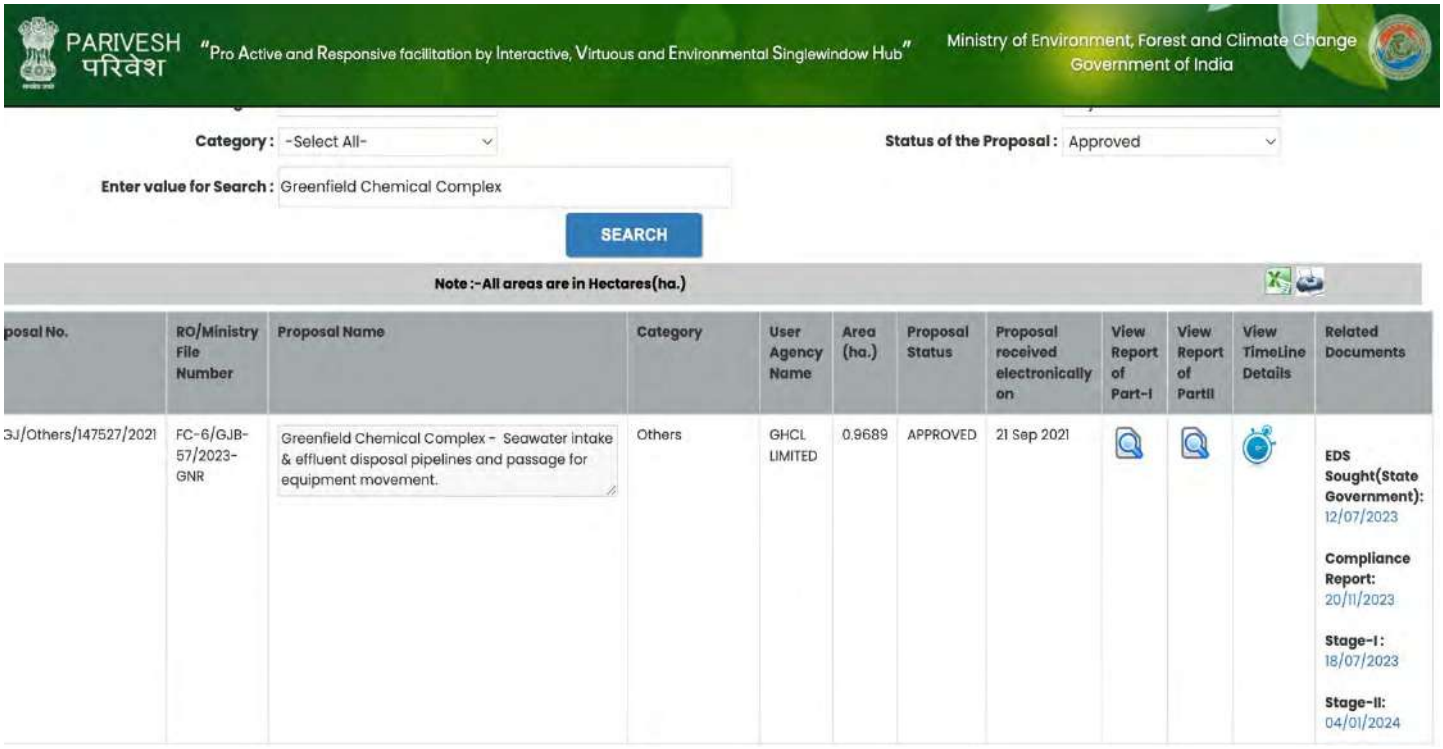
Notary DELHI

19 AUG 2025

For GHCL LIMITED

Authorised Signatory

DEPONENT



PARIVESH परिवेश "Pro Active and Responsive facilitation by Interactive, Virtuous and Environmental Singlewindow Hub" Ministry of Environment, Forest and Climate Change Government of India

Category : -Select All-

Status of the Proposal : Approved

Enter value for Search : Greenfield Chemical Complex

SEARCH

Note :-All areas are in Hectares(ha.)

posal No.	RO/Ministry File Number	Proposal Name	Category	User Agency Name	Area (ha.)	Proposal Status	Proposal received electronically on	View Report of Part-I	View Report of PartII	View TimeLine Details	Related Documents
GJ/Others/147527/2021	FC-6/GJB-57/2023-GNR	Greenfield Chemical Complex - Seawater intake & effluent disposal pipelines and passage for equipment movement.	Others	GHCL LIMITED	0.9689	APPROVED	21 Sep 2021				EDS Sought(State Government): 12/07/2023 Compliance Report: 20/11/2023 Stage-I: 18/07/2023 Stage-II: 04/01/2024

ANNEXURE R/2 [Colly]

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI
Application No.154 of 2014 (SZ)
AND
M.A. No. 284 of 2014 (SZ)

In the matter of:

1. D.V. Girish
   Kalleshwara Estate
   Kaimara P.O.,
   Chikmagalur
   Karnataka

2. Shreedev Huilkere
   Woodway Estate
   Jakkanahalli Post
   Chikmagalur
   Karnataka

3. S. Girijashankar
   Sai Madhuvana Layout
   Chikmagalur
   Karnataka … Applicants

AND

1. The Secretary to Government
   (Environment and Ecology)
   Department of Forest Environment and Ecology
   Room No. 708, Gate 2, Multi Storied Building
   Dr. Ambedkar Veedhi,
   Bangalore – 560 001

2. The Principal Chief Conservator of Forests (Wildlife)
   Aranya Bhavan, 2nd floor, Malleshwaram
   Bangalore – 560 003

3. The Additional Principal Chief Conservator of Forests
   Field Director – Project Tiger – Shimoga Circle
   Shimoga

4. The Deputy Conservator of Forests
   Territorial Forest Division
   Chikmagalur
   Karnataka – 577101

5. The Conservator of Forests
   Bhadra Wildlife Division
   Chikmagalur, Karnataka – 577101

6. KSS Hotels and Resorts Pvt Ltd
   Trivik Chikamagalur
   Chinnabi Khan Estate
   Channagondanahalli Village
   Vasatre hobli, Chikamagalur District
   Karnataka

7. Prim Rose
   Bagneheddal
   Bayaravalli hobli
   Chikmagalur District
   Karnataka

8. Green Woods
   Rashi Eco Tourism
   Attigundi
   ID Peeta Village
   Jagara Hobli
   Chikmagalur, Karnataka

9. Jhari Eco Stay
   Rashi Eco Tourism
   Attigundi
   ID Peeta Village

Jagara Hobli
Chikmagalur, Karnataka … Respondents

Counsel for Appearing:

Applicant: M/s. K. Thilageswaran, G. Balamanikandan, P. Sundararajan, and M. Subha, Advocates

Respondents: Shri Devaraj Ashok, Advocate for respondent Nos. 1 to 5; Shri Sanjay Upadhya for M/s. A. Thayaparan, L.G. Sahadevan, Shri P. Rajendrakumar, Advocates for respondent No. 6; Shri Paul, Hudson Samuel, Advocate for respondent No. 7; M/s. Thomas V. Peter and R. Manohar, Advocates for respondent No. 8; M/s Pitty Parthasarthy and S. Kolandasamy, Advocates for respondent No. 9.

Appeal No. 5 of 2015(SZ)

In the matter of:

D.V. Girish
Kalleshwara Estate
Kaimara P.O.,
Chikmagalur
Karnataka … Applicant

AND

1. The Member Secretary
   National Tiger Conservation Authority
   Ministry of Environment and Forests
   Government of India
   Annexe No. V, Bikaner House
   Shajahan Road, New Delhi 110 011

2. The Principal Secretary to Government
   Forest, Ecology & Environment Department

Room No. 448, 4th floor
M.S. Building, Bangalore - 560 001

3. The Secretary
Revenue Department
Government of Karnataka
Multistoreyed building
Ambedkar Veedhi
Bangalore

4. The Principal Chief Conservator of Forest
Aranya Bhavan
Malleswaram, Bangalore

5. The Deputy Commissioner
Chikamagalur District
Chikamagalur – 577 101
Karnataka

6. The Conservator of Forests
Bhadra Wildlife Division
Chikmagalur, Karnataka – 577101

7. The Member Secretary
Karnataka Pollution Control Board
"Parisara Bhavan"
49, Church Street
Bangalore – 560 001
Karnataka

8. KSS Hotels and Resorts Pvt Ltd
Trivik Chikamagalur
Chinnabi Khan Estate
Channagondanahalli Village
Vasatre hobli, Chikamagalur District
Karnataka … Respondents

Counsel Appearing:

Applicant: M/s. M. Radhakrishnan, P. Sundararajan and Vetri Selan, Advocates.

Respondents: Smt. C. Sangamithirai, Advocate for respondent No. 1; Shri Devaraj Ashok, Advocate for respondent Nos. 2 and 6; Shri Thirunavukarsu, Advocate for respondent No. 7; Mr. Sanjay Upadhaya for M/s. A. Thayaparan, L.G. Sahadevan, Shri P. Rajendrakumar, Advocates

R.A. No. 1 of 2015 in Appeal No. 5 of 2015 (SZ)

In the matter of:

KSS Hotels and Resorts Pvt Ltd
Trivik Chikamagalur
Chinnabi Khan Estate
Channagondanahalli Village
Vasatre hobli, Chikamagalur District
Karnataka …. Appellant/Respondent No. 8

AND

1. D.V. Girish
   Kalleshwara Estate
   Kaimara P.O.,
   Chikmagalur, Karnataka … Respondent No. 1/Appellant

2. The Member Secretary
   National Tiger Conservation Authority
   Ministry of Environment and Forests
   Government of India
   Annexe No. V, Bikaner House
   Shajahan Road, New Delhi 110 011

3. The Principal Secretary to Government
Forest, Ecology & Environment Department
Room No. 448, 4th floor
M.S. Building, Bangalore - 560 001

4. The Secretary
Revenue Department
Government of Karnataka
Ambedkar Veedhi, Bangalore

5. The Principal Chief Conservator of Forest
Aranya Bhavan
Malleswaram, Bangalore

6. The Deputy Commissioner
Chikamagalur District
Karnataka – 577 101

7. The Conservator of Forests
Bhadra Wildlife Division
Chikmagalur, Karnataka – 577101

8. The Member Secretary
Karnataka Pollution Control Board
"Parisara Bhavan"
49, Church Street
Bangalore – 560 001 … Respondent Nos. 2 to 8/
Respondent Nos. 1 to 7

Counsel for Appearing:

Review Applicant : M/s. Thayaparan and P. Rajendrakumar, Advocates.

Respondents : M/s. M. Radhakrishnan, P. Sundararajan and M. Vetriselvan, Advocates for respondent No. 1(Appellant in Appeal No. 5 of 2015

(SZ); Smt. C. Sangamithirai, Advocate for respondent No. 2; Shri Devaraj Ashok, Advocate for respondent Nos. 3 to 7; Shri Thirunavukkarasu, Advocate for respondent No. 8

JUDGMENT

Present:

1. Hon'ble Shri Justice M. Chockalingam
   Judicial Member

2. Hon'ble Prof. Dr. R. Nagendran
   Expert Member

Dated, 09th April, 2015

(Hon'ble Shri Justice M. Chockalingam, Judicial Member)

Application No. 154 of 2014 (SZ):

This Application has been filed by the applicants who claim to be environmental activists residing in Chikmagalur, State of Karnataka seeking direction against the respondents/administrative authorities to take appropriate action with regard to the encroachment and illegal constructions being made in Bababudangiri and Mullayanagiri hill areas in the State of Karnataka. The facts in brief as found in the Application are summarised below:

2. Bababudangiri and Mullayanagiri are hill areas in the State of Karnataka which are located within 10 km from the boundary of Bhadra

Tiger Reserve (Tiger Reserve) in Chikmaagalur district. These mountain ranges are the offshoot and integral part of the Western Ghats, which is a global biodiversity hotspot and are located within Ecologically Sensitive Zone of Tiger Reserve and it is one among the 25 bio-hotspots in the World.

3. These mountains are vital part of the active wildlife corridor that connects the Tiger Reserve with other reserve forests such as Masagali, Udev, Churche Gudda, Gangooru, Thimmapura, Yemme Dhoddi etc. There has been scientific documentation on regular movement of endangered animals such as tiger, leopard, porcupine, sambar and so on in this area and it is a habitat for several rare species of birds such as Rufous Bellied Eagle, Falcons, Blue Rock Thrush etc. According to Birdlife International UK, Lesser Kestrel, White Bellied Short Wing categorized as one of the threatened bird species is found in this area. This landscape is also an important catchment area for several perennial streams which flow through the Tiger Reserve and are the tributaries of River Bhadra feeding water to thousands of people downstream.

4. However, a number of unauthorized and illegal constructions are being carried out in these hill areas affecting the biological nature and the environment. A number of resorts are under construction and these constructions either block or divert the fresh water streams which flow through the Tiger Reserve on the higher reaches of the mountains.

These hill areas are also the water catchment areas of the habitations situated in the foot of the hills but the constructions are affecting the fresh water ecosystem in the entire catchment area by reducing the water flow, altering the vegetation downstream and reducing the water availability for agriculture and basic sustenance of people's livelihood. These resorts also alter the land use pattern by taking up large scale land excavation and construction, destabilizing the fragile slope in the 'shola' grassland ecosystem over the mountains.

5. The applicants sent various representations to the respondents who are having statutory duty to curtail those encroachment and illegal constructions which have neither been considered nor replied with.

6. **Appeal No: 5 of 2015:** This Appeal is converted from Application No.53 of 2015 filed by the first applicant herein who filed the Application No.154 of 2014 above by the Orders of this Tribunal dated 20.02.2015. The facts of the case adduced from the averments made in the Appeal Memorandum are as follows:

7. The appellant who is one of the applicants in Application No. 154 of 2014 (SZ) an environmental activist having come to know about the construction of a large scale commercial resort with an investment of over Rs.45 Crore by respondent No.7 at the base of Mullayangiri hill (the highest peak in Karnataka) in survey No.344 (3.25 acres) and survey No.216 (3.25 acres) of Channagondanahalli village of Vasatre

hobli in Chikmangalur district, Karnataka, made an appeal along with one Shreedev Hulikere and one Girijashankar made an appeal on 21.02.2013 to respondent No.4 and other authorities of the State of Karnataka to cancel the permit granted to respondent No.8. In the said appeal, the appellant *inter alia* stated as follows:

> *"In addition to large scale excavations and erection of huge concrete structures, the perennial streams flowing through the ever green shola forest (which are common property resources) leading to Bhadra Tiger Reserve have been diverted to meet the unsustainable demands of the resort. The wildlife movements in the area including that of tiger are being disturbed due to the usage of heavy machinery and movement of heavy motor vehicle supplying raw materials to the site and expansion of road leading to the resort. More than 100 resident labourers employed in the construction work at this site have been repeatedly illegally entering the nearby evergreen shola forests and over extracting wood from the deemed forest.The Mullayangiri hill range is part of the Western Ghats and is located within three kilometers from the Bhadra Tiger Reserve. The resort construction site falls well within the Buffer Zone of Bhadra Tiger Reserve and the landscape around harbors a variety of rare, endangered and endemic wildlife including species like Tiger, leopard, white bellied short wing (bird), Nyctilbatrachus dattatreyensis (frof) etc. This range is also of great religious significance to the local people. In addition, several perennial streams also take birth in this high altitude shola grassland forest which feed river Bhadra supporting innumerous life systems*

dependent on these fresh water streams down the valley".

8. A copy of the said appeal appears to have been forwarded to respondent No.1, National Tiger Conservation Authority (NTCA), New Delhi. Respondent No.1 *vide* its letter dated 01.04.2013 addressed to the Chief Wildlife Warden, Government of Karnataka, Bengaluru requested a factual status report on the subject matter of the appeal of the appellant dated 21.02.2013 before the respondent authorities for further processing in the matter. No action whatsoever was taken by the respondent No.2 on the request of the respondent No.1. Respondent No.2 ought to have sent a factual status report regarding the proposed construction of resorts by the respondent No.8 to the respondent No.1.The appeal of the applicant appears to have been forwarded to the respondent No.6 by the respondent No.4 instead of the respondent No.2. Respondent No.6 who is not competent to decide the question of grant or cancellation of permit for construction of the resorts in the aforesaid survey nos. by the respondent No.8 passed an order dated 07.06.2013 addressed to the applicant and two others, who made the aforesaid appeal to the respondent No.4. The said order was served on the applicant through his counsel during the course of hearing of Application No.154 of 2014 (SZ) by the Tribunal on 11.02.2015. Immediately on receipt of the said order dated 07.06.2013 passed by the

respondent No.6 on the appeal of the applicant dated 21.02.2013 made to the respondent No.4 as well as the respondents 2 and 5, the appellant filed this appeal against the order dated 07.06.2013 served on the applicant on 11.02.2015.

9. **M.A. No. 284 of 2014 in Application No. 154 of 2014 (SZ):**

The Applicants in Application No. 154 of 2014 have filed this M.A. No. 284 of 2014 seeking an amendment to the prayer clause in Application No. 154 of 2014 by substituting the expression "**therefore the applicants pray that the Hon'ble Tribunal be pleased to restrain respondents 6 to 9 from further proceedings with the construction of resorts in Bababudangiri and Mullayangiri hill ranges adjacent to Bhadra Tiger Reserve in Chickmagalur District, State of Karnataka"**, for the expression **"Therefore, the applicants pray that this Hon'ble Tribunal may be pleased to direct the respondents to take appropriate action on the representation made by the applicants dated 16.02.2012 with regard to the encroachment and illegal constructions being made in Bababudangiri and Mullayangiri hill areas in the State of Karnataka within the time frame that may be fixed by this Hon'ble Tribunal and thus render justice".**

10. **R.A.No.1 of 2015 (SZ) in Appeal No.5 of 2015 (SZ):**

This is a review Application filed by the respondent No.8 in Appeal No.5 of 2015 on conversion of the Application No.53 of 2015 by an order dated 20.02.2015 passed by this Tribunal to review *ibid* orders.

11. As seen above, the applicants who claim to be environmental activists in Chickmagalur District in the State of Karnataka have filed the Application No. 154 of 2014 seeking a direction against the respondents to take appropriate action on their representation made on 16.02.2012 alleging encroachment and illegal constructions made in Bababudangiri and Mullayangiri hill areas in the State of Karnataka. On entering appearance, the respondents have filed their replies. Pending enquiry of the said Application, the applicants filed M.A.No. 284 of 2014 seeking an amendment of the relief clause in Application No. 154 of 2014. Aggrieved over an order made by the Conservator of Forest (CoF) and Director, Bhadra Wild CAT C, Chickmagalur Division, Chickmagalur dated 07.06.2013, the 1st applicant in Application No. 154 of 2014 filed an application which was converted into Appeal No. 5 of 2015.

12. On admission, the 8th respondent in Appeal No. 5 of 2015 (SZ) therein and 6th respondent in Application No. 154 of 2014 (SZ) filed a Review Application which was taken on file as R.A. No. 1 of 2015. Since the questions that arose in all the above proceedings are inter-

connected and also on the same subject matter, all were taken up for joint enquiry. On the pleadings placed by the parties, the following questions were formulated:

13. Application No. 154 of 2014:

(i) Whether the applicants are entitled for a direction to the 1st to 5th respondents to consider their representation dated 16.02.2012 with regard to the encroachment and illegal constructions made in Bababudangiri and Mullayanagiri hill areas in the State of Karnataka within a time frame.

14. M.A. No. 285 of 2014 in Application No. 154 of 2014:

(i) Whether the application seeking an amendment of prayer in Application No. 154 of 2014 filed by the applicants has to be ordered.

15. Appeal No. 5 of 2015:

(i) Whether the appeal is maintainable on the question of jurisdiction for all or any of the reasons putforth by the appellant.

16. R.A. No. 1 of 2015 in Appeal No. 5 of 2015:

(i) Whether the Review Application is maintainable and has to be allowed.

17. The arguments advanced by the learned counsel for the applicants, the appellant and also the respondents are heard. All the

materials made available were looked into. The Tribunal paid its anxious consideration on the same.

Application No. 154 of 2014:

18. The only grievance ventilated by the applicants in this Application is the non-consideration of their representation dated 16.02.2012 with regard to the encroachment and illegal constructions being made in the hill areas of Bababudangiri and Mullayanagiri in the State of Karnataka and hence they have sought for a direction to the respondents to take appropriate action. A perusal of the representation dated 16.02.2012 as found in Sl. No. 9 (Page No.37) in the typeset of papers filed by the applicant would indicate that the same was addressed by the applicant to the Chief Conservator of Forests (CCF), Field Director, Project Tiger, Shimoga Circle, Shimoga who is shown as 3rd respondent in Application No. 154 of 2014. There is nothing to indicate that any copy of the same was addressed to the other respondents therein.

19. Pointing to the representation made by the applicants, the learned counsel for the applicant would submit that after giving full description of the location of the said hill area within 10 km of the boundary of Bhadra Tiger Reserve (Tiger Reserve), ecological sensitivity, native bio-diversity, fresh water eco-system in a catchment area, by the said representation the applicants have made a request for

immediate action to halt the construction in Bababudangiri and Mullayanagiri hill range adjacent to the Tiger Reserve. It was specifically stated therein that the construction of numerous resorts would involve opening of new area, cutting of trees, construction of roads, power lines, pipelines etc., which would lead to destruction, fragmentation and alteration of natural habitat in the area violating the Forest Act and Wildlife Act and in view of ecological importance of the said hill range which is located next to the Tiger Reserve and its significance from larger social welfare perspective it becomes necessary to protect the sensitive and fragile Western Ghat ecosystem. But the authorities have not exercised any care to consider the representation and take any appropriate action on that regard and hence it becomes necessary to issue a direction to the respondent/authorities to initiate action against the other respondents who have been carrying on the construction activities in violation of law and without obtaining any permits and licenses from the authorities concerned.

20. Countering the above contention, the learned counsel for the 1st to 5th respondents who are the authorities would submit that the application has got to be dismissed since it is much beyond the period of limitation under the National Green Tribunal (NGT) Act, 2010 and the relief sought for is beyond the scope of Sections 14, 15 and 18 of the NGT Act, 2010. The application is not maintainable in facts and law and

apart from that the application has got to be dismissed for the suppression of the material fact, namely, the subsequent representations made by the same applicants to the respondent authorities and appropriate order made thereon.

21. Vehemently opposing the application, the learned counsel for other respondents who are appearing for the resorts against whom allegations of encroachment and illegal constructions are made would submit that the allegations of encroachment on an ecologically sensitive area of the Western Ghat of Tiger Reserve and illegal constructions are thoroughly baseless and unfounded. The constructions are neither unauthorized nor irregular in any manner since they are not made within the legally protective areas or the buffer zone or ecologically sensitive areas, reserve forests or even on a deemed forest land. Pointing to the documents placed, the learned counsel would submit that the land in Survey Nos. 216 and 344 in which the said resort was originally built was a coffee plantation which was purchased on 18.06.2010 shown under Annexure I. The conversion of 3.25 acres of the said land was sought for from the Deputy Commissioner, Chickmagalur District before starting the construction work in the year 2011. Another permission was sought for on 08.09.2011 for the land in second Survey No. 344. The Karnataka State Pollution Control Board (KSPCB) has duly granted Consent for Establishment (CFE) on 27.02.2013. The office of the

Executive Engineer has given the sanction order for electric power connection on 28.12.2012 shown under Annexure 14. The KSPCB has also given the consent to expand by an order dated 21.08.2013 and the concerned *Panchayat* Development Officer has granted business license on 02.06.2014 which was made based on an approved plan sanctioned by the village *panchayat.* It is pertinent to point out that the said ecotourism facility/resort also conformed to the EIA Notification, 2006 particularly under Entry 8 (a) of Schedule I of the above Notification. The ecotourism facility/resort is located on the private land and situate at about 5.8 km away from the boundary of the Tiger Reserve which is confirmed by the State regulatory and competent authorities as per the forest records. Even as per the affidavit of the 1st to 5th respondents, the facility is more than 4 km from the Tiger Reserve, 2.8 km from the ecologically sensitive area which is excluded from Kasturi Rangan Report which formed basis of the Ministry of Environment and Forests Notification dated 14.03.2014 declaring ecologically sensitive zones in the Western Ghat outside the buffer zone and more importantly the said activity is a regulated activity and not a prohibited one. When a detailed consultative process was adopted by the State Government in declaring the buffer zone/area of the Tiger Reserve, all the applicants have been parties to the process of identifying the villages that should fall within the ecologically sensitive

areas and the same is evidenced by the proceedings of the meeting dated 20.09.2011 shown under Annexure 9. The applicants have concealed the facts and thus they have not come before the Tribunal with clean hands. The eco-tourism facility is not only a legal activity but it is even permissible inside a protected area subject to sections 28 and 33 of the Wildlife Protection Act, 1972. No guidelines, notifications or court orders are currently applicable prohibiting eco-tourism or its facilities if carried out in accordance with law. While the respondents have fully complied with all statutory requirements and undertake to adhere to all conditions imposed hitherto by regulatory and statutory authorities, the applicants cannot have any grievance to ventilate and thus all the allegations are unfounded. Added further the learned counsel that the applicants have failed to raise any substantial question on environment much less any specific violation of any environmental law or norm by the respondents. Though the applicants have pleaded that the construction made by the respondents are unauthorized, illegal and by encroachment within the Tiger Reserve and eco-sensitive zone of the Western Ghats, they have not placed a single evidence to prove the same. On the contrary, the respondents have placed all the materials for undertaking the construction which the respondents obtained from various departments which were granted after spot inspections and physical verification carried out by the officials of the Forest Department. All these

would be indicative of the fact that the respondents have not violated any provision of law as contended by the applications and hence the application has got to be dismissed.

22. Admittedly, the applicants made the representation on 16.02.2012 to the 3rd respondent, Deputy Conservator of Forests alleging that construction of numerous resorts if allowed would lead to ecological degradation. The averments there were as generic as they could be. They did not make any specific complaint or indicate any violation of law against the construction activities of any specific resort in particular or any one of the respondents shown in the application. However, it cannot be disputed that the cause of action for the application first arose on 16.02.2012, the date of representation made to the Deputy Conservator of Forest. Invoking the original jurisdiction of the Tribunal, the applicants have filed this application. Hence, the applicants must plead and raise the following: - (a) it should be a civil case, (b) various substantial questions relating to environment or enforcement of any legal right relating to environmental issues and (3) such questions arise out of implementation of the enactments specified in Schedule I of the NGT Act, 2010. Section 18(2) of the NGT Act, 2010 provides the details in regard to locus and character of an applicant who is entitled to move the Tribunal by filing an application for the grant of relief or compensation or settlement of dispute. Section 18 (2) is worded by the

Legislature with wide amplitude besides covering any person aggrieved and the legal representatives of the various categories. The expression 'substantial question relating to environment' or 'enforcement of any legal right to environment' cannot be interpreted so generically that it would even include a direction to the respondent authorities to take action against other respondents when there are no specific allegations or violations are made.

23. Speaking on the period of limitation for filing an application before the NGT, section 14 of the NGT Act, 2010 reads as follows:

> *"14. Tribunal to settle disputes.- (1) The Tribunal shall have the jurisdiction over all civil cases where a substantial question relating to environment (including enforcement of any legal right relating to environment), is involved and such question arises out of the implementation of enactments specified in Schedule I.*
>
> *(2) The Tribunal shall hear the disputes arising from the questions referred to in sub-section (1) and settle disputes and pass order thereon.*
>
> *(3) No application for adjudication of dispute under this section shall be entertained by the Tribunal unless it is made within a period of six months from the date on which the cause of action for such disputes first arose;*
>
> *Provided that the Tribunal may, if satisfied that the applicant was prevented by sufficient cause from filing the application within the said period, allow it to be filed within a further period not exceeding sixty days".*

24. The instant application was filed on 30.05.2014 long beyond the limitation period as stated above. What is all stated in the application is that the application is being filed within the period of limitation and no more averments are made and no explanation is forthcoming. The only explanation tendered by the learned counsel for the applicants is that though the representation was made on 16.02.2012, the authorities have not taken any action and so long no action is taken, the application can be well maintained since the cause of action would continue. Even if his contention has got to be accepted, the applicants are not entitled for the relief for more reasons than one.

25. From the documents made available, it could be seen that the 1st representation on the strength of which the instant application was filed was made by the applicants on 16.02.2012. On 21.02.2012, all the three applicants sent a letter addressed to the PCCF, Karnataka, the 2nd respondent herein appealing to cancel the permit for construction of the resorts by the 6th respondent in Survey Nos. 344 (3.25 acres) and 216 (3.25 acres) in Channagondanahalli village of Vasatre hobli in Chickmaglur District. Equally, the applicants sent a communication dated 25.02.2013 to the PCCF, Forest, Ecology and Environment Department, Karnataka making a request to refrain from permitting the resorts in Bababudangiri and Mullayanagiri hill range. A perusal of these two communications made by the applicants to the authorities would clearly

indicate that they have reiterated the very same grievance which they originally made in the representation dated 16.02.2012. It is pertinent to point out that the applicants have not revealed anything about those communications which were made after the 1st representation dated 16.02.2012 and before filing the instant application, but on the very same subject matter. The Deputy Inspector General, National Tiger Conservation Authority (NTCA) of the MoEF, on receipt of a copy of the representation dated 21.02.2013 stated *supra* has sent a communication dated 01.04.2013 to the Chief Wildlife Warden, Government of Karnataka, Bangalore to furnish factual status for further process in the matter. The Principal Secretary to Government, Forest, Ecology and Environment Department, Government of Karnataka, Bangalore, applicants issued a direction to the PCCF, the 2nd respondent herein to take suitable action by considering the same in accordance with rules in that regard. Pursuant to the above direction, an order came to be passed by the Conservator of Forest and Director, Bhadra Wild CAT C, Chickmagalur, the 5th respondent herein as seen in Annexure 5 filed by the 1st to 4th respondents. It would be more apt and appropriate to reproduce the order which will suffice to answer the allegations levelled against the respondents which reads verbatim as follows:

> *"In the letter vide Ref.(1) above, as you have been informed that M/s. K.S.S. Hotel & Resorts Company have constructing the resorts in the*

land in Sy.No.216 and 344 situated at Channagndanahalli village, Vasthere Hobli, Chickmagalore Taluk ; and due to this, causing problem to wild lives; and hence in this regard it was notified to submit a report to the Asst. Conservator of Forests, Bhadra Wild life Sub-Dvn., Lakkavalli/ Chickmagalore, by making spot inspection of the above said place, in this regard.

Accordingly as per his report in the letters vide Ref.(2) & (3) above, as per order of Buffer Project reserved area of Bhadra life CAT C, vide No. FEE/122/ FWL/2009 dated :29-01-2010; and corrigendum order dated : 24-02-2011 in No: FEE/122/ FWL/2009; the date : 29-10-2010 is amended as 29-01-2011; the said village is not coming within the jurisdiction of Buffer Zone; and the proposal of Eco Sensitive Zone by preparing the same and submitted to the Government for its approval; and even the village of Channagondanahalli village did not mention there itself also. This village is coming in the jurisdiction of Chickmagalore Regional Division.

In continuation of the same, in respect of the matter as you have been informed, the Asst. Conservator of Forests,Bhadra Wild Life Sub-Dvn, Chickmagalore, has made spot inspection and inspected the area by visit to it, where construction work of the said resorts made by M/s. KSS Hotels & Resorts Company; and accordingly the construction work is already completed at 75% and when enquired the manager, who doing construction work, it is stated that the land in Sy.No.216 and 344 of Channagodanahalli, is being Hiduvali land; and M/s. KSS Hotels & Resorts have purchased it and registered the same in its name; and they had

submitted an application to the Hon'ble Deputy Commissioner for land conversion of the above said land; and they got land conversion of the said land etc. As informed by him. (for the construction of resorts in the concerned area, got attested by preparing sketch map of the said spot from Tahsildar, Chickmagalore; and also for commercial purpose by preparing above said sketch map got a report in this regard from Asst. Director of City planning, Chickmagalore; and Karnataka State Pollution Control board, Chickmagalore; and also from Hon'ble Deputy Commissioner, Chickmagalore, respectively and they have issued conditional permit in this regard, etc. as stated by himself).

In continuation of the same Range Forest Officer, Muttodi Divisional range,Muttodi, he informed that due to the construction of resort made by them, it will cause problem to the wild lives and effected on the environment etc. stated in the notice dated 6-8-2012 issued and informed to M/s.KSS Hotels and Resorts in this regard. Even the said resort company that they have stated to take suitable action in this regard by putting Sewage Plant in not causing any harm to the environment, not giving chance to the sound pollution and not in causing water pollution and also not causing any problem to the wild lives due to their resort.

The area constructing the above said resorts is of GPS reading as N: 13 23' 32.2" E-:75 41' 23.4'; and Bhadra Wild CAT C preserved area is with a distance of 5.8 km from D line of Seegekan. It is found that there are constructing very big buildings in more quantity in the said area constructed by the above said K.S.S. Hotel and Resorts in the said area and hence for that reason

there is a possibility of creating hurdle to the walking of wild animals in the said area. This area is a reservoir of streams water flowing in the said Bhadra Wild CAT C protected area; and the garbage and water if leaved to flow without refining the same, which are using in the said resort, all these made effect directly and there is a chance to be flow such dirty water in the said Bhadra Wild CAT C prohibited area. Therefore it is hereby informed that it will be taken care in not causing any problem in such above manner from this Resort in this regard".

26. A reading of the above order would clearly indicate that the said village in which the project is undertaken is not coming within the jurisdiction of Buffer Zone but under the jurisdiction of Chickmagalur Division. On inspection, it was found that the construction work was already completed by 75%. A part of the land was purchased and registered in the name of the respondent/resorts and the remaining land was got by the 6th respondent on conversion on an application made to the Deputy Commissioner for Land Conversion. The 6th respondent had obtained other necessary permits from the concerned authorities. The resort company has also undertaken to take suitable action by putting up the Sewage Treatment Plant (STP) and also measures to prevent noise and water pollution and any problem to the wildlife. It is pertinent to point out that the authorities while concluding the order stated that it would take care to ensure that no problems are created in any manner. In the

face of the above detailed order, it would be futile to contend that no action was taken on the representation of the applicants.

28. The learned counsel for the applicants would submit that the original representation made on 16.02.2012 was not acted upon and not even been referred to in the above order and hence a direction has got to be issued to take necessary action on the representation dated 16.02.2012. The Tribunal is unable to notice any substance in the above contention. It is true that in the above said order there is no reference in respect of the 1st representation dated 16.02.2012, but as pointed out earlier, the representation made to both the authorities on 21.02.2013 and 25.02.2013 were made by the very same applicants and in respect of the complaints on the same subject matter. Hence, the applicants cannot have any grievance to state the 1st representation dated 16.02.2013 was not acted upon since it merged with other two representations dated 21.02.2013 and 25.02.2013. Again, it has to be pointed out that having suppressed the later representations which were actually acted upon, the applicants cannot be permitted to state that the original representation was not acted upon. Equally, the contention of the applicants that the copy of the order dated 07.06.2013 made by the Conservator of Forest and Director, Bhadra Wild CAT C, Chickmagalur was not served upon the applicants has to be rejected in view of the fact that it is indicated in that order that it was addressed to all the three

applicants and was also despatched on 17.06.2013. The suppression of the later representations dated 21.02.2013 and 25.02.2013 and order made thereon by the applicants in the application would cast a doubt that they were purposefully made so and if made it would be against them. The applicants have chosen to file the application on the strength of the 1st representation dated 16.02.2012 taking advantage of the fact that the same was not referred to in the order dated 07.06.2013. Hence, it has got to be concluded that the 1st representation was merged with the other representations dated 21.02.2013 and 25.02.2013 which were considered and after passing the order, they were served upon the applicants. Thus the case of the applicants that their representation dated 16.02.2012 was not acted upon is baseless, unfounded and worth to be ignored.

29. The learned counsel appearing for the resorts pointed to necessary documents to show that the lands in question do not come under the Buffer Zone of the Tiger Reserve as could be seen under Annexure 12 and 13. The KSPCB has granted the CFE as found in Annexure 10. The electrical power supply was granted as shown in Annexure 14. The KSPCB granted the consent for expansion shown under Annexure 16. The Panchayat Development Officer has given business license shown under Annexure 21. The same was based on the approval plan sanctioned by the Panchayat shown in Annexure 22.

Equally, the 7th respondent has also filed his documentary evidences such as permissions and licenses obtained. In view of the permissions, licenses, CFE etc., granted by the respective authorities, it cannot be stated that the respondents are carrying on illegal construction or violating any of the provisions of law. If the applicants were really aggrieved by the grant of those permissions, licenses, CFE and other approvals, they could have questioned the same, if so advised, in accordance with law. But, the applicants have not challenged any of those permissions, licences, CFE etc., in this proceedings.

30. Pending the Main Application No. 154 of 2014, the applicants have filed M.A. No.284 of 2014 under rule 16(7) of the NGT (Practices and Procedure) Rules, 2011 to amend the prayer in Application No. 154 of 2014. By the said amendment the applicants intend to substitute the following expression in the relief clause:

> *"Therefore, the applicants pray that the Hon'ble Tribunal may be pleased to restrain respondents 6 to 9 from further proceeding with the construction of resorts in Bababudangiri and Mullayangiri hill ranges adjacent to Bhadra Tiger Reserve in Chickmagalur District, State of Karnataka and thus render justice".*

in place of:

> "*Therefore, the applicants pray that this Hon'ble Tribunal may be pleased to direct the respondents to take appropriate action on the representation made by the applicants dated*

16.02.2012 with regard to the encroachment and illegal constructions being made in Bababudangiri and Mullayangiri, the hill areas in the State of Karnataka within the time frame that may be fixed by this Hon'ble Tribunal and thus render justice".

31. It was submitted by the learned counsel for the applicant that originally the applicants sought for a direction to the respondents to take appropriate action on the representation made by the applicants on 16.02.2012 with regard to the encroachment and illegal construction being made in Bababudangiri and Mullayangiri hill areas within a time frame. The representation was to the immediate and effective action that was needed to protect the Western Ghat ecosystem from the eco-tourism by halting the construction of resorts in the hill ranges. Since the 1st to 5th respondents have taken the stand that they have already taken steps to verify the allegations contained in the said representation dated 16.02.2012 and found them incorrect it became necessary for the applicants to seek an amendment to the prayer clause in the main application to restrain the 6th to 9th respondents from proceeding further with the construction of resorts. The counsel for the respondents vehemently opposed the application. After hearing both sides, the Tribunal is of the considered opinion that this application is got to be dismissed for many reasons. In the original application no specific allegation was made against the 6th to 9th respondents. But, it was

generic in nature stating that there were encroachment and illegal constructions are made in Bababudangiri and Mullayangiri hill areas. It was also not pleaded with any specific violation of law. It was only on the specific cause of action that a representation was made on 16.02.2012 and in view of the inaction on the part of the 1st to 5th respondents, direction were sought to be issued. The amendment which is for a substitution of relief clause in entirety, if allowed it would be without any corresponding pleading or evidence and apart from that on altogether a different cause of action. In the instant case, both the parties were given opportunity to putforth their pleadings. The amendment sought for to substitute the relief clause if permitted would alter the very original and fundamental character of the original application. It is a settled law that the amendment shall not be allowed if the amendment would change the character of the application and that too by a different cause of action.

32. It is true that an amendment under rule 16 (7) of the NGT (Practices and Procedure) Rule, 2011 can be ordered. But, an application or appeal can be maintained on only one cause of action. Rule 14 of the *ibid* Rule, 2011 reads as follows:

> "*14. Plural remedies. - An application or appeal, as the case may be, shall be based upon single cause of action and may seek one or more reliefs provided that they are consequential to one another*".

33. The Hon'ble Western Zone Bench of the NGT at Pune had an occasion to consider the question of maintainability of an application in a composite form of application-cum-appeal filed in view of the availability of the plural remedies in accordance with rule 14 of NGT Rules, 2011 in *Vikas K. Tripathi Mumbai Vs. The Secretary, MoEF reported in 2014 ALL (I) NGT Reporter (3) (Pune) 95* and has held as follows:

> *" 21..... We shall deal with his contention in order to set right issue once for all, in as much as it is likely to be raised in many such cases on similar ground. Rule 14 of the NGT (Practices and Procedure) Rules, 2011 reads as follows*:
>
> *"Rule14. Plural remedies. - An application or appeal, as the case may be, shall be based upon a single cause of action and may seek one or more relief provided that they are consequential to one another*".
>
> *22. Perusal of Rule 14, without any prejudicial notions in the mind, will make it amply clear that any Application or Appeal, as the opening words imply are distinct remedies under which the particular relief may be sought on single cause of action. Thus, if properly read the rule provide as follows:*
>
> *i) There may be either single Application or Appeal. In other words, it cannot be a comprehensive or hybrid type of pleadings like Appeal-cum-*

Application, as captioned by the Appellant-cum-Applicant (Vikas Tripathy) as in the present Application/Appeals.

ii) The Appeal or Application, whatsoever it may be must be filed on single cause of action. Thus, it cannot be filed on several causes of action. In other words, an Appeal cannot be filed with combined causes challenging different ECs or orders, nor an Application can be filed challenging different orders or different violations under the different laws.

iii) Still, however, choice given to the Appellant/Applicant is to ask for grant of more than one relief in case such reliefs are of consequential character. In other words, if a relief depends upon grant of another relief, then grant of more than one relief is permissible.

*22. ****

23. We cannot overlook and brush aside main provisions of the NGT Act, which do not provide for any kind of permission to allow filing of two Appeals, one against the time barred EC, coupled with another EC for revised construction plan along with an Application under Sections 14,15 and 18 of the NGT Act, 2010. In case, Vikas Tripathi is genuinely interested in the cause of environment and feels that the project in question has caused violations of EC conditions/

deterioration of the environment, then he is at liberty to file a separate Application under Section 14 (1) (2) read with Sections 15 and 18 of the NGT Act, 2010 if so advised and if it is permissible under law. He cannot, however, club all such Appeals and Applications together and explore to examine whether one cap fits on another".

34. In view of the same, the request of the applicants seeking amendment to the prayer clause in the Application No. 154 of 2014 (SZ) has got to be negatived. Hence, the M.A. No. 284 of 2014 (SZ) is dismissed.

35. In the result, the Application No. 154 of 2014 (SZ) and the M.A. No.284 of 2014(SZ) are dismissed.

36. APPEAL No. 5 of 2015 (SZ)

The appellant herein originally made an application and at the time of admission a direction was issued to the Registry of the Tribunal to convert the application into an appeal. The respondents have filed R.A. No. 1 of 2015 questioning the maintainability of the appeal on different grounds *inter alia* on limitation and jurisdiction.

37. The Tribunal heard the learned counsel for the appellant and also for the respondents and paid its anxious consideration on the submissions made.

37. This appeal is brought forth seeking to set aside an order dated 07.06.2013 made by the Conservator of Forest and Director, Bhadra Wild CAT C, Chickmagalur shown as 6th respondent and also for a direction to the 4th and 5th respondents to decide the representation dated 27.02.2013 on merits and in accordance with the law.

38. The order under challenge was made on 07.06.2013 by the 6th respondent Conservator of Forest and Director, Bhadra Wild CAT C, Chickmagalur. Admittedly, it was in response to a communication dated 21.02.2103 made by the appellant appealing to cancel the permit given for construction of the resort by the 6th respondent. The entire complaint was that the permission was granted for construction activities for the resort by the 6th respondent. Speaking on the appellate jurisdiction, section 16 of the NGT Act, 2010 makes it clear that any person aggrieved by any order or decision made on or after the commencement of the NGT Act, 2010 can challenge the same provided if the impugned order or decision falls with those order/decision enumerated therein within the stipulated period. But the said order challenged is not from an order or decision enumerated under section 16 of the NGT Act, 2010. On the applicability of the section 16 of the NGT Act, 2010, the Hon'ble Principal Bench of NGT in M.A. No. 894 of 2014 in O.A. No. 26 of 2012 dated 24.12.2014 has held that section 16 provides for appeals to the

Tribunal from clauses (a) to (j) and prescribes the order against which appeal would lie before the Tribunal. The intent of the Legislature in excluding other orders being appealed before the Tribunal is implicit in section 16 of the NGT Act, 2010. Thus, it is quite evident that the appeal is beyond scope, powers and jurisdiction of the Tribunal and hence the appellant cannot maintain the appeal. Therefore, the appeal has to be dismissed as not maintainable.

39. One more contention raised by the learned counsel for the appellant is that the representation by way of an appeal made by the appellant was decided by the authority who was not competent to decide the same and hence on that ground the impugned order has to be set aside. This contention does not merit consideration in view of the aforesaid finding that the appeal itself lies outside the jurisdiction and power of the Tribunal. However, in view of the facts and circumstances of the case, the Tribunal feels it fit that liberty has to be given to the appellant to approach the appropriate authorities for necessary reliefs, if so advised.

40. Once an appeal does not lie before the Tribunal against a given order, it will not be appropriate for the Tribunal to exercise judicial jurisdiction under section 14 or any other provisions of the NGT Act, 2010.

41. In view of the dismissal of the appeal, the Review Application is disposed of accordingly.

42. In the result, the Application No. 154 of 2014 (SZ) and M.A. No.284 of 2014 (SZ) are dismissed.

No cost.

43. The Appeal No. 5 of 2015 (SZ) is dismissed with liberty to the appellant to approach the appropriate authorities for necessary relief, if so advised.

No cost

44. The R.A. No. 1 of 2015 (SZ) in Appeal No. 5 of 2015 (SZ) is disposed of.

No cost.

45. All other connected Miscellaneous Applications pending, if any, are closed.

No cost.

(Justice M. Chockalingam)
Judicial Member

(Prof. Dr. R. Nagendran)
Expert Member

Chennai
Dated, 09th April, 2015

BEFORE THE NATIONAL GREEN TRIBUNAL

(WESTERN ZONE) BENCH, PUNE

M.A.NO.628/2013

APPLICATION NO.17/2013

APPEAL NO.80/2013

CORAM :

HON'BLE SHRI JUSTICE V.R. KINGAONKAR
(JUDICIAL MEMBER)

HON'BLE DR. AJAY A.DESHPANDE
(EXPERT MEMBER)

B E T W E E N:

VIKAS K. TRIPATHI
101/13, 3rd Floor, Western Railway Colony
Matunga Road, Mumbai - 400019

....**APPLICANT**

A N D

1. **Secretary, Ministry of Environment and Forests**,
   Paryavaran Bhavan, CGO Complex,
   Lodhi Road, New Delhi - 110 003.

2. **MEMBER SECRETARY,**
   Maharashtra State Level Environment
   Impact Assessment Authority, Environment
   Department,
   Environment Department, Mantralaya, Mumbai - 400
   032.

3. **SECRETARY**, **ENVIRONMENT DEPARTMENT**,
Government of Maharashtra Mantralaya, Mumbai - 400 032.

4. **THE REGIONAL DIRECTOR**
Central Groundwater Board
Central Region, N.5. Building, Civil Lines,
Nagpur - 440001 (Maharashtra).

5. **CENTRAL GROUND WATER BOARD**,
State Unit Office, 217/11,
Kendriya Sadan 'B' Wing, GPOA, First Floor,
Akurdi, Pune - 411 044.

6. **HDIL,**
Dheeraj Arma, 9th Floor,
Anant Kanekar Marg, Bandra East,
Mumbai - 400 051.

7. **ECSTASY REALITY PVT. LTD**.,
3rd Floor, Solitaire Building, 80
SV Road, Santa Cruz West,
Mumbai - 400 054

.....**RESPONDENTS**

Counsel for Applicant(s)

Mr. Aditya Pratap, Adv a/w Mr. A.B.Walunj Adv, Mr.Abha Singh Adv

Counsel for Respondent(s):

Mr.D.M.Gupte Adv a/w Supriya Dangare Adv for

Respondent Nos.2,3.

Mrs Ujwala Pawar DGP, S.S.P.Mishra, Sourabh Gupta for CGWB

Respondent Nos.4,5

Mr. T.N.Subramaniam Senior Advocate a/w Mr. Piyush Raheja

Mr. Piyush Raheja Adv a/w Mr. Sanmish Gala Adv

Respondent No.6.

Mr. Arif Bookwala Senior Advocate a/w Mr. Gautam Kulkarni Adv,

Ms Roshne Mulla Feroze, Ms Gitanjali Joshi, Mr. Nandkishor Sharma, Mr. Sangada Tarkar Adv i/b Kamik & Kamik Respondent No.7.

Date: October 1st , 2014

J U D G M E N T

1. Originally, this Appeal was filed by Appellant – Vikas Tripathi, before the National Green Tribunal (PB), New Delhi. He filed Misc Application No.628/2013, in the said Appeal. On the first date of admission, i.e. July 17th, 2013, the Hon'ble Principal Bench of NGT, passed following order:

"**M.A.No.628 0f 2013**

"Notice of this Misc Application on the question of limitation be issued by registered post/acknowledgement due and Dasti as well.

Notice returnable on 04th September, 2013."

.....Sd/xxx....., **CP**
(Swatanter Kumar)

.....Sd/-xxx....., **JM**
(U.D. Salvi)

..

.....Sd/xxx....., **JM**
(S.N.Hussain)

.....Sd/xxx....., **EM**
(P.S.Rao)

.....sd/xxx....., **EM**
(Ranjan Chatterjee)

2. The issue of limitation, thus, loomed at large since day one of filing of the present Appeal. Learned Advocate for the Appellant was made aware about such objection in respect of limitation, particularly, when we directed learned Counsel for the Respondent No.7, to file reply affidavit to delay condonation Application, stating relevant information as to the date of communication by way of placing Environmental Clearance (EC) in the public domain on the website, including time of placing it on the website and for how much period it was so on the display. At the relevant time when such direction was given by order dated September 28th, 2013, learned Counsel for the Respondent No.6, made a categorical statement that there was newspaper publication of revised E.C.

3. Subsequent development is rather interesting, inasmuch as learned Advocate for the Appellant sought amendment of the Appeal Memo, on the ground that he desires to make it comprehensive Application-cum-Appeal

under Sections 14,15 and 16 of the NGT Act, 2010. He contended that there are plural remedies available in view of the facts stated in the Appeal Memo. Accordingly, he got the Appeal Memo amended and requested that his further Memo of Appeal filed by him, may be amalgamated with the previous Appeal No.80 of 2013, and that is what he desired to describe as comprehensive amended Application. By order dated October 29th, 2013, this statement of learned Advocate Mr. Aditya Pratap is amply clear. We may reproduce the same for ready reference:

> "We have heard Learned Counsel Mr. Aditya Pratap.
>
> By Order dated 9th October 2013, in Appeal No.80 of 2013, we noted that Learned Counsel desires to amend the Appeal, in order to make it as a comprehensive Application-cum-Appeal under Sections 14, 15 and 16 of the National Green Tribunal Act 2010. The Counsel then submitted that due to availability of plural remedies, he desires to amend the Appeal Memo for conversion of the same into the form of Application. The Counsel for the Respondent No.7 indicated that he may not take any objection, if such Application is submitted and amendment is carried out.
>
> What we find today is that the Learned Counsel has presented Memorandum of another Appeal, without carrying out any amendment, as such. He argued that the Second Appeal may amalgamated with earlier Appeal and that is what he describes as comprehensive Amendment Application. According to him, the second Memorandum of Appeal itself can be termed as amendment in view of the provision of Rule 16(7) of the National Green Tribunal (Practices & Procedure) Rules 2011.
>
> We pointed out to the Learned Counsel that filing of Second Appeal by submitting a letter dated 21st October 2013,

addressed to the Registry, is not the true compliance of the earlier order, in as much as, he is supposed to submit a regular Amendment Application, by indicating proposed amendments to be carried out in the Memorandum of Appeal and then, to file the amended Application. The procedure for filing of Amendment Application is well settled. Amendment Application will be treated as Misc. Application, in as much as, the amendment must be restricted to the relief, which may be sought within permissible limits of Sections 14, 15 and 16 of NGT Act. The Applicant may not be allowed to include unnecessary pleadings or irrelevant pleadings in the Amendment Application. The purpose of amendment is to secure that the pleadings are focused to the issues, which are involved in the *lis*. Therefore, filing of separate Amendment Application is always essential and copy of such Application has to be served on the other side, in order to get response of other side as regard a nature of the amendment to be carried out. The Applicant cannot carry out any kind of amendment, as per his whim and choice. It must have some nexus with the nature of the litigation and the case put forth by him.

The Counsel for the Applicant/Appellant vehemently argued that the Civil Procedure Code, is not strictly applicable and therefore, the Application for Amendment, need not be filed and that the present Second Appeal may be treated as Amendment Application. It is true; no doubt, those provisions of the Civil Procedure Code are not strictly applicable to the proceedings before this Tribunal. However, when the Rule 16(7) of the NGT (Practices & Procedure) Rules 2011, categorically states that Order VI, Rule 17 of the Civil Procedure Code, will be applicable, then the Amendment ought to be carried out, in accordance with the said procedure. In other words, we cannot exclude the said provision, when it has been so specifically enumerated for the Rules.

Under the circumstances, we direct the Applicant to take appropriate steps to file the Amendment Application, as per Order VI, Rule 17 of the C.P.C. and to do the needful. The Application/Appeal will be deemed as dismissed, in case no such Application is filed within a period of three (3) weeks. If the

Application for Amendment, is filed, the Registry then to serve copy thereof on the other side without any delay. The Applicant may file such Amendment Application in the Registry, as provided under Order VI, Rule 17 of the Civil Procedure Code and, it shall be registered as Miscellaneous Application.

..……sd/xx……, **JM**
(Justice V. R. Kingaonkar)

….……sd/xxx……..……, **EM**
(Dr.Ajay A. Deshpande)

4. It appears that subsequently learned Counsel for the Appellant desired to file an Application for amendment and it was so filed which was treated as Application No.17 of 2013.

5. For sake of convenience, we refer the Appellant by his name as 'Vikas Tripathi' , Respondent No.1- as MoEF, Respondent No.2 as – State Environment Impact Assessment Authority (SEIAA), Respondent No.3 as – Environment Department, Respondent Nos.4 and 5 as Central Groundwater Board Authority (CGWB) and Respondent No.6 - HDIL as Project Proponent-I, and Respondent No.7 as – Project Proponent II.

6. Vikas Tripathi, seeks to assail the revised EC granted on 2nd May, 2013, to develop the project by SEIAA, in favour of Project Proponent –II. The prayers in the Appeal may be reproduced as below:

(A) THAT orders may be issued under the provisions section 5 of the Environment Protection Act, 1986,to cancel the Impugned Revised Environment Clearance since it violates the law. As a consequence whereof.it

may be directed to stop the construction of the project of the Project Proponent at once, and to demolish that entire portion, which has been constructed beyond the Form 1 and lA, as submitted before the State Level Expert Appraisal Committee.

(8) THAT the Project Proponent be asked to submit and entirely new application for Environment Clearance stating true facts and then the State Level Expert Appraisal Committee may consider it on merits and by following the procedures contained for Category 'A' projects.

(C) THAT all that construction which has not been approved by the State Level Expert Appraisal Committee, be demolished.

(D) THAT a view may be taken for the nepotistic orders passed by the public servants in the matter and which has led to such a massive violation of the environment laws.

(E) THAT a minor delay of less than a month in the filing of this Appeal with reference to the issuance of the revised Environment Clearance may be condoned.

(F) Any other order which this Hon'ble Tribunal may deem fit to pass considering the facts and circumstances of this case.

7. The Appeal No.80 of 2013, came to be filed on July 17th, 2013, before the Hon'ble Principal Bench, New Delhi. Vikas Tripathi, however, claims that after the amendment he filed so called second Appeal or comprehensive amended Appeal-cum-Application in this Tribunal on April 22nd, 2014, on the ground that he is entitled to seek plural remedies, in view of Rule 16(7) of the National Green Tribunal (Practices & Procedure) Rules, 2011.

8. Before we proceed to consider whether such comprehensive Application can be entertained on the so called ground about availability of plurality of the remedies and particularly by way of amendment of the Original Appeal, after the objection was raised in respect of issue of limitation, on the very first date, because Notice

on the Misc Application on the question of limitation, was issued by the Hon'ble Principal Bench. It is worthwhile to note that basic issues raised in the Appeal itself, are also required to be culled out, in order to examine whether even assuming that such plural remedies are available, yet can they be availed by the Appellant, being of incidental nature to the main challenge to the 2nd EC dated 2nd May, 2013.

9. According to Vikas Tripathi when Project Proponent-submitted an Application for grant of EC for development of proposal of land situated at Andheri (W), there were reservations which were challenged by the State Govt. There was stipulation that 30 mtr ground buffer zone, shall be maintained around the land in question. Govt. of Maharashtra accordingly, issued Notification dated 12th July,2005, whereby the land bearing CTS No.866, Survey No.111/A/B/C, of village Ambiwali, Taluka Andheri, to the extent of 13.8 Ha, was reserved for I-Sewerage Plant, (Site No.580), II- recreation ground, (Site No.205), III-House for development for dishoused (Site No.549), IV-Govt. Staff Quarters (Site No.535- Retail Market (Site No.436) and West access road, VII, it was deleted from reservation and reserved for MRTS Car depot/workshop and allied activities and commercial use, as shown on the plan attached. The MMRDA, was appointed as Authority

for reservation. The Govt. Notification further shows that buffer zone of 30mtrs width, shall be kept around peripheral site land, so as to avoid noise pollution and tree plantation shall be allowed in this buffer zone.

10. The case of Vikas Tripathi is that EC letter No. SEAC-2009/127/CR-23/ TC.I, dated 12-5-2009, was issued without mentioning the conditions enumerated as above, including keeping of buffer zone as a condition precedent. He alleges that after such EC was initially granted in 2009, the Project Proponent – I, started construction in the area. According to Vikas Tripathi, during intervening period new concept of tangible FSI was evolved and therefore the Project Proponent claims that he was entitled to get more FSI. Such claim of the Project Proponent was fraudulent, inasmuch as massive concession in the FSI was already received by him and he had constructed five basements in the building. The Project Proponent was not, therefore, entitled for any additional FSI.

11. Case of Vikas Tripathi, further is that based on such Application of the Project Proponent, SEIAA issued 'nepotistic' revised EC dated 25th March, 2013 for additional structure sought by the Project Proponent. The revised EC, is totally illegal, inasmuch as it was extension of project, which ought have been treated as category B-I

Project, and hence, should have been referred to MoEF, in accordance with EIA Notification dated 14th September, 2006, for the reason that the construction project involves area of more than 1,50,000 sq.mtrs. Thus, according to Vikas Tripathi, stages of scoping, appraisal, public hearing and necessary evaluation ought to have been followed, in accordance with the said Notification, which were given go-by without any reason. The Project Proponent, according to Vikas Tripathi, must have arrived at some extraneous arrangements with the public servants in the manner, which would suit his nefarious intention, but concomitantly, would in violation of noble provisions of Law.

12. Another plank of submission of the Appellant is that width of the road, in accordance with the O.M. of MoEF, issued on 7th February,2012, ought to be at least 30 mtrs, but shockingly this aspect was overlooked when the revised EC was issued by SEIAA.

13. Next ground indicated in the Appeal of Vikas Tripathi is that inspite of the fact that only two basements were permitted in the first EC issued in 2009, yet the Project Proponent completed/provided five basements, which was blatant breach of the conditions of EC issued in 2009. But, it was conveniently overlooked while granting EC for expansion of the project in 2013. Thus,

impugned EC is bad in Law, results into the flouting of Regulation 37 (9) of the Development Control Regulations and deserves to be quashed.

14. Vikas Tripathi, further alleges that the EC conditions for extraction of the groundwater was granted on condition that permission would be obtained from CGWA, yet the Project Proponent never obtained such permission although a pit of more than 100 ft depth was dug, in order to make five basements. On basis of these averments, Vikas Tripathi seeks quashing of both the ECs and particularly, the revised EC granted on 2nd May, 2013, as well as reservation of the area under construction.

15. As stated before, Vikas Tripathi, filed Appeal No.80 of 2013, before the NGT (PB), New Delhi, on July 17th, 2013, for the first time, which should be taken as date of filing of the Appeal. He filed MA No.628 of 2013, for condonation of delay, seeking condonation of delay which according to him, had occurred in filing of the Appeal due to certain unavoidable reasons. It is pertinent to note that the delay condonation Application shows that the delay is only of forty two (42) days, in regard to the revised EC dated 2nd May,2013. Section 16 of the NGT Act, 2010, provides for prescribed period of thirty (30) day for filing of the Appeal. The proviso appended to Section 16, however, gives discretion to the Tribunal, that if it is satisfied "that

the Appellant was prevented by sufficient cause" from filing the Appeal, within the said period, it may allow (the Appeal) to be filed under this Section within a further period not exceeding sixty (60) days. Thus, limitation period can be extended only up to period of sixty (60) days only, if it is demonstrated by the Appellant that there was cause for him, which prevented him from filing of the Appeal, within initial prescribed period of limitation. In ***Sunil Kumar Samanta, M/s. Samanta Engineering Workds, 1, B.T. Road, Barrackpore, North 24-Parganas, v. West Bengal Pollution Control Board & Ors***. (2014 India NGT Reporter (Part 3) 250), the Hon'ble Principal Bench of this Tribunal, elaborately considered the relevant proviso of Section 16 of the NGT Act, 2010. The Hon'ble Principal Bench also considered analogues provisions of the Limitation Act. The Hon'ble Principal Bench, held that:

> 33. Normally, the statutory period of limitation provided in a provision like under the NGT Act, is un-extendable by recourse to provisions of Section 5 of the Limitation Act. While applying the provisions of limitation, besides applying the rule of strict construction, the Tribunal has to keep a balance between rival rights of the parties; appellant who has lost his right or whose remedy is barred by time and other to whom a benefit has accrued as a result of loss of right of the first. At this stage, it may be appropriate to make reference to a recent judgment of the Supreme Court, in the case of Esha Bhattacharjee v. Managing Committee of Raghunathpur Nafar Academy and others [JT 2013 (12) SC 450), where the Court was primarily concerned with the condonation of delay in filing an appeal. The Court adverted itself towards the respective rights and obligations of the parties and held as under:
>
> "26. The law of limitation is a substantive law and has definite consequences on the right and obligation of a party to arise.

> These principles should be adhered to and applied appropriately depending on the facts and circumstances of a given case. Once a valuable right has accrued in favour of one party as a result of the failure of the other party to explain the delay by showing sufficient cause and its own conduct, it will be unreasonable to take away that right on the mere asking of the applicant, particularly when the delay is directly a result of negligence, default or inaction of that party. Justice must be done to both parties equally. Then alone the ends of justice can be achieved. If a party has been thoroughly negligent in implementing its rights and remedies, it will be equally unfair to deprive the other party of a valuable right that has accrued to it in law as a result of his acting vigilantly.
>
> vii) The concept of liberal approach has to encapsulate the conception of reasonableness and it cannot be allowed a totally unfettered free play."
>
> 33.1.In light of these principles, the contention of the appellant that the National Green Tribunal is the forum to which first appeal is provided against the orders specified in Section 16 of the NGT Act and that these provisions should be construed liberally, can hardly be accepted. Also there is no question of depravation of right to appellant. The right of appeal is a statutory right and can be exercised within the prescribed period of limitation. If a party chooses to sleep over its right and permits the remedy available to it to become barred by time, then it can hardly be heard to contend that it has lost a valuable right and the result is unjust. Such interpretation would be a normal corollary of application of rule of 'plain construction'. This would be in line with the object and purpose of the Act and would also sub serve the cause of justice. This interpretation would not preclude any litigant from taking recourse to an appropriate remedy prescribed in in accordance with law.

16. Coming to MA No.628 of 2013, it is worthwhile to note that nowhere the Appellant alleges that he did not receive the information about impugned EC dated 2nd May, 2013, at late stage/particular date, subsequent to grant of such EC. It appears that the revised EC dated 2nd May, 2013, was placed on the website of SEIAA on 7th May, 2013 and therefore, it was on public domain within few days after issuance thereof. Interestingly, what the

Appellant alleges is that he has preferred the Appeal before the NGT on the following causes of action:

a) Against the inaction by the Environment Department, Govt. of Maharashtra, on his complaint dated 12th February, 2013'

b) Gross violation of laws in issuance of the amended EC dated 2nd May, 2013.

17. From the above averments in the Application, it is difficult to ferret out as to on what ground the Appellant really seeks exemption under the proviso appended to Section 16 of the NGT Act, 2010, in the context of prescribed period of limitation? Both the grounds (2) and (3) in the Application about above two statements, pertain to the explanation he wants to give in regard to delay caused in filing of the Application under Section 14(3) of the NGT Act, 2010.

18. So far as the impugned EC dated 2nd May, 2013, is concerned, only vague statement made by him in paragraph (4) of the Application, is that the Appellant got know about the order dated 2nd May, 2013, only after same was uploaded on the website, after substantial lapse of time. He states as follows:

"*Since the complainant got to know about this impugned order through the website, he immediately started working*

on the legal points specifically to this impugned order and thereafter promptly filed this Application. Hence, condonation of delay of forty (40) days, may be given with respect to filing of this Appeal". The averments in paragraph (4), do not make head or tail, as to when the Appellant really gained knowledge about the impugned order of EC dated 2nd May, 2013. He vaguely states that he got knowledge about the same only after same was uploaded on the website, "after substantial lapse of time".

19. At this juncture, it is significant to note that the Appellant did not give any particulars about the date and time as to when the impugned EC dated 2nd May, 2013, was put on the website of the Environment Department. Nor, he has stated anything as to when he made access to the website of the Environment Department. Hence, it can be said that he could immediately have access to the website of the Environment Department.

20. In this context, additional affidavit filed by Shri. A.K.Pimparkar, Scientist-I of the Environment Department, Govt. of Maharashtra, categorically shows that the amended EC dated 2nd May, 2013, was placed on the website w.e.f. 7th May, 2013, (At 14:04:50) and still is shown on the website for the information of the public at large. His affidavit further shows that SEIAA not only placed the EC on its website, but also placed concerned

additional recommendations of the SEAC and SEIAA, respectively on the website of the Environment Department, Govt. of Maharashtra. His affidavit shows that the said recommendations and the EC of the above project are still displayed on the website of the Govt. of Maharashtra. This affidavit is filed on 3.10.2013, and it is not specifically denied by Vikas Tripathi. So, such untraversed statement may be accepted. There is no any material on record to show that a copy of website information was sought and obtained by the Vikas Tripathi. The subsequent explanation of Vikas Tripathi cannot make due "acceptable and satisfactory explanation" within the legal framework of the proviso appended to Section 16 of the NGT Act.

21. We cannot and shall not overlook mandate of the proviso appended to Section 16 of the NGT Act, 2010, which carve out exception to the general Rule provided under Section 16 of the NGT Act, 2010. It is well stated that 'proviso' is always an exception to the main Rule, which is set out in the provision of the Rules. Needless to say, the 'proviso' will not supersede the main provision. The language of proviso, appended to Section 16, would make it amply clear that the Tribunal "must be satisfied by the Appellant with tangible reasons, which prevented him from filing of the Appeal within prescribed period of

limitation, in order to make him eligible to ask for concession for extension of time". True, interpretation of the proviso has to be primarily made and the same cannot be used as cobweb to deprive a genuine litigant from approaching the Tribunal. Still, however, in an appropriate case, where there is absolutely no acceptable explanation given by the Appellant, then extension of period of under the proviso, is unwarranted grant of premium inspite of absence of satisfactory reason being stated in the delay condonatin Application. Such an Application cannot be granted just for asking by a litigant, who fails to explain reasons for the delay of about one month and twenty two days on his own showing. In our opinion, Vikas Tripathi, has failed to show that as to when first date of 'cause of action' triggered for challenging of the revised EC dated 2nd May, 2013. We are of the opinion that the Appeal No.80 of 2013, is barred by limitation. We find it difficult to condone the delay in the present situation and hence, deem it proper to dismiss Misc Application No.628 of 2013. This takes us to the question of maintainability of the Application in a composite form, which he says is dual- Appeal-cum-Application, filed in view of availability of plural remedies, in accordance with Rule 14 of the National Green Tribunal (Practices and Procedure) Rules, 2011. We shall deal with his contention,

in order to set right the issue once for all, inasmuch as it is likely to be raised in many such cases, on similar ground. Rule 14 of the NGT (Practices and Procedure) Rules, 2011, reads as follows:

"Rule 14. Plural remedies- An application or appeal, as the case may be, shall be based upon a single cause of action and may seek one or more relief provided that they are consequential to one another."

22. Perusal of Rule 14, without any pre-judicial notions in the mind, will make it amply clear that any Application *or* Appeal, as the opening words imply are distinct remedies under which the particular relief may be sought on single cause of action. Thus, if properly read, the Rule provides as follows:

i) There may be either single Application *or* Appeal. In other words, it cannot be a comprehensive or hybrid type of pleadings like Appeal-cum-Application, as captioned by the Appellant-cum-Applicant (Vikas Tripathi), as in the present Application/Appeals.

ii) The Appeal or Application, whatsoever it may, be must be filed on single cause of action. Thus, it cannot be filed on several causes of action. In other words, an Appeal cannot be filed with combined causes

challenging different ECs or orders, nor an Application can be filed challenging different orders or different violations under the different Laws.

iii) Still, however, choice given to the Appellant/Applicant is to ask for grant of more than one relief in case such reliefs, are of consequential character. In other words, if a relief depends upon grant of another relief, then grant of more than one relief is permissible.

For example; in case EC for grant of a project is challenged on the ground that there is no permission from CRZ Authority to the construction carried out, then consequential relief to demolish illegal construction carried out, without CRZ Authority's permission, which falls within CRZ area/NDZ area.

23. We cannot overlook and brush aside main provisions of the NGT Act, which do not provide for any kind of permission to allow filing of two (2) Appeals, one against time barred EC, coupled with another EC for revised construction plan along with an Application under Sections 14,15 and 18 of the NGT Act, 2010. In case, Vikas Tripathi is genuinely interested in the cause of environment and feels that the project in question has

caused violations of the EC conditions/ deterioration of the environment, then he is at liberty to file a separate Application under Section 14 (1) (2) read with Sections 15 and 18 of the NGT Act, 2010, if so advised and if it is permissible under the Law. He cannot, however, club all such Appeals and Applications together and explore to examine whether one cap fits or another.

24. We may take note of the fact that large number of authorities were cited by both the sides. We have not referred them herein because, the relevant issues are not being dealt with, so as to avoid any prejudicial opinion on any of the issue. We have also not dealt with impact of enactment of the Environment (Protection) Act, 1986, on the NGT Act, 2010, inasmuch as the NGT Act, is a special statute. It is well settled that the Rules framed under the provisions of the Statute are always subordinate to the main provisions in the Act. The NGT (Practices and Procedure) Rules, 2011, would show at the outset that they are framed in exercise of powers available under Section 4(4) read with Section 34 of the NGT Act, 2010. Obviously, these Rules must sub-serve main purpose of the provisions of the NGT Act and cannot be read in derogation or in excess of limitations thereunder.

25. Though, we have elaborately heard learned Advocate Mr. Aditya Pratap for the Appellant/Applicant, on merits

of the Application as well as the Appeal, and learned Advocates for the other side yet, we do not find it proper and desirable to deal with the grounds raised by them, inasmuch as it is likely to prejudice Vikas Tripathi, if he decides lateron to file such Application separately. We should not create legal hurdle in his seeking such legal remedy on any count. Therefore, we refrain ourselves from saying anything about merits of the Application as well as Appeal. We record, at this juncture, that we have not expressed any opinion or merits in respect of any legal grounds stated in the Appeal or Application for the simple reason that the legal point regarding availability of "plurality of remedies" to Vikas Tripathi, under Rule 14 of the National Green Tribunal (Practices & Procedure) Rules 2011, is being decided against him and clubbing of his two (2) Applications and the Appeal, is now found to be improper, illegal and unwarranted. We have also recorded our finding that the Appeal No.80 of 2013, is barred by limitation and therefore, it is liable to be dismissed.

26. In the result, Appeal No.80 of 2013 and M.A.No.628 of 2013, along with Application No.17 of 2013, and other Applications, are dismissed. We make it clear that other issues are kept open, including the question of *locus standi* of Vikas Tripathi, limitation of his filing of the Application under Sections 14,15 and 18 of the NGT Act, 2010 and his being 'aggrieved person 'or not for such purpose. We grant him liberty to file such Application, if it is so advisable and

legally permissible. In view of the findings recoded above, the Application No.17of 2013, is disposed of granting liberty to the Applicant to file fresh Application, as discussed herein above and keeping all the issues open. The M.A. Application, and the Appeal, are accordingly disposed of. No costs.

....., **JM**
(Justice V. R. Kingaonkar)

....., **EM**
(Dr.Ajay A. Deshpande)

Date: October 1st, 2014

ANNEXURE R/3
[Colly]

The
Forest (Conservation) Rules, 2003

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The Forest (Conservation) Rules, 2003[1]

In exercise of the powers conferred by sub-section (1) of Section 4 of the Forest (Conservation) Act, 1980 (69 of 1980), and in supersession of the Forest (Conservation) Rules, 1981, except as respects things done or omitted to be done before such supersession, the Central Government hereby makes the following rules, namely:—

1. Short title, extent and commencement.—(1) These rules may be called the Forest (Conservation) Rules, 2003.

(2) They shall extend to the whole of India except the State of Jammu and Kashmir.

(3) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions.—In these rules, unless the context otherwise requires:—

(*a*) "Act" means the Forest (Conservation) Act, 1980 (69 of 1980);

[2][(*b*) "Committee" means the Forest Advisory Committee constituted under Section 3 of the Act;]

[3][(*ba*) "Conservator of Forests" means an officer appointed by the State Government or the Union Territory Administration, as the case may be, under the designation of Conservator of Forests or the Chief Conservator of Forests or the Regional Chief Conservator of Forests or any such similar designation, to hold charge of a Forest Circle having jurisdiction over the forest land for which the approval of the Central Government under the Act is required;]

(*c*) "Chairperson" means the Chairperson of the Committee;

[4][(*ca*) "Divisional Forest Officer" means an officer appointed by the State Government or the Union territory Administration, as the case may be, under the designation of the Divisional Forest Officer or the Deputy Conservator of Forests or any such similar designation, to hold charge of a Forest Division having jurisdiction over the forest land for which the approval of the Central Government under the Act is required;]

[5][(*caa*) "District Collector" means an officer appointed by the State Government or the Union Territory Administration, as the case may be, under the designation of District Collector or Deputy Commissioner or any such similar designation, to hold charge of the administration of

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1. *Vide* Noti. No. G.S.R. 23(E), dated January 10, 2003, published in the Gazette of India, Extra., Part II, Section 3(*i*), dated 10th January, 2003, pp. 14-24, No. 18.
2. *Subs.* by Noti. No. G.S.R. 94(E), dated February 3, 2004 (w.e.f. 3-2-2004). Prior to substitution it read as:
   '(*b*) "Committee" means the Advisory Committee constituted under Section 3 of the Act;'
3. *Ins.* by G.S.R. 185(E), dt. 14-3-2014 (w.e.f. 14-3-2014).
4. *Ins.* by G.S.R. 185(E), dt. 14-3-2014 (w.e.f. 14-3-2014).
5. *Ins.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017).

the revenue district having jurisdiction over the forest land for which the approval of the Central Government under the Act is required.]

[6][(*cb*) "Chairperson of the Regional Empowered Committee" means chairperson of each of the Regional Empowered Committees constituted under Rule 4-A;

(*cc*) "Head of the Regional Office" means senior-most officer in the rank of Additional Principal Chief Conservator of Forests or Chief Conservator of Forests appointed by the Central Government at Regional Office to deal with the forest conservation matters under the Act;

(*cd*) "linear projects" means projects involving linear diversion of forest land for purposes such as roads, railways lines, pipelines, transmission lines, etc.;]

(*d*) "Member" means a member of the Committee;

(*e*) "Nodal Officer" means any officer not below the rank of Conservator of Forests, authorised by the State Government to deal with the forest conservation matters under the Act;

(*f*) "Regional Office" means a Regional Office of the Central Government in the [7][Ministry of Environment, Forests and Climate Change] established as part of the Ministry to deal with the forest conservation matters under the Act;

(*g*) "Section" means a section of the Act;

(*h*) "User Agency" means any person, organisation or Company or Department of the Central or State Government making a request for diversion or de-notification of forest land for non-forest purpose or using forest land for non-forest purpose in accordance with the permission granted by the Central Government under the Act or the rules.

[8]**[3. Composition of the Forest Advisory Committee.**—(1) The Forest Advisory Committee shall be composed of the following members, namely:—

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6. *Ins.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
7. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
8. *Subs.* by Noti. No. G.S.R. 94(E), dated February 3, 2004 (w.e.f. 3-2-2004). Prior to substitution it read as:

"3. *Composition of the Committee.*—(1) The Committee shall be composed of the following members:—

(*i*)	Director General of Forests, Ministry of Environment and Forests	Chairperson
(*ii*)	Additional Director General of Forests, Ministry of Environment and Forests	Member
(*iii*)	Additional Commissioner (Soil Conservation), Ministry of Agriculture	Member
(*iv*)	Three eminent experts in forestry and allied disciplines (non-officials)	Members
(*v*)	Inspector General of Forests (Forest Conservation), Ministry of Environment and Forests	Member Secretary

(2) Additional Director General of Forests shall act as the Chairperson in the absence of Director General of Forests."

R. 4]

(*i*)	the Director General of Forests, [9][Ministry of Environment, Forests and Climate Change]	—	Chairperson
(*ii*)	the Additional Director General of Forests, [10][Ministry of Environment, Forests and Climate Change]	—	Member
(*iii*)	the Additional Commissioner (Soil Conservation), Ministry of Agriculture	—	Member
(*iv*)	three non-official members who shall be experts one each in Mining, Civil Engineering and Development Economics	—	Members
(*v*)	the Inspector General of Forests (Forest Conservation), [11][Ministry of Environment, Forests and Climate Change]	—	Member-Secretary-

(2) The Additional Director General of Forests shall act as Chairperson in the absence of the Director General of Forests.]

4. Terms of appointment of non-official members shall be as follows.—(*i*) A non-official member shall hold his office for a period of two years;

(*ii*) A non-official member shall cease to hold office if he becomes of unsound mind, becomes insolvent or is convicted by court of law on a criminal offence involving moral turpitude;

(*iii*) A non-official member may be removed from his office if he fails to attend three consecutive meetings of the Committee without any sufficient cause or reasons;

(*iv*) Any vacancy in the membership caused by any reason mentioned in clauses (*ii*) and (*iii*) shall be filled by the Government for the unexpired portion of two years term;

(*v*) Travelling and daily allowance shall be payable to the non-official members of the Committee at the highest rate admissible to the Government servants of Group 'A' under the rules and orders made by the Central Government and for the time being in force:

Provided that the payment of travelling allowance and daily allowance to a member who is a Member of the Parliament or a Member of a State Legislature shall be regulated in accordance with the Salary, Allowances and Pension of Members of Parliament Act, 1954 (30 of 1954) or the respective provisions of law pertaining to the member of the concerned State Legislature.

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9. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
10. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
11. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).

[12][*]**4-A. Constitution of Regional Empowered Committee.**—(1) The Central Government by notification in the Official Gazette, shall constitute a Regional Empowered Committee at each of the Regional Offices.

(2) The Regional Empowered Committee at each of the Regional Offices shall consist of the following members to be appointed by the Central Government to deal with the forest conservation matters, namely:

(*i*)	Head of the Regional Office;	Chairperson
(*ii*)	Senior most officer from amongst officers in the rank of Chief Conservator of Forests or Conservator of Forests in the Regional Office;	Member
(*iii*)	Three non-official members from amongst eminent persons who are experts in the forestry and allied disciplines;	Members
(*iv*)	Senior most officer from amongst officers in the rank of Deputy Conservator of Forests in the Regional Office.	Member-Secretary

(3) Representatives of the State Government or the Union Territory Administration, as the case may be, not below the rank of a Director to the Government of India, one each from Forest Department and Revenue Department shall also be invited to attend meeting of the Regional Empowered Committee as special invitee, in the examination of the proposals pertaining to such State or Union Territory Administration, as the case may be.

(4) The term of appointment of non-official members shall be as specified in Rule 4.]

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12. *Subs.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014). Prior to substitution it read as:
"*Constitution of the Regional Empowered Committee.*—(1) A Regional Empowered Committee shall be constituted at each of the Regional Offices and shall consist of the following members, namely—

(*i*)	the Regional Principal Chief Conservator of Forests (Central)	—	Chairperson
(*ii*)	three non-official members who shall be experts one each in Mining, Civil Engineering and Development Economics	—	Members
(*iii*)	the Conservator of Forests or the Deputy Conservator of Forests in the Regional Office	—	Member-Secretary"

* **Publisher's Note: In G.S.R. 94(E), dt. 3-2-2004, R. 4 reads as:**
"(4) In the said rules, after Rule 3, the following rule shall be inserted, namely:—"
However, this ought to read as "4. In the said rules, after Rule 4, the following **Rule 4-A** shall be inserted, namely:—"
In G.S.R. 713(E), dt. 10-10-2014, Rule 3 read as:
"3. In the said rules, for Rule 4 relating to constitution of Regional Empowered Committee as inserted vide Notification Number G.S.R. 94(E), dated the 3rd February, 2004, the following rule shall be substituted, namely:—"
However, this ought to read as "In the said rules, for **Rule 4-A** relating to constitution of Regional Empowered Committee as inserted vide Notification Number G.S.R. 94(E), dated the 3rd February, 2004, the following rule shall be substituted, namely:—"

5. Conduct of business of the Committee.—(*i*) The Chairperson shall call the meeting of the Committee whenever considered necessary, but not less than once in a month.

(*ii*) The meeting of the Committee shall be held at New Delhi.

(*iii*) In a case where the Chairperson is satisfied that inspection of site or sites of forest land proposed to be used for non-forest purposes shall be necessary or expedient in connection with the consideration of the proposal or proposals received under sub-rule (3) of Rule 6, he may direct that the meetings of the Committee to be held at a place other than New Delhi from where such inspection of site or sites is necessary.

(*iv*) The Chairperson shall preside over every meeting of the Committee at which he is present.

(*v*) Every question upon which the Central Government is required to be advised shall be considered in the meeting of the Committee provided that in urgent cases if the meeting cannot be convened within a month, the Chairperson may direct that papers may be circulated and sent to the members for their opinion within the stipulated time.

(*vi*) The quorum of the meeting of the Committee shall be three.

[13][**5-A. Conduct of Business of Regional Empowered Committee.**—(1) The Chairperson of the Regional Empowered Committee shall hold the meeting of the Regional Empowered Committee whenever considered necessary, but not less than once in a month.

(2) The meetings of the Regional Empowered Committee shall be held at the headquarters of the Regional Office:

Provided that where the Chairperson of the Regional Empowered Committee is satisfied that inspection of site or sites of forest land proposed to be used for non-forest purposes shall be necessary or expedient in connection with the consideration of the proposals referred to the Regional Empowered Committee, he may direct that the meetings of the Regional Empowered Committee be held at a place other than headquarters of the Regional Office for such inspection of site or sites.

(3) The Chairperson of the Regional Empowered Committee shall preside over every meeting of the Regional Empowered Committee:

Provided that in the absence of Chairperson of the Regional Empowered Committee, the senior most member in the rank of the Chief Conservator of Forests or the Conservator of Forests shall act as the Chairperson of the Regional Empowered Committee.

(4) Every proposal referred to the Regional Empowered Committee for advice or decision shall be considered in the meeting of the Regional Empowered Committee:

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13. *Ins.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).

Provided that in urgent cases if the meeting cannot be convened within a month, the Chairperson of the Regional Empowered Committee may direct that papers may be circulated and sent to members of the Regional Empowered Committee for their opinion within the stipulated time.

(5) The quorum of the meeting of the Regional Empowered Committee shall be three.]

[14][**6. Submission of proposal seeking approval of the Central Government under Section 2 of the Act.**—(1) Every User Agency that wants to use any forest land for non-forest purposes, shall make its proposal in the relevant Form appended to these rules, namely: Form 'A' for proposal seeking first time approval under the Act, Form 'B' for proposal seeking renewal of leases, where approval of the Central Government under the Act had already been obtained, and Form 'C' for prospecting of minerals, to the Nodal Officer of the concerned State Government or the Union territory Administration, as the case may be, along with requisite information and documents, complete in all respect.

(2) The User Agency shall endorse a copy of the proposal, along with a copy of the receipt obtained from the office of the Nodal Officer to the concerned Divisional Forest Officer, District Collector and Regional Office as well as the Monitoring Cell of the Forest Conservation Division of the [15][Ministry of Environment, Forests and Climate Change].

(3)(*a*) The Nodal Officer of the State Government or the Union territory Administration, as the case may be, after having received the proposal under sub-rule (1) and on being satisfied that the proposal is complete in all respects and requires prior approval under Section 2 of the Act, shall send the proposal to the concerned Divisional Forest Officer and the District Collector within a period of ten days of the receipt of the proposal.

(*b*) If the Nodal Officer of the State Government or the Union territory Administration, as the case may be, finds that the proposal is incomplete, he shall return it within a period of ten days to the User Agency and this time period and the time taken by the User Agency to re-submit the proposal shall not be counted for any future reference.

(*c*) The Divisional Forest Officer shall examine the factual details and feasibility of the proposal, certify the maps, carry out site-inspection and enumeration of the trees and forward his findings in the Format specified in this regard to the Conservator of Forests.

(*d*) The Divisional Forest Officer shall process and forward the application along with his findings on the proposal involving forest land up to forty hectares, above forty hectares and up to one hundred hectares and above one hundred hectares to the Conservator of Forests within a period of thirty days, forty-five days and sixty days respectively.

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14. *Subs.* by G.S.R. 185(E), dt. 14-3-2014 (w.e.f. 14-3-2014).
15. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).

[16][(*e*) the District Collector shall—

(*i*) complete the process of recognition and vesting of forest rights in accordance with the provisions of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) for the entire forest land indicated in the proposal;

(*ii*) obtain consent of each Gram Sabha having jurisdiction over the whole or a part of the forest land indicated in the proposal for the diversion of such forest land and compensatory and ameliorative measures, if any, having understood the purposes and details of diversion, wherever required; and

(*iii*) forward his findings in this regard to the Conservator of Forests;

(*f*) the entire process referred to in clause (*e*) shall be completed by the District Collector within the time period stipulated in these rules for grant of in-principle approval under the Act to the proposal;

(*g*) the Conservator of Forests shall examine the factual details and feasibility of the proposal, carry out site inspection in case the area of forest land proposed to be diverted is more than forty hectares, and forward the proposal along with his recommendations to the Nodal Officer;]

(*h*) The time taken by the Conservator of Forests to process and forward to the Nodal Officer the proposal involving forest land up to forty hectares and above forty hectares shall not be more than ten days and thirty days respectively.

(*i*) The Nodal Officer, through the Principal Chief Conservator of Forest, shall forward the proposal to the State Government or the Union territory Administration, as the case may be, along with his recommendations.

(*j*) The Nodal Officer shall process and forward the proposal along with his findings on the proposal involving forest land, up to five hectares, above five hectares and up to forty hectares, above forty hectares up to one hundred hectares and above one hundred hectares, to the State Government or the Union territory Administration, as the case may be, within a period of ten days, twenty days, twenty-five days and thirty days respectively.

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16. Clauses (*e*), (*f*) and (*g*) *subs.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017). Prior to substitution it read as:

"(*e*) The District Collector shall complete the process for settlement of rights in accordance with the provisions of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) (hereinafter referred to as the FRA), obtain consent of the Gram Sabha or Gram Sabhas, wherever required, and forward his findings in the Format specified in this regard to the Conservator of Forests.

(*f*) The District Collector shall forward the proposal along with his findings on settlement of rights under FRA and consent of the Gram Sabha or Gram Sabhas, wherever required, in respect of the proposal involving forest land up to forty hectares, above forty hectares and up to one hundred hectares and above one hundred hectares to the Conservator of Forests within a period of thirty days, forty-five days and sixty days respectively.

(*g*) The Conservator of Forests shall examine the factual details and feasibility of the proposal, carry out site-inspection in case the area of forest land proposed to be diverted is more than forty hectares, and forward the proposal along with his recommendations and the report on settlement of rights under the FRA and consent of the concerned Gram Sabha or Gram Sabhas, wherever required, received from the District Collector to the Nodal Officer.".

(*k*) In case the State Government or the Union territory Administration, as the case may be, decides not to, de-reserve or divert for non-forest purpose or assign on lease the forest land indicated in the proposal, as the case may be, the same shall be intimated to the User Agency within thirty days of the receipt of proposal from the Nodal Officer:

Provided, all proposals involving diversion of forest land for projects of the Central Government or Central Government Undertakings where the State Government or the Union territory Administration, as the case may be, does not agree in-principle to de-reserve or divert for non-forest purpose or assign on lease the forest land indicated in the proposal, as the case may be, shall be forwarded to the Central Government along with comments of the State Government or the Union territory Administration, as the case may be.

(*l*) The State Government or the Union territory Administration, as the case may be, shall forward along with its recommendations all those proposals where State Government or the Union territory Administration, as the case may be, agrees in-principle to de-reserve or divert for non-forest purpose or assign on lease the forest land indicated in the proposal, as the case may be, and all proposals involving diversion of forest land for projects of the Central Government or Central Government Undertakings, to the Central Government within thirty days:

Provided that the all proposals involving felling of trees on forest land or a portion thereof for the purpose of using it for reafforestation shall be sent in the form of Working Plan or Working Scheme or Management Plan:

Provided further that the concerned State Government or the Union territory Administration, as the case may be, shall simultaneously send the intimation to the User Agency about forwarding of the proposal, along with its recommendations, to the Regional Office or the [17][Ministry of Environment, Forests and Climate Change], as the case may be:

Provided also that total time taken exclusively for transit of a proposal between various authorities in the State Government or the Union territory Administration, as the case may be, shall not be more than twenty days, over and above the time period specified for processing of proposal by each authority.

(*m*) Whenever the time taken by the State Government or the Union territory Administration, as the case may be, for processing the proposal exceeds the time limits stipulated in clauses (*a*) to (l) above, the proposal shall be considered by the Central Government only if an explanation for the delay is furnished to the satisfaction of the Central Government, together with action taken against any individual held to be responsible for the delay.

[18][(4)(*a*) The proposal referred to in clause (l) of sub-rule (3), involving forest land up to forty hectares and all proposals related to linear projects irrespective

17. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
18. *Subs.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014). Prior to substitution it read as:

of the area of forest land involved, shall be forwarded by the concerned State Government or the Union Territory Administration, as the case may be, along with its recommendations, to the concerned Regional Office.

(*b*) The proposal referred to in clause (1) of sub-rule (3), involving forest land of more than forty hectares, other than proposals related to linear projects shall be forwarded by the concerned State Government or the UnionTerritory Administration, as the case may be, along with its recommendations, to the Secretary, Government of India, Ministry of Environment, Forests and Climate Change.]

(*c*) The proposals referred to in clause (1) of sub-rule (3), involving clearing of trees in forest land or portion thereof for the purpose of using it for re-afforestation shall be sent to the concerned Regional Office.]

[19][(5)(*a*) notwithstanding anything contained in these rules, the proposal to obtain approval under the Act to undertake prospecting of minerals without felling of trees and construction of new road or path in mining blocks falling outside the protected areas, eco-sensitive zone of protected areas, identified tiger corridors and having no forest cover of more than ten per cent crown density as per the latest India State of Forest Report published by the Forest Survey of India, shall be submitted by the User Agency in a letter form along with a georeferenced map indicating boundary of the prospecting block, location of each borehole site and roads or paths to be used for prospecting; and a certificate to the effect that the proposal meets the aforementioned requirements to the Nodal Officer;

(*b*) the Nodal Officer, after having received the proposal under clause (*a*) and on being satisfied that the georeferenced map and the certificate are in order, shall send the proposal to the Divisional Forest Officer within a period of ten days of the receipt of the proposal;

(*c*) if the Nodal Officer, finds that the georeferenced map or the certificate are not in order, he shall return the proposal within a period of ten days to the User Agency and the said period taken by the Nodal Officer and the time taken by the User Agency to resubmit the georeferenced map and the certificate shall not be counted for any future reference;

(*d*) the Divisional Forest Officer shall authenticate the georeferenced map and certificate submitted by the User Agency and forward the same directly to the State Government or Union Territory Administration, as the case may be, or an officer not below the rank of the Nodal Officer, authorised by the State Government or

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"(4)(*a*) The proposal referred to in clause (1) of sub-rule (3), involving forest land up to forty hectares shall be forwarded by the concerned State Government or the Union territory Administration, as the case may be, along with its recommendations, to the concerned Regional Office.

(*b*) The proposal referred to in clause (1) of sub-rule (3), involving forest land of more than forty hectares shall be forwarded by the concerned State Government or the Union territory Administration, as the case may be, along with its recommendations, to the Secretary, Ministry of Environment and Forests, Government of India."

19. *Ins.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017).

Union Territory Administration, as the case may be, to finally dispose of such proposals, within thirty days of its receipt;

(*e*) the State Government or the Union Territory Administration, as the case may be, or the officer not below the rank of the Nodal Officer, duly authorised by the State Government or the Union Territory Administration, as the case may be, to finally dispose of such proposals, after examination of the georeferenced map and certificate and after such further enquiry as it may consider necessary, grant permission for prospecting of minerals subject to fulfilment of stipulated conditions, or reject the same within twenty five days of receipt of the proposal from the Divisional Forest Officer and communicate the same to the concerned Divisional Forest Officer and the User Agency, within next five days;

(6)(*a*) notwithstanding anything contained in these rules, proposal to obtain approval under the Act to undertake prospecting of minerals without felling of trees and construction of new road or path in mining blocks falling outside the protected areas, eco-sensitive zone of protected areas, identified tiger corridors and having no forest cover of more than forty per cent crown density as per the latest India State of Forest Report published by the Forest Survey of India, shall also be submitted in a letter form along with a georeferenced map indicating boundary of the prospecting block, location of each borehole site and roads or paths to be used for prospecting; and a certificate to the effect that the proposal meets the aforementioned requirements to the Nodal Officer;

(*b*) the Nodal Officer, after having received the proposal under clause (*a*) and on being satisfied that the georeferenced map and the certificate are in order, shall send the proposal to the Divisional Forest Officer within a period of ten days of the receipt of the proposal;

(*c*) if the Nodal Officer, finds that the georeferenced map or the certificate are not in order, he shall return the proposal to the User Agency within a period of ten days and the said period taken by the Nodal Officer and the time taken by the User Agency to resubmit the proposal shall not be counted for any future reference;

(*d*) the Divisional Forest Officer shall authenticate the georeferenced map and certificate submitted by the User Agency and forward the same directly to the Nodal Officer, within a period of thirty days of receipt of the georeferenced map and the certificate;

(*e*) the proposal received by the Nodal Officer under clause (*d*) shall be further processed in the manner and within the period as provided in clause (*i*) to clause (*m*) of sub-rule (3) and sub-rule (4) of Rule 6 and Rule 7 of these rules.]

[20][**7. Processing of proposals received by the Central Government.**—(1)(*a*) The Regional Office, after having received the proposal referred in clause (*a*) and clause (*c*) of sub-rule (4) of Rule 6 shall determine the completeness of proposal within five working days.

20. *Subs.* by G.S.R. 185(E), dt. 14-3-2014 (w.e.f. 14-3-2014).

(*b*) If the Regional Office finds that the proposal is incomplete, it shall return it within the period of five working days as specified under clause (*a*), to the State Government or the Union territory Administration, as the case may be, and this time period and the time taken by the State Government to re-submit the proposal shall not be counted for any future reference.

[21][(2)(*a*) The Regional Office shall after examination of the proposal involving forest land up to five hectares other than the proposal related to mining, encroachments, and hydel projects, which are complete in all respect, and after such further enquiry as it may consider necessary, grant in-principle approval subject to fulfillment of stipulated conditions, or reject the same within twenty five days of its receipt from the State Government or the Union Territory Administration, as the case may be, and communicate the same to the concerned State Government or the Union Territory Administration, as the case may be, within next five days.

[22][(*b*) In case a proposal involves forest land more than one hundred hectares or renewal of lease, Regional Office shall within forty five days of the receipt of the proposal complete in all respects from the State Government or the Union Territory Administration, as the case may be, inspect the forest land proposed to be diverted and prepare a site inspection report:

Provided that in case of the proposals seeking approval under the Act for prospecting of minerals in forest land, prior site inspection by the Regional Office

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21. *Subs.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014). Prior to substitution it read as:
"(2)(*a*) The Regional Office shall after examination of the proposal involving forest land up to five hectares other than the proposal relating to mining and encroachments, which are complete in all respect, and after such further enquiry as it may consider necessary, grant in-principle approval subject to fulfilment of stipulated conditions, or reject the same within twenty five days of its receipt from the State Government or the Union territory Administration, as the case may be, and communicate the same to the concerned State Government or the Union territory Administration, as the case may be, within next five days.

(*b*) The proposals involving forest land above five hectares and up to forty hectares and all proposals for regularisation of encroachments and mining up to forty hectares, which are complete in all respects, shall be examined by the Regional Office in consultation with an Advisory Group consisting of representatives of the State Government or the Union territory Administration, as the case may be, from Revenue Department, Forest Department, Planning Department or Finance Department and the concerned Department whose proposal is being examined.

(*c*) The Regional Office shall within a period of thirty-five days of the receipt of the proposal from the State Government or the Union territory Administration, as the case may be, shall forward such proposal along with views of the Advisory Group to the Secretary, Ministry of Environment and Forests for obtaining the decision of the Central Government:

Provided that time taken in transit of a proposal from Regional Office to the Ministry of Environment and Forests shall not be more than five days.

(*d*) The Central Government shall, after considering the views of the Advisory Group and after further enquiry as it may consider necessary, grant in-principle approval subject to fulfilment of stipulated conditions, or reject the same within thirty days of its receipt from the Regional Office and communicate the same to the concerned State Government or the Union territory Administration, as the case may be, within next five working days."

22. *Subs.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017). Prior to substitution it read as:
"(*b*) The proposals involving forest land above five hectares and up to forty hectares and all proposals for regularisation of encroachments and mining up to forty hectares, which are complete in all respects, shall be examined by the Regional Office in consultation with an Advisory Group consisting of representatives of the State Government or the Union territory Administration, as the case may be, from Revenue Department, Forest Department, Planning Department or Finance Department and the concerned Department whose proposal is being examined.".

shall be required only if the area of forest land required for construction of roads, paths, drilling of boreholes and all such non-forest purpose is more than one hundred hectares.]

(*c*) Regional Office shall refer all proposals involving forest land above five hectares and up to forty hectares; proposals related to mining, encroachments, and hydel projects involving forest land up to five hectares; and all proposals related to linear projects which are complete in all respects, including site inspection report, wherever required, to the Regional Empowered Committee within ten days of the receipt of the proposal from the State Government or the Union Territory Administration, as the case may be:

Provided that proposals referred to in clause (*b*) above, shall be referred to the Regional Empowered Committee within five days of the receipt of the site inspection report.

(*d*) The Regional Empowered Committee shall within a period of thirty days examine the proposals referred to it under clause (*c*) above and after such further enquiry as it may consider necessary, grant in-principle approval to the proposals other than proposals related to mining, encroachment and hydel projects subject to fulfilment of stipulated conditions, or reject the same and the Regional Office shall communicate the decision of the Regional Empowered Committee to the concerned State Government or the Union Territory Administration, as the case may be, within next five working days.

(*e*) The Regional Empowered Committee shall within a period of thirty days examine the proposals related to mining, encroachments, and hydel project involving diversion of forest land up to forty hectares and tender its advice:

Provided that the Regional Empowered Committee may suggest such conditions or restrictions if any, required to be imposed on the use of any forest land for non-forest purpose, which in its opinion would minimise adverse environmental impact.

(*f*) The Regional Office shall within a period of five days of the receipt of the advice of the Regional Empowered Committee on proposals referred to in clause (*e*) above, forward such proposal along with advice of the Regional Empowered Committee to the Secretary, Ministry of Environment, Forests and Climate Change for obtaining the decision of the Central Government:

Provided that time taken in transit of a proposal from Regional Office to the Ministry of Environment, Forests and Climate Change shall not be more than five days.

(*g*) The Central Government shall, after considering the advice of the Regional Empowered Committee and after further enquiry as it may consider necessary, grant in-principle approval subject to fulfillment of stipulated conditions, or reject the same within thirty days of its receipt from the Regional Office and communicate the same to the concerned State Government or the Union Territory Administration, as the case may be, within next five working days.]

(3)(*a*) All proposals involving clearing of trees in forest land or portion thereof for the purpose of using it for re-afforestation shall be finally disposed of by the Regional Office within a period of sixty days of receipt of the proposals from the State Government or the Union territory Administration, as the case may be.

(*b*) While examining the proposal, the Regional Office shall ensure that the final decision is in conformity with the National Forest Policy, Working Plan guidelines and other relevant rules and guidelines issued by the Central Government from time to time.

(*c*) The Regional Office shall however seek prior clearance of the [23][Ministry of Environment, Forests and Climate Change] whenever the proposal involves clear-felling of forest land having crown density above forty per cent irrespective of the area involved, or clear-felling of forest area of size more than twenty hectares in the plains and ten hectares in the hilly region, irrespective of density.

(4)(*a*) The [24][Ministry of Environment, Forests and Climate Change], after having received the proposal referred to in clause (*b*) of sub-rule (4) of Rule 6 shall determine the completeness of the proposal within ten days.

(*b*) If the [25][Ministry of Environment, Forests and Climate Change] finds that the proposal is incomplete, it shall return it within the period of ten days as specified under clause (*a*), to the State Government or the Union territory Administration, as the case may be, and this time period and the time taken by the State Government to resubmit the proposal shall not be counted for any future reference.

[26][(*c*) in case the proposal involves forest land more than one hundred hectares or renewal of lease, the Ministry of Environment, Forests and Climate Change shall within ten days of the receipt of a proposal complete in all respects, request the concerned Regional Office to inspect the forest land proposed to be diverted and submit a report to the Ministry of Environment, Forests and Climate Change within a period of forty five days:

Provided that in case of the proposals seeking approval under the Act for prospecting of minerals in forest land, prior site inspection by the Regional Office shall be required only if the area of forest land actually required for construction of roads, paths, drilling of boreholes and all such non-forest purpose is more than one hundred hectares:

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23. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
24. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
25. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
26. *Subs.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017). Prior to substitution it read as:
"(*c*) In case the proposal involves forest land more than one hundred hectares, Ministry of Environment and Forest shall within ten days of the receipt of a proposal complete in all respects, request the concerned Regional Office to inspect the forest land proposed to be diverted and submit a report to the Ministry of Environment and Forest within a period of forty-five days:
Provided that the total time taken in communication of the request for site inspection from the Ministry of Environment and Forests to Regional Office and communication of the site inspection report from the Regional Office to the Ministry of Environment and Forests shall not be more than ten days, over and above the time taken in undertaking site inspection by the Regional Office.".

Provided further that the total time taken in communication of the request for site inspection from the Ministry of Environment, Forests and Climate Change to Regional Office and communication of the site inspection report from the Regional Office to the Ministry of Environment, Forests and Climate Change shall not be more than ten days, over and above the time taken in undertaking site inspection by the Regional Office.]

(*d*) The Central Government shall refer every proposal, which is complete in all respects, received by it under clause (*b*) of sub-rule (4) of Rule 6 including site inspection reports, wherever required, to the Committee for its advice and the Committee shall give its advice within thirty days from the date of receipt of the said proposal.

(*e*) The Committee shall have due regard to all or any of the following matters while tendering its advice on the proposals referred to it under clause (*d*), namely—

(*i*) whether the forests land proposed to be used for non-forest purpose forms part of a nature reserve, national park, wildlife sanctuary, biosphere reserve or forms part of the habitat of any endangered or threatened species of flora and fauna or of an area lying severely eroded catchment;

(*ii*) whether the use of any forest land is for agricultural purposes or for the rehabilitation of persons displaced from their residences by reason of any river valley or hydro-electric project;

(*iii*) whether the State Government or the Union territory Administration, as the case may be, has certified that it has considered all other alternatives and that no other alternatives in the circumstances are feasible and that the required area is the minimum needed for the purpose;

(*iv*) whether the State Government or the Union territory Administration, as the case may be, undertakes to provide at its cost for the acquisition of land of an equivalent area and afforestation thereof;

(*v*) whether the per unit requirement of forest land is significantly higher than the national average for similar projects; and

(*vi*) whether the State Government or the Union territory Administration, as the case may be, before making their recommendation has considered all issues having direct and indirect impact of the diversion of forest land on forest, wildlife and environment.

(*f*) While tendering advice, the Committee may also suggest any condition or restriction on the use of any forest land for any non-forest purpose, which in its opinion would minimise adverse environmental impact.

(*g*) The Central Government shall, after considering the advice of the Committee under clause (*e*) and clause (*f*) and after such further enquiry as it may consider necessary, grant in-principle approval subject to fulfilment of stipulated conditions, or reject the same within thirty days of the receipt of advice from the Committee and communicate the same to the concerned State Government or the Union territory Administration, as the case may be, within next five working days.

[27][**8. Submission of report on compliance to conditions stipulated in the in-principle approval and grant of final approval.**—(1)(*a*) The Nodal Officer shall within five days of receipt of the in-principle approval, endorse a copy of the same to the concerned Divisional Forest Officer and the Conservator of Forests;

(*b*) On receipt of a copy of the in-principle approval, the Divisional Forest Officer shall prepare a demand note containing item-wise amount of compensatory levies such as cost of creation and maintenance of compensatory afforestation, Net Present Value (NPV), cost of implementation of catchment area treatment plan or wildlife conservation plan etc. to be paid by the User Agency and communicate the same, along with a list of documents, certificates and undertakings required to be submitted by the User Agency in compliance with the conditions stipulated in the in-principle approval to the User Agency within ten days of the receipt of a copy of the in-principle approval.

(*c*) The User Agency shall within thirty days of receipt of demand note and list of documents, certificates and undertakings from the Divisional Forest Officer make payment of compensatory levies and submit a compliance report containing a copy of documentary evidence in respect of the payment of compensatory levies along with documents, certificates and undertakings indicated in the said list to Divisional Forest Officer.

(*d*) The Divisional Forest Officer, after having received the compliance report shall determine its completeness within a period of fifteen days of its receipt from the User Agency.

(*e*) If the Divisional Forest Officer finds that the compliance report is incomplete, he shall communicate the shortcoming or shortcomings in the compliance report to the User Agency within a period of fifteen days of its receipt from the User Agency and if the compliance report is complete in all respect, it shall be forwarded to the Conservator of Forests within a period of fifteen days of its receipt from the User Agency.

(*f*) The Conservator of Forests, after having received the compliance report shall determine its completeness within a period of fifteen days of its receipt from the Divisional Forest Officer.

[28][(*g*) in case the Conservator of Forests finds that the compliance report is complete in all respect, he shall forward such report along with the report on completion of the process of recognition and vesting of forest rights and consent of the each Gram Sabha received from the District Collector referred to in sub-clause (*f*) of sub-rule (3) of Rule 6, to the Nodal Officer within a period of fifteen days of its receipt from the Divisional Forest Officer:

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27. *Ins.* by G.S.R. 185(E), dt. 14-3-2014 (w.e.f. 14-3-2014). Earlier it was *omitted* by G.S.R. 94(E), dated February 3, 2004 (w.e.f. 3-2-2004).

28. *Subs.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017). Prior to substitution it read as:

"(g) If the Conservator of Forests finds that the compliance report is incomplete, he shall communicate the shortcoming or shortcomings in the compliance report to the User Agency and the Divisional Forest Officer within a period of fifteen days of its receipt from the Divisional Forest Officer and if the compliance report is complete in all respects, it shall be forwarded to the Nodal Officer within a period of fifteen days of its receipt from the Divisional Forest Officer.".

Provided that in case the Conservator of Forests finds that the compliance report is incomplete, he shall communicate the shortcoming or shortcomings in the compliance report to the User Agency and the Divisional Forest Officer within a period of fifteen days of its receipt from the Divisional Forest Officer.]

(*h*) The Nodal Officer, after having received the compliance report shall determine its completeness within a period of fifteen days of its receipt from the Conservator of Forests.

[29][(*i*) in case the Nodal Officer finds that the compliance report is complete in all respect, he shall forward such report to the State Government or Union Territory Administration, as the case may be, within a period of fifteen days of its receipt from the Conservator of Forests:

Provided that the State Government or the Union Territory Administration, as the case may be, may authorise the Nodal Officer to send the compliance report directly to the Ministry of Environment, Forest and Climate Change or the Regional Office, as the case may be:

Provided further that in case the Nodal Officer finds that the compliance report is incomplete, he shall communicate the shortcoming or shortcomings in the compliance report to the User Agency, the Conservator of Forests and the Divisional Forest Officer within a period of fifteen days of its receipt from the Conservator of Forests.]

(*j*) The State Government or Union territory Administration, as the case may be, after having received the compliance report shall determine its completeness within a period of fifteen days of its receipt from the Nodal Officer.

(*k*) If the State Government or Union territory Administration, as the case may be, finds that the compliance report is incomplete, it shall communicate the shortcoming or shortcomings in the compliance report to the User Agency, the Nodal Officer, the Conservator of Forests and the Divisional Forest Officer within a period of fifteen days of its receipt from the Nodal Officer and if the compliance report is complete in all respects, it shall be forwarded to the [30][Ministry of Environment, Forests and Climate Change] or the Regional Office, as the case may be, within a period of fifteen days of its receipt from the Nodal Officer.

(*l*) The [31][Ministry of Environment, Forests and Climate Change] or the Regional Office, as the case may be, after having received the compliance report shall determine its completeness within a period of fifteen days.

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29. *Subs.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017). Prior to substitution it read as:
"(*i*) If the Nodal Officer finds that the compliance report is incomplete, he shall communicate the shortcoming or shortcomings in the compliance report to the User Agency, the Conservator of Forests and the Divisional Forest Officer within a period of fifteen days of its receipt from the Conservator of Forests and if the compliance report is complete in all respects, it shall be forwarded to the State Government or Union territory Administration, as the case may be, within a period of fifteen days of its receipt from the Conservator of Forests."
30. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
31. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).

[32][(*m*) in case the Ministry of Environment, Forests and Climate Change or the Regional Office, as the case may be, finds that the compliance report is complete in all respect, it shall accord the final approval under the Act and communicate such approval to the State Government or the Union Territory Administration, as the case may be, within a period of twenty days of the receipt of the compliance report:

Provided that in case the Ministry of Environment, Forests and Climate Change or the Regional Office, as the case may be, finds that the compliance report is incomplete, the shortcoming or shortcomings in the compliance report shall be communicated to the State Government or the Union Territory Administration, as the case may be, the Nodal Officer and the User Agency, within a period of twenty days of the receipt of the compliance report.]

(*n*) The report on fulfilment of shortcoming or shortcomings in the compliance report shall be processed and forwarded to authorities concerned in the State Government or the Union territory administration, as the case may be, and Central Government in the manner and within the time limits stipulated in clause (*d*) to clause (1) above.

(2) [33][(*a*) In cases where compliance of conditions stipulated in the in-principle approval is awaited for more than five years from the State Government or the Union Territory Administration, as the case may be, the in-principle approvals may be summarily revoked:

Provided that in cases where for valid and cogent reasons it has not been possible for the User Agency or the State Government or the Union territory Administration, as the case may be, to comply with one or more of the conditions stipulated in the in-principle approval for obtaining final approval under the Act within five years from the date of grant of in-principal approval, the Central Government may extend the period for compliance of such conditions by such further period as it deem fit.]

(*b*) If the User Agency or the State Government or the Union territory Administration, as the case may be, is still interested in the project, after its revocation, they may submit a fresh proposal which shall be considered de-novo.

(3)(*a*) In case, before submission of a report on compliance to conditions stipulated in the in-principle approval accorded under the Act for a mining project by the State Government or the Union territory Administration, as the case may be, and grant of final approval by the Central Government within five years from the date of grant of in-principle approval, validity of the mining lease

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32. *Subs.* by G.S.R. 200(E), dt. 6-3-2017 (w.e.f. 6-3-2017). Prior to substitution it read as:
"(*m*) If the Ministry of Environment and Forests or the Regional Office, as the case may be, finds that the compliance report is complete in all respect, it shall accord the final approval under the Act and communicate the same to the State Government or the Union territory Administration, as the case may be, within a period of twenty days of the receipt of a compliance report which is compete in all respect.".

33. *Subs.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014). Prior to substitution it read as:
"(*a*) In cases where compliance of conditions stipulated in the in-principle approval is awaited for more than five years from the State Government or the Union territory Administration, as the case may be, the in-principle approvals shall be summarily revoked."

expires, instead of submission of a de-novo proposal to obtain approval of Central Government under the Act for diversion of such forest land, for renewal of mining lease, the State Government or Union territory Administration, as the case may be, while submitting report on compliance to conditions stipulated in the in-principle approval may seek final approval of Central Government under the Act for diversion of such forest land for original period of the mining lease for which in-principle approval has already been accorded, and also for renewal of mining lease for a period, as specified by the State Government and Union Territory Administration, as the case may be, not exceeding twenty years.

(*b*) Report on compliance to statutes, circulars or directives, as applicable to such proposals, which came into force after grant of in-principle approval, if any, shall also be submitted to the Central Government along with the report on compliance to conditions stipulated in the in-principle approval.

[34][(*c*) In such cases, apart from grant of final approval under the Act for diversion of such forest land for original period of mining lease, the Central Government, shall, after considering advice of the Forest Advisory Committee or the Regional Empowered Committee, as the case may be, and after further enquiry as it may consider necessary, grant final approval to the proposal of the State Government or the Union Territory Administration, as the case may be, for renewal of mining lease for a period, as may be specified by the Central Government, not exceeding twenty years, with appropriate conditions or reject the same.]

[35][(*d*) Procedure stipulated in clauses (*a*) to (*c*) above, shall also be applicable to the cases where in-principle approval under the Act for diversion of forest land has been accorded on a day more than five years prior to date of expiry of mining lease and for valid and cogent reasons it has not been possible for the User Agency or the State Government or the Union Territory Administration, as the case may be, to comply with one or more of the conditions stipulated in the in-principle approval and obtain final approval within five years from the date of grant of the in-principal approval:

Provided such in-principle approval has not already been summarily revoked by the Central Government:

Provided further that in such cases, apart from the report referred to in clause (*b*) above, the State Government or the Union Territory Administration, as the case may be, shall also submit to the Central Government, reason or reasons for delay in compliance to conditions stipulated in the in-principle approval.

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34. *Subs.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014). Prior to substitution it read as:
"(*c*) In such cases, apart from grant of final approval under the Act for diversion of such forest land for original period of mining lease, the Central Government, shall, after considering advice of the Forest Advisory Committee or the State Advisory Group, as the case may be, and after further enquiry as it may consider necessary, grant final approval to the proposal of the State Government of Union Territory Administration, as the case may be, for renewal of mining lease for a period, as may be specified by the Central Government, not exceeding twenty years, with appropriate conditions or reject the same."

35. *Ins.* by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).

(*e*) Procedure stipulated in clauses (*a*) to (*c*) above, shall also be applicable to the cases where mining lease expires or has already expired within a period of ten years from the date of grant of in-principle approval under the Act, even if final approval under the Act for diversion of such forest land has been granted prior to expiry of the mining lease:

Provided, that in such cases, in place of a report on compliance to conditions stipulated in the in-principle approval, a report on compliance to conditions stipulated in the final approval under the Act for diversion of such forest land during validity of the original lease period shall be submitted to the Central Government by the State Government or the Union Territory Administration, as the case may be.]

9. Proceedings against persons guilty of offences under the Act.—(1) The Central Government may, by notification, authorize any officer not below the rank of Conservator of Forests or the concerned forest officer having territorial jurisdiction over the forest land in respect of which the said offence is said to have been committed, to file complaints against the person(s) prima facie found guilty of offence under the Act or the violation of the rules made thereunder, in the court having jurisdiction in the matter:

Provided that no complaint shall be filed in the court, without giving the person(s) or officer(s) or authority(s) against whom the allegations of offence exist, an opportunity to explain his or their conduct and to show cause, by issuing a notice in writing of not less than sixty days, as to why a complaint should not be filed in the court against him or them for alleged offences.

(2) The officer authorised by the Central Government in sub-rule (1) may require any State Government or its officer or any person or any other authority to furnish to it within a specified period any reports, documents, statistics and any other information related to contravention of the Act or the rules made thereunder, considered necessary for making a complaint in any court of jurisdiction and every such State Government or officer or person or authority shall be bound to do so.

APPENDIX

(*See* Rule 6)

FORM 'A'

Form for seeking prior approval under Section 2 of the proposals by the State Governments and other authorities

Part-I

(To be filled up by user agency)

1. Project details:
   - (*i*) Short narrative of the proposal and project/scheme for which the forest land is required.
   - (*ii*) Map showing the required forest land, boundary of adjoining forest on a 1 : 50,000 scale map.
   - (*iii*) Cost of the project.
   - (*iv*) Justification for locating the project in forest area.
   - (*v*) Cost-benefit analysis (To be enclosed).
   - (*vi*) Employment likely to be generated.

2. Purposewise break-up of the total land required.
3. Details of displacement of people due to the project, if any:
   (*i*) Number of families.
   (*ii*) Number of Scheduled Castes/Scheduled Tribe families.
   (*iii*) Rehabilitation plan (To be enclosed).
4. Whether clearance under Environment (Protection) Act, 1986 required? (Yes/No).
5. Undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government (Undertaking to be enclosed).
6. Details of Certificates/documents enclosed as required under the instructions.

Signature
(Name in Block Letters)
Designation
Address (of User Agency)

Date: .....
Place: .....

State Serial No. of proposal .....
(To be filled up by the Nodal Officer with date of receipt)

Part-II

(To be filled by the concerned Deputy Conservator of Forests)

State Serial No. of proposal .....

7. Location of the project/Scheme:
   (*i*) State/Union Territory.
   (*ii*) District.
   (*iii*) Forest Division.
   (*iv*) Area of forest land proposed for diversion (In ha.).
   (*v*) Legal status of forest.
   (*vi*) Density of vegetation.
   (*vii*) Specieswise (scientific names) and diameter classwise enumeration of trees (To be enclosed. In case of irrigation/hydel projects enumeration at FRL, FRL-2 meter and FRL-4 meter also to be enclosed).
   (*viii*) Brief note on vulnerability of the forest area to erosion.
   (*ix*) Approximate distance of proposed site for diversion from boundary of forest.
   (*x*) Whether forms part of National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed).
   (*xi*) Whether any rare/endangered/unique species of flora and fauna found in the area — if so details thereof.
   (*xii*) Whether any protected archaeological/heritage site/defence establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required.
8. Whether the requirement of forest land as proposed by the user agency in Column 2 of Part-I is unavoidable and barest minimum for the project. If no, recommended area itemwise with details of alternatives examined.
9. Whether any work in violation of the Act has been carried out (Yes/No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.

10. Details of compensatory afforestation scheme:

(*i*) Details of non-forest area/degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch.

(*ii*) Map showing non-forest/degraded forest area identified for compensatory afforestation and adjoining forest boundaries.

(*iii*) Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc.

(*iv*) Total financial outlay for compensatory afforestation scheme.

(*v*) Certificates from competent authority regarding suitability of area identified for compensatory afforestation and from management point of view (To be signed by the concerned Deputy Conservator of Forests).

11. Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in Columns 7(*xi*, *xii*), 8 and 9 above.

12. Division/District profile:

(*i*) Geographical area of the district.

(*ii*) Forest area of the district.

(*iii*) Total forest area diverted since 1980 with number of cases.

(*iv*) Total compensatory afforestation stipulated in the district/division since 1980 on—

(*a*) forest land including penal compensatory afforestation,

(*b*) non-forest land.

(*v*) Progress of compensatory afforestation as on (date) ..... on—

(*a*) forest land,

(*b*) non-forest land.

13. Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons.

Signature

Name

Official Seal

Date: .....

Place: .....

Part-III

(To be filled by the concerned Conservator of Forests)

14. Whether site, where the forest land involved is located has been inspected by concerned Conservator of Forests (Yes/No). If yes, the date of inspection and observation made in form of inspection note to be enclosed.

15. Whether the concerned Conservator of Forests agree with the information given in Part-B and the recommendations of Deputy Conservator of Forests.

16. Specific recommendation of concerned Conservator of Forests for acceptance or otherwise of the proposal with detailed reasons.

Signature

Name

Official Seal

Date: .....

Place: .....

Part-IV

(To be filled in by the Nodal Officer or Principal Chief Conservator of Forests or Head of Forest Department)

17. Detailed opinion and specific recommendation of the State Forest Department for acceptance of otherwise of the proposal with remarks.
(While giving opinion, the adverse comments made by concerned Conservator of Forests or Deputy Conservator of Forests should be categorically reviewed and critically commented upon.)

Signature
Name and Designation
(Official Seal)

Date: .....
Place: .....

Part-V

(To be filled in by the Secretary in Charge of Forest Department or by any other authorised officer of the State Government not below the rank of an Under Secretary)

18. Recommendation of the State Government:
(Adverse comments made by any officer or authority in Part-B or Part-C or Part-D above should be specifically commented upon.)

Signature
Name and Designation
(Official Seal)

Date: .....
Place: .....

Instructions (for Part-I).—

1. The project authorities may annex a copy of the approved project/plan in addition to filling Column 1(*i*) e.g. IBM approved mining plan for major mineral/CMPDI plan with subsidence analysis reports, etc.
2. Map has to be in original duly authenticated jointly by project authorities and concerned DCF — Column 1(*ii*).
3. Complete details of alternative alignments examined especially in case of project like roads, transmission lines, railway lines, canals, etc. to be shown on map with details of area of forest land involved in each alternative to be given — Column 1(*iii*).
4. For proposals relating to mining, certificate from competent authority like District Mining Officer about non-availability of the same mineral in surrounding/nearby non-forest areas.
5. In case the same company/individual has taken forest land for similar project in the State, a brief detail of all such approvals/leases be given as an enclosure along with current status of the projects.
6. The latest clarifications issued by the Ministry under Forest (Conservation) Act, 1980 may be kept in mind. In case such information do not fit in the given columns, the same shall be annexed separately.

General Instructions.—

1. On receipt of proposal, Nodal Officer shall issue a receipt to the user agency indicating therein the name of the proposal, user agency, area in hectare, serial number and date of receipt.

2. If the space provided above is not sufficient to specify any information, please attach separate details/documents.
3. While forwarding the proposal to the Central Government, complete details on all aspects of the case as per form prescribed above read with the clarifications issued by the [36][Ministry of Environment, Forests and Climate Change], Government of India, New Delhi should be given. Incomplete or deficient proposals shall not be considered and shall be returned to the State Government in original.
4. The State Government shall submit the proposal to the Central Government within stipulated time limits. In case of delay while forwarding, the reasons for the same to be given in the forwarding/covering letter.

FORM 'B'

(*See* Rule 6)

Form for seeking prior approval under Section 2 of the proposals by the State Governments and other authorities in respect of renewal of leases, which have been earlier granted clearance under Forest (Conservation) Act, 1980

Part-I

(To be filled up by user agency)

1. Letter No. and date vide which clearance under Forest (Conservation) Act, 1980 accorded by the Central Government (Copy to be enclosed):
2. Project details:
   (*i*) Short narrative of the proposal and project/scheme for which the forest land is required.
   (*ii*) Map showing the required forest land, boundary of adjoining forest on a 1 : 50,000 scale map.
   (*iii*) Cost of the project:
3. Purposewise break-up of the total land required (Already broken and to be broken):
4. Details of Certificates/documents enclosed as required under the instructions.

Signature

(Name in Block Letters)

Designation

Address (of User Agency)

Date: .....

Place: .....

State Serial No. of proposal .....

(To be filled up by the Nodal Officer with date of receipt)

Part-II

(To be filled by the concerned Deputy Conservator of Forests)

State Serial No. of proposal .....

5. Location of the project/Scheme:
   (*i*) State/Union Territory.
   (*ii*) District.
   (*iii*) Forest Division.
   (*iv*) Area of forest land proposed for diversion (In ha.).
   (*v*) Legal status of forest.

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36. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).

(*vi*) Density of vegetation.

(*vii*) Specieswise (scientific names) and diameter classwise enumeration of trees in unbroken area.

(*viii*) Whether forms part of National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed.)

6. Whether any work in violation of the Act has been carried out (Yes/No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.

7. Site inspection report of the DCF (to be enclosed) in respect to status of compliance of conditions stipulated during earlier approval.

8. Division/District profile:

(*i*) Geographical area of the district.

(*ii*) Forest area of the district.

(*iii*) Total forest area diverted since 1980 with number of cases.

(*iv*) Total compensatory afforestation stipulated in the district/division since 1980 on—

(*a*) forest land including penal compensatory afforestation,

(*b*) non-forest land.

(*v*) Progress of compensatory afforestation as on (date) ..... on—

(*a*) forest land,

(*b*) non-forest land.

9. Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons.

Signature

Name

Official Seal

Date: .....

Place: .....

Part-III

(To be filled by the concerned Conservator of Forests)

10. Whether site, where the forest land involved is located has been inspected by concerned Conservator of Forests (Yes/No). If yes, the date of inspection and observation made in form of inspection note to be enclosed.

11. Whether the concerned Conservator of Forests agree with the information given in Part-B and the recommendations of Deputy Conservator of Forests.

12. Specific recommendation of concerned Conservator of Forests for acceptance or otherwise of the proposal with detailed reasons.

Signature

Name

Official Seal

Date: .....

Place: .....

Part-IV

(To be filled in by the Nodal Officer or Principal Chief Conservator of Forests or Head of Forest Department)

13. Detailed opinion and specific recommendation of the State Forest Department for acceptance of otherwise of the proposal with remarks.
(While giving opinion, the adverse comments made by concerned Conservator of Forests or Deputy Conservator of Forests should be categorically reviewed and critically commented upon.)

Signature
Name and Designation
(Official Seal)

Date: .....
Place: .....

Part-V

(To be filled in by the Secretary in Charge of Forest Department or by any other authorised officer of the State Government not below the rank of an Under Secretary)

14. Recommendation of the State Government:
(Adverse comments made by any officer or authority in Part-B or Part-C or Part-D above should be specifically commented upon.)

Signature
Name and Designation
(Official Seal)

Date: .....
Place: .....

Instructions (for Part-I).—

1. The project authorities may annex a copy of the approved project/plan in addition to filling Column 2(*i*) e.g. IBM approved mining plan for major minerals/CMPDI plan with subsidence analysis reports, etc.
2. Map has to be in original duly authenticated jointly by project authorities and concerned DCF — Column 2(*ii*).
3. In case the same company/individual has taken forest land for similar project in the State, a brief detail of all such approvals/leases be given as an enclosure along with current status of the projects.
4. Itemwise requirement (Column 3) should be separately shown for broken up and fresh areas.
5. The latest clarifications issued by the Ministry under Forest (Conservation) Act, 1980 may be kept in mind. In case such information do not fit in the given columns, the same shall be annexed separately.

General Instructions.—

1. On receipt of proposal, Nodal Officer shall issue a receipt to the user agency indicating therein the name of the proposal, user agency, area in hectare, serial number and date of receipt.
2. If the space provided above is not sufficient to specify any information, please attach separate details/documents.
3. While forwarding the proposal to the Central Government, complete details on all aspects of the case as per form prescribed above read with the clarifications issued by the

[37][Ministry of Environment, Forests and Climate Change], Government of India, New Delhi should be given. Incomplete or deficient proposals shall not be considered and shall be returned to the State Government in original.

4. The State Government shall submit the proposal to the Central Government within stipulated time limits. In case of delay while forwarding, the reasons for the same to be given in the forwarding/covering letter.

[38][FORM 'C'

Form for seeking prior approval under Section 2 of the proposals by the State Governments and other authorities for prospecting of minerals in forest land

Part-I

(To be filled up by User Agency)

1. Project detail:

(*i*) Name, address and contact details of the User Agency:

(*ii*) Legal status of the User Agency:

(*iii*) Name, designation and full address of the person making application:

(*iv*) Documents in support of the competence or authority of the person making this application to make application on behalf of the User Agency enclosed: (Yes/No)

(*v*) Mineral commodity to be explored:

(*vi*) Short narrative of the activities proposed to be undertaken in both forest and non-forestland:

(*vii*) Details of approvals accorded by the concerned Ministry or Department in the State or Central Government, as the case may be, for grant of prospecting license in favour of the User Agency:

(*viii*) Details of forest and non-forest land included in the prospecting lease:

(*ix*) Total area of forest land required for prospecting:

(*a*) Area of forest land likely to experience permanent change in land use

(*b*) Area of forest land likely to experience temporary change in land use

(*x*) Total period for which the forest land is proposed to be utilised for prospecting:

(*xi*) Estimated cost of the project:

(*xii*) Details of forest land diverted earlier, if any, in favour of the User Agency in the State or Union territory along with current status of the use of such forest land:

(*xiii*) Details of permission accorded earlier, if any, in favour of the User Agency for prospecting of minerals in forest land along with current status of prospecting in each case:

2. Details of Maps enclosed:

(*i*) Survey of India Topo-sheet(s), in original in 1:50,000 scale showing boundary of prospecting block; boundary of each patch of forest land located within the prospecting block; location of each sample plot or borehole site, roads or pathway (existing as well as new pathway to be shown separately) to be used for transportation of drilling equipments; boundary of the adjoining forests and protected areas located within ten (10) Kilometres distance from boundary of forest land identified for prospecting etc.:(Yes/No).

Note 1: In case Survey of India Toposheet in 1:50,000 scale is not available, especially in case of the areas located near International Borders and other strategic locations, in place of Survey of India Toposheet other maps available in public domain may also be used.

Note 2: Due to technical reasons, while undertaking the prospecting activities, the user agency may vary location of boreholes, sample plots, roads or paths etc. up to 300 metres,

37. *Subs.* for "Ministry of Environment, Forests" by G.S.R. 713(E), dt. 10-10-2014 (w.e.f. 1-11-2014).
38. *Ins.* by G.S.R. 185(E), dt. 14-3-2014 (w.e.f. 14-3-2014).

provided area of forest land proposed to be utilised and number of trees proposed to be cut does not exceed the same given in the proposal.

3.(*i*) Justification for prospecting in forest land:

(*ii*) Details of alternatives examined;

(*iii*) Detail of non-invasive prospecting activities, if any, undertaken by the user agency in the forest land indicated in the extant proposal:

4. Whether the forest land identified for prospecting is located in scheduled areas (Yes/No);

5. Details of activities proposed to be undertaken in forest land;

(*i*) Surface sampling

- (*a*) Grab sampling
- (*b*) Chip sampling
- (*c*) Groove sampling
- (*d*) Channel sampling
- (*e*) Bulk sampling
- (*f*) Geochemical grid sampling with sample line spacing

(*ii*) Pitting or trenching

- (*a*) Number and dimension of pits or trenches
- (*b*) Total volume of excavation
- (*c*) Area of forest land to be utilised for pits or trenches

(*iii*) Drilling

- (*a*) Number and diameter of boreholes or wells
- (*b*) Spacing of boreholes or wells
- (*c*) Area to be temporarily disturbed at each bore hole or well
- (*d*) Area, if any, to be permanently disturbed at each bore hole or well
- (*e*) Total meterage of boreholes or wells
- (*f*) Number of drill core samples
- (*g*) Volume of drill core samples

(*iv*) Construction of roads or paths

- (*a*) Length and width of roads or paths proposed to be constructed;
- (*b*) Area of forest land proposed to be utilised for roads or paths;

(*v*) Any other activity (pl. specify)

6. Area of forest land likely to experience temporary change in land use due to:

(*i*) Surface sampling;
(*ii*) Pitting or trenching;
(*iii*) Drilling;
(*iv*) Construction of roads or paths;
(*v*) Any other activity (pl. specify);
Total:

7. Area of forest land likely to experience permanent change in land use due to:

(*i*) Surface sampling;
(*ii*) Pitting or trenching;
(*iii*) Drilling;
(*iv*) Construction of roads/paths;
(*v*) Any other activity (pl. specify.);
Total:

8. Details of machinery or equipments to be deployed for prospecting:

Sl. No.	Name of equipment or machinery	Mode of traction	Size (L × B × H)	Estimated deployment (machine hours)	Maximum noise level (decibel)

9. Details of existing paths or roads proposed to be utilised for transport of the equipment or machines in the forest land;

10. Approximate number and approximate duration of stay in the forest land of the persons proposed to be deployed for prospecting;

11. Summary of the estimated quantity of ore and other samples proposed to be collected during the prospecting (not applicable for hydrocarbon sector):

Sl. No.	Details of samples	Qty. proposed to be collected (Metric Tonne)

12. Estimated accuracy and confidence level for mineral reserve assessment;

13. Estimated accuracy and confidence level in case number of bore holes proposed to be drilled are reduced by:

		Accuracy (%)	Confidence level (%)
(*i*)	10%:	.....	.....
(*ii*)	20%:	.....	.....
(*iii*)	30%:	.....	.....
(*iv*)	40%:	.....	.....
(*v*)	50%:	.....	.....

14. In case the proposal is for extension of the period of the permission granted for prospecting, or for drilling of additional bore holes, please provide following additional information:

(*i*) Details of approval accorded under the Forest (Conservation) Act, 1980 in the past:

Sl. No.	Number and date of the approval accorded	Area of forest land permitted for prospecting (ha)	Validity period of approval	
			From	To

(*ii*) Report on status of compliance to the conditions stipulated in the approval accorded in the past enclosed (Yes/No)

(*iii*) Details of violation(s), if any committed.

(*iv*) Justification for extension of permission accorded for prospecting.

(*v*) Details of prospecting activities undertaken and sample collected, so far.

15. Details of documents enclosed: .....

Date: .....

Place: .....

Signature

(Name in Block letter)

Designation

Address (of User Agency)

State serial No. of proposal .....

Part-II

(To be filled by the concerned Deputy Conservator of Forests)

Division serial No. of proposal.....

16. Location of the project or scheme:

(*i*) State/Union Territory

(*ii*) District

(*iii*) Forest Division

(*iv*) Area of forest land proposed to be utilised for prospecting.

17. Legal status of forest land identified for prospecting.

18. Details of vegetation available in the forest land proposed for diversion:

(*i*) Forest type;

(*ii*) Average crown density of vegetation;

(*iii*) Species-wise local or scientific names and girth-wise enumeration of trees required to be felled;

(*iv*) Working plan prescription for the forest land proposed to be utilised for prospecting.

19. Brief note on topography and vulnerability of the forest land proposed to be utilised for prospecting to erosion.

20. Approximate distance of the forest land proposed to be utilised for prospecting from boundary of the forest land.

21. Significance of the forest land proposed to be utilised for prospecting from wildlife point of view:

(*i*) Details of wildlife present in and around the forest land proposed to be utilised for prospecting;

(*ii*) Whether forms part of national park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, wildlife migration corridor etc., (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed);

(*iii*) Whether any national park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, wildlife migration corridor etc., is located within ten kilometers from boundary of the forest land proposed to be utilised for prospecting (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed);

(*iv*) Whether any national park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, wildlife migration corridor etc., is located within one kilometer from boundary of the forest land proposed to be utilised for prospecting (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed);

(*v*) Whether any rare or endangered or unique species of flora and fauna found in the area — if so details thereof.

22. Whether any protected archaeological or heritage site or defense establishment or any other important monument is located in the area — (If so, details thereof with No Objection Certificate (NOC) from competent authority to be annexed).

23. Comment as to the reasonability of the extent of the forest land proposed to be utilised for prospecting:

(*i*) Whether the requirement of forest land as proposed by the User Agency in Para 6 and Para 7 of the Part – I is unavoidable and bare minimum for the project.

(*ii*) If no, recommended area of forest land which may be used for prospecting.

24. Details of violation committed:

(*i*) Whether any work in violation of the Act or guidelines issued under the Act has been carried out (Yes/No).

(*ii*) If yes, details of the violation including period of work done, area of forest land involved in violation, name, address and designation of the person(s) responsible for violation and action taken against the person(s) responsible for violation;

(*iii*) Whether work in violation is still in progress (Yes/No):

25. Details of compensatory afforestation scheme:

(*i*) Legal status of the land identified to raise compensatory afforestation;

(*ii*) Details such as location, Survey or Compartment or Khasra number, area and distance from adjoining forest of each plot of non-forest area or degraded forest land identified for compensatory afforestation;

(*iii*) Survey of India Toposheet(s), in original in 1:50,000 scale showing non-forest or degraded forest land identified for compensatory afforestation and adjoining forest boundaries enclosed? (Yes/No);

(*iv*) Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc. enclosed (Yes/No);

(*v*) Total financial outlay for compensatory afforestation scheme;

(*vi*) Certificates from the concerned Deputy Conservator of Forests regarding suitability of area identified for compensatory afforestation and from management point of view enclosed? (Yes/No);

26. Site inspection report of the Deputy Conservator of Forests highlighting important facts pertaining to the impact of proposed activities on flora and fauna enclosed (Yes/No);

27. Specific recommendations of the Deputy Conservator of Forests for acceptance or otherwise of the proposal with reasons.

Date: .....

Place: .....

Signature.....

Name.....

Official Seal

.....

Part-III

(To be filled by the concerned Conservator of Forests)

28. Whether site, where the forest land involved is located has been inspected by the Conservator of Forests (Yes/No). If yes the date of inspection and observations made in form of inspection note to be enclosed.

29. Whether the Conservator of Forests agree with the information given in Part-II and the recommendations of Deputy Conservator of Forests.

30. Specific recommendation of Conservator of Forests for acceptance or otherwise of the proposal with detailed reasons.

Date: .....

Place: .....

Signature.....

Name.....

Official Seal

.....

Part-IV

(To be filed in by the Nodal Officer or Principal Chief Conservator of Forests or Head of Forest Department)

31. Detailed opinion and specific recommendation of for acceptance or otherwise of the proposal with remarks

(While giving opinion, the adverse comments made by the Conservator of Forests or Deputy Conservator of Forests should be categorically reviewed and critically commented upon).

Date: .....

Place: .....

Signature.....

Name.....

Official Seal

.....

Part-V

(To be filled in by the Secretary in charge of Forest Department or by any other authorised officer of the State Government not below the rank of an Under Secretary)

32. Recommendation of the State Government:

(Adverse comments made by any officer or authority in Part-II or Part –III or Part-IV above should be specially commented upon)

Date: .....

Place: .....

Signature.....

Name.....

Official Seal

.....]

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 29 नवम्बर, 2023

सा.का.नि.869(अ)—केन्द्रीय सरकार, वन (संरक्षण एवं संवर्धन) अधिनियम 1980 (1980 का 69) की धारा 4 की उप-धारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, और वन (संरक्षण) नियम, 2022, को, उन बातों के सिवाय जिन्हें ऐसे अधिक्रमण से पूर्व किया गया है या करने का लोप किया गया है, अधिक्रांत करते हुए, निम्नलिखित नियम बनाती है, अर्थात्:-

1. संक्षिप्त नाम, विस्तार और प्रारंभ (1) इन नियमों का संक्षिप्त नाम वन (संरक्षण एवं संवर्धन) नियम, 2023 है।

(2) ये 1 दिसम्बर, 2023 से प्रवृत्त होंगे।

2. परिभाषाएं- (1) इन नियमों में, जब तक संदर्भ से अन्यथा अपेक्षित न हों,-

(क) ''प्रत्यायित प्रतिपूरक वनीकरण'' से अधिनियम की धारा 2 की उप-धारा (1) के अधीन पूर्व अनुमोदन प्राप्त करने के लिए प्रयोग की जाने वाली सक्रिय वनीकरण की एक प्रणाली अभिप्रेत है;

(ख) ''अधिनियम'' से वन (संरक्षण एवं संवर्धन) अधिनियम,1980 (1980 का 69) अभिप्रेत है;

(ग) ''परामर्शदात्री समिति'' से अधिनियम की धारा 3 के अधीन गठित परामर्शदात्री समिति अभिप्रेत है;

(घ) ''प्रतिपूरक वनीकरण'' से अधिनियम के अधीन वनेतर प्रयोजन के लिए वन भूमि के अपवर्तन की एवज में किया गया वनीकरण अभिप्रेत है;

वनेत्तर प्रयोजन के लिए अपवर्तित वन भूमि के बदले में प्रतिपूरक वनीकरण के लिए उपयोग की जा सकने वाली वनेत्तर भूमि, राजस्व भूमि, ज़ुडपी जंगल, छोटे झाड़ का जंगल, बड़े झाड़ का जंगल, जंगली झाड़ी भूमि, सिविल-सोयम भूमि और वन भूमि की अन्य श्रेणियों, (वन विभाग के प्रबंधन और प्रशासनिक नियंत्रण के अधीन वन भूमि के अलावा) में आने वाली भूमि उपलब्ध नहीं है।

मेरे हस्ताक्षर और मुहर से आज.....दिन .....को जारी किया गया।

हस्ताक्षर और आधिकारिक मुहर

[फा.सं. एफसी-11/118/2021-एफसी]

रमेश कुमार पाण्डेय, वन महानिरीक्षक

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 29th November, 2023

G.S.R. 869(E).—In exercise of the powers conferred by sub-section (1) of section 4 of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 (69 of 1980) and in supersession of the Forest (Conservation) Rules, 2022, except as respects things done or omitted to be done before such supersession, the Central Government hereby makes the following rules, namely:- -

1. Short title, extent and commencement.—(1) These rules may be called the Van (Sanrakshan Evam Samvardhan) Rules, 2023.

(2) They shall come into force on the 1st Day of December 2023.

2. Definitions.—(1) In these rules, unless the context otherwise requires, -

(a) "accredited compensatory afforestation" means a system of proactive afforestation to be used for obtaining prior approval under sub-section (1) of section 2 of the Adhiniyam.

(b) "Adhiniyam" means the Van (Sankashan Evam Samvardhan) Adhiniyam, 1980 (69 of 1980);

(c) "Advisory Committee" means the Advisory Committee constituted under section 3 of the Adhiniyam;

(d) "compensatory afforestation" means afforestation done in lieu of the diversion of forest land for non-forest purpose under the Adhiniyam;

(e) "compensatory levies" includes all money and funds specified in clauses (iii) and (iv) of sub-section (3) of section 4 of the Compensatory Afforestation Fund Act, 2016 (38 of 2016);

(f) "Conservator of Forests" means Conservator of Forests, Chief Conservator of Forests, the Regional Chief Conservator of Forests or an officer equivalent to Conservator of Forests appointed by the State Government or Union territory Administration to hold the charge of a forest circle having jurisdiction over the forest land for which the prior approval of the Central Government is required;

(g) "Deputy Director General of Forests (Central)" means head of the Regional Office appointed by the Central Government;

(h) "dereservation" means an order issued by the State Government or Union territory Administration or any authority thereof, for change in the legal status of a land statutorily or otherwise recognised as forest to any other category of land;

(i) "diversion" means an order issued by the State Government or Union territory Administration or any authority thereof for the use of any forest land for non-forest purpose or assignment of a lease of any forest land for non-forest purpose;

(j) "District Collector" includes Deputy Commissioner, to hold the charge of the Administration of the revenue district having jurisdiction over the forest land for which the prior approval of the Central Government under the Adhiniyam is required;

(k) "Divisional Forest Officer" means Divisional Forest Officer, Deputy Conservator of Forests or an officer equivalent to the Divisional Forest Officer or Deputy Conservator of Forests appointed by the State Government or Union territory Administration to hold the charge of a Forest Division having

jurisdiction over the forest land for which the prior approval of the Central Government under the Adhiniyam is required;

(l) "land bank" means the lands identified or earmarked, as the case may be, by the State Government and Union territory Administration for raising compensatory afforestation in lieu of forest land proposed for diversion or diverted under the Adhiniyam;

(m) "linear project" means project involving linear diversion of forest land for the purposes such as roads, pipelines, railways, transmission lines, slurry pipeline, conveyor belt etc.;

(n) "National Working Plan Code" means a code prepared by the Central Government for the preparation of Working Plans;

(o) "Nodal Officer" means any officer not below the rank of Chief Conservator of Forests, authorised by the State Government or Union territory Administration, as the case may be, or the senior most officer in the Forest Department of the concerned Union territory, if there is no post of Chief Conservator of Forests or above in the Department, for the purpose of implementation of the Adhiniyam and rules thereof and to deal with and to make correspondence with the Central Government, in the matter of forest conservation;

(p) "Project Screening Committee" means the Project Screening Committee constituted under rule 8;

(q) "Regional Empowered Committee" means the Regional Empowered Committee constituted under sub-rule (1) of rule 6;

(r) "Regional Office" means a Regional Office established by, and controlled by the Central Government for the purpose of these rules;

(s) "survey" means any activity to be taken up prior to initiating commissioning of a project or any activity undertaken for the purpose of exploring, locating or proving mineral deposits including coal, petroleum and natural gas before carrying out actual mining in the forest land, that includes survey, investigation, prospecting, exploration, including drilling therefor, etc.;

(t) "technological tool" means Geographical Information System based digital tools such as Decision Support System facilitating the decision making process of proposal seeking prior approval under the Adhiniyam;

(u) "user agency" means any person, organisation or legal entity or company or Department of the Central Government or State Government or Union territory Administration submitting a proposal under section 1 of the Adhiniyam;

(v) "working permission" means permission granted to linear projects before final approval to mobilise the resources to commence the preliminary project work other than black topping, concretisation, laying of railway tracks, charging of transmission lines, etc. or as specified in the in-principle approval;

(w) "Working Plan" means the document prepared as per the provisions of the National Working Plan Code published by the Central Government from time to time and having prescriptions for scientific management of the forests of a particular Forest Division for a specified period;

(2) Words and expressions used herein and not defined in these rules but defined in the Adhiniyam shall have the same meaning as respectively assigned to them in the Adhiniyam.

3. Constitution of Advisory Committee. - (1) The Central Government may, by an order, constitute an Advisory Committee to advise the Central Government with regards to the grant of approval under sub-section (1) of section 2 in respect of proposals referred under sub-rule (2) of rule 10; and any matter connected with the conservation of forests referred to the Advisory Committee by the Central Government.

(2) The Advisory Committee shall consist of the following persons, namely: -

(a) Director General of Forests, Ministry of Environment, Forest and Climate Change – Chairperson;

(b) Additional Director General of Forests, dealing with the forest conservation in the Ministry of Environment, Forest and Climate Change – Member;

(c) Additional Director General of Forests, dealing with wildlife in the Ministry of Environment, Forest and Climate Change – Member;

(d) Additional Commissioner (Soil Conservation), Ministry of Agriculture and Farmers' Welfare – Member;

(e) Three non-official experts to be nominated by the Central Government representing one each from the fields of ecology, engineering and development economics – members;

(f) Inspector General of Forests dealing with forest conservation and Adhiniyam thereof – Member-Secretary

(3) The Chairperson may co-opt the domain experts as special invitees to a meeting of the Advisory Committee.

(4) The Chairperson shall preside over the meeting of the Advisory Committee and in his absence, the Additional Director General of Forests, dealing with forest conservation, in the Ministry of Environment, Forest and Climate Change shall preside over the meeting.

4. Terms and conditions of non-official Members of Advisory Committee. –

(1) A non-official Member shall hold his office for a period of up to two years from the date of his nomination or as specified by the Central Government.

(2) A non-official Member shall cease to hold office if he becomes of unsound mind, or insolvent or is convicted for an offence which involves moral turpitude.

(3) A non-official Member may be removed from his office if he fails to attend three consecutive meetings of the Advisory Committee without any sufficient cause or reason.

(4) Any vacancy caused by any reason mentioned in clauses (b) and (c) shall be filled by the Central Government for the remaining term of two years.

(5) The non-official Members of the Advisory Committee shall be entitled to a travelling allowance and daily allowance as are admissible to an officer of the Government of India holding Group 'A' post.

(6) Provided that where a Member of the Parliament or a Member of a State Legislature has been appointed as a member of the Advisory Committee, he shall be entitled to the travelling allowance and daily allowances in accordance with the Salary, Allowances and Pension of Members of Parliament Act, 1954 (30 of 1954) or the respective provisions of law pertaining to the member of the concerned State Legislature, as the case may be.

5. Conduct of business of the Advisory Committee.—(1) The Chairperson of the Advisory Committee shall call the meeting of the Committee at least once a month, whenever considered necessary;

(2) the meeting of the Advisory Committee shall ordinarily be held at New Delhi except when the Chairperson considers it necessary to inspect the proposed land, then the Chairperson may direct the meeting to be held at a place from where the proposal can be inspected.

(3) the quorum of the meeting of the Advisory Committee shall be five including the Chairperson.

(4) The Member-Secretary shall prepare an agenda of the meeting and present the proposals and matters referred to the Advisory Committee by the Central Government.

(5) The Advisory Committee shall examine in its meeting the proposal or the matter and, in urgent cases, the Chairperson may direct the proposal or the matter to be sent to the members for the their opinion, which shall be furnished to the Committee within the stipulated time.

(6) the user agency may be allowed to attend the meeting of the Advisory Committee for such duration as may be necessary to furnish such information or clarify any issue which may pertain to it.

(7) After the examination of the proposal or the matter, the Advisory Committee shall make its recommendation/advise to the Central Government.

6. Constitution of Regional Empowered Committee.—(1) The Central Government may, by an order, constitute a Regional Empowered Committee at each of the Regional Offices to examine proposals referred to it under sub-rule (3) of rule 10 and grant approval or rejection of proposals under sub-section (1) of section 2.

(2) The Regional Empowered Committee at each of the Regional Offices shall consist of the following persons, namely: -

(a) Deputy Director General of Forests (Central) or an officer nominated by the Central Government – chairperson;

(b) Three non-official members from amongst eminent persons who are experts in the field of forestry and allied disciplines – members;

(c) The senior-most officer amongst officers of the rank of Conservator of Forests and Deputy Conservator of Forests in the Regional Office – member-secretary.

(3) The chairperson of the Regional Empowered Committee may co-opt the domain experts as special invitees to the meeting.

(4) One representative each from the Forest Department and Revenue Department of the State or the Union territory Administration, not below the rank of Director to the Government of India, shall be invited by the Regional Empowered Committee to attend the meeting as a special invitee, in the examination of the proposals.

(5) Terms and conditions of non-official members of Regional Empowered Committee.—

(1) A non-official member shall hold his office for a period of up to two years from the date of his nomination.

(2) A non-official member shall cease to hold office if he becomes of unsound mind, insolvent, or is convicted for an offence involving moral turpitude.

(3) A non-official member may be removed from his office if he fails to attend three consecutive meetings of the Committee without any sufficient cause or reason.

(4) Any vacancy of a member in the Regional Empowered Committee caused by any reason mentioned in sub-rules (2) and (3) shall be filled by the Central Government for the remaining term of the member in whose place vacancy has arisen.

(5) The non-official members of the Regional Empowered Committee shall be entitled to a travelling allowance and daily allowance as are admissible to an officer of the Government of India holding Group 'A' post carrying the same scale of pay.

(6) Provided that where a Member of the Parliament or a Member of a State Legislature has been appointed as a member of the Advisory Committee, he shall be entitled to the travelling allowance and daily allowances in accordance with the Salary, Allowances and Pension of Members of Parliament Act, 1954 (30 of 1954) or the respective provisions of law pertaining to the member of the concerned State Legislature, as the case may be.

7. Conduct of business of Regional Empowered Committee. —The Regional Empowered Committee shall conduct its business as follows, namely:—

(1) The chairperson of the Regional Empowered Committee shall hold the meeting whenever considered necessary, but not less than once a month.

(2) The meetings of the Regional Empowered Committee shall be held at the headquarters of the Regional Office:

Provided that where the chairperson of the Regional Empowered Committee is satisfied that inspection of site of forest land proposed to be used for non-forest purposes shall be necessary or expedient in connection with the consideration of the proposal referred, he may direct that the meetings of the Regional Empowered Committee be held at a place other than headquarters of the Regional Office for such inspection of site;

(3) The chairperson of the Regional Empowered Committee shall preside over the meeting of the Regional Empowered Committee and in his absence, Deputy Director General of Forests holding the charge of other Regional Office or Inspector General of Forests dealing with the matter related to the Adhiniyam, as may be authorised by the Central Government, may chair the meeting of the Regional Empowered Committee.

(4) Every proposal referred to the Regional Empowered Committee for advice or decision shall be considered in the meeting of the Regional Empowered Committee:

Provided that in urgent case, the chairperson of the Regional Empowered Committee may direct that documents may be circulated and sent to the members of the Regional Empowered Committee for their opinion within the stipulated time.

(5) The quorum of the meeting of the Regional Empowered Committee shall be three.

(6) The user agency may be allowed to remain present for such duration during a meeting as may be necessary to furnish such information or clarify any issue which may pertain to it.

(7) The member-secretary shall prepare agenda of the meeting and present the proposals and matters connected with the Adhiniyam before the committee for making appropriate recommendations and decisions thereafter.

8. Constitution of Project Screening Committee.—(1) The State Government and Union territory Administration may, by an order, constitute a Project Screening Committee to examine the completeness of the proposal submitted under clauses (i), (ii) or (iii) of sub-section **(1)** of section 2 of the Adhiniyam.

(2) The Project Screening Committee shall consist of the following persons, namely:-

a. Nodal Officer – chairperson;

b. Concerned Chief Conservator of Forests/ Conservator of Forests – member;

c. Concerned Divisional Forest Officer- member;

d. Concerned District Collector or his representative (Not below the rank of Deputy Collector) –member;

e. Divisional Forest Officer in the office of Nodal Officer- member-secretary

(3) The Project Screening Committee shall meet at least twice every month and the quorum of the meeting of the Project Screening Committee shall be three.

(4) The Project Screening Committee shall, after examination of the proposals, make recommendation to the State Government or Union territory Administration, as the case may be.

9. Proposals for prior approval of Central Government.—(1) The approval shall be accorded by the Central Government in two stages, namely, (i) 'In- Principle' approval; and (ii) 'Final' approval.

(2) The user agency shall submit an application to the State Government or Union territory Administration for approval of the Central Government under sub-section (1) of section 2 of the Adhiniyam for dereservation of forest land, use of forest land for non-forest purposes or for assignment of lease online, through the web portal of the Central Government.

(3) A proposal identity number shall be generated online for the proposal submitted by the user agency and the said identity number shall be used for all future references;

(4) The copy of the proposal shall be simultaneously forwarded to the concerned Divisional Forest Officers, District Collectors, Conservator of Forests, Chief Conservator of Forests and the Nodal Officer of the State Government or Union territory Administration each of whom shall independently undertake preliminary examination of the completeness of documentation of the proposal.

(5) The Project Screening Committee shall examine the proposal received from the State Government or Union territory Administration, except proposals involving forest land of five hectares or less, that the proposal is complete in all respects and the proposed activity is not in any restricted area or category.

(6) The Project Screening Committee, for the purpose of screening, may call the user agency for clarification or additional documents, if any.

(7) The Project Screening Committee shall examine the proposal for its completeness and correctness and ensure that deficiencies in the proposal, if any, are identified and the member-secretary shall inform in this regard to the user agency.

(8) The proposals returned to the user agency shall be re-submitted after addressing the deficiency, as identified under sub-rule (7) above, within a period of ninety days, failing which the proposal shall stand de-listed.

(9) In case the user agency submits the information within the given time the proposal will be re-examined by the Project Screening Committee and in case the proposal is not complete in all respect then the same will be de-listed for the reasons to be recorded in writing:

Provided that the after de-listing of the proposal by the Project Screening Committee, the user agency, after addressing the deficiencies, can re-list the proposal only once using the same proposal identity number, as generated under sub-rule (2) above, which will again be examined by the PSC as per procedure given in sub-rule (5) to (7) above and in case the proposal is found still incomplete, it will be rejected and deleted permanently from the portal.

(10) The complete proposal with the proposal identity number shall be forwarded to concerned Divisional Forest Officer concerned, District Collectors, Conservator of Forests or Chief Conservator of Forests for field verification.

(11) Where the forest land or part thereof included in the proposal is not under the management control of the Forest Department, the District Collector shall get the land schedule and map of the forest land included in the proposal authenticated online through joint verification by officers of the Revenue Department and Forest Department.

(12) In addition to every proposal verified in the field by the Divisional Forest Officer concerned, field inspection shall be simultaneously undertaken for every proposal that involves more than forty hectares of forest land by the Conservator of Forests concerned and for every proposal that involves more than hundred hectares of forest land by the Nodal Officer.

(13) The proposal, except involving forest land of five hectares or less, shall come up for consideration of the Project Screening Committee within the period specified in Schedule I, annexed to these rules, from

submission of the completed proposal under sub-rule (8), or (9), as the case may be, and the Project Screening Committee shall examine the feasibility of the proposal for the purpose of recommending it to the State Government or Union territory Administration along with mitigation measures to be adopted by the user agency:

Provided that the Project Screening Committee may seek from the user agency any clarification, additional detail or modification of the proposal in terms of change in forest land proposed for diversion on account of reasons such as minimising the requirement of forest land or minimising adverse impact on forest and wildlife, change in compensatory afforestation land proposed or change in measures proposed to be adopted by the user agency to mitigate the adverse impact of the project, and for this purpose it may ask the user agency to make a presentation:

Provided further that the proposal shall be reconsidered by the Project Steering Committee in case of timely submission of complete information and clarification and additional detail by the user agency online and in case the user agency modifies the original proposal substantially and makes major changes such as change in the forest land or land use plan, the Project Steering Committee may return the proposal to complete the steps given in sub-rule (7) to (11) and therefore the steps in this sub-rule shall also be repeated in such cases.

(14) Where the user agency fails to submit correct information, additional detail or a modified proposal within the period as specified, the proposal shall stand rejected*:*

Provided that if the user agency satisfies the Project Screening Committee that the reason for the delay was beyond its control, the Project Screening Committee may reconsider the proposal, after the reasons to be recorded in writing and recommend it to the State Government or Union territory Administration, as the case may be;

(15) The proposal involving forest land of up to five hectares, shall after their examination at the level of Divisional Forest Officer be forwarded by him directly to the Nodal Officer and the Nodal Officer shall forward such proposals to the State Government or Union territory Administration along with his recommendations:

Provided that Division Forest Officer, after receiving the proposals from the user agency, shall assess their completeness and incomplete proposal shall be returned to the user agency for re-submitting it with complete information.

(16) The proposal involving forest land of more than five hectares, shall be forwarded by the Nodal Officer, with the approval of the Principal Chief Conservator of Forests, to the State Government or Union territory Administration, along with the Project Screening Committee's recommendation and the same shall also be forwarded to the Regional Office.

(17) Where the State Government or Union territory Administration, as the case may be, decides not to dereserve, divert for non-forest purposes or assign on lease the forest land as indicated in the proposal, the same shall be intimated to the user agency by the Nodal Officer.

(18) Where the State Government or Union territory Administration agrees 'In-Principle' to dereserve the forest land, divert for non-forest purposes or assign on lease the forest land as indicated in the proposal shall forward its recommendation to the Central Government.

10. In-Principle approval of the proposal.—

(1) Except the proposals referred to in sub-rule (2), all proposals related to.-

(i) linear projects;

(ii) hydro electric power projects of upto 25 MW capacity proposed in the river basin where cumulative impact assessment to assess the carrying capacity of the river basing has been done

(ii) forest land up to forty hectares; and

(iii) use of forest land having canopy density up to 0.7 irrespective of their extent for the purpose of survey which are not covered under the exemptions provided under clause (iii) of sub-section (1) of section 2 of the Adhiniyam and Guidelines issued thereunder;

shall be examined in the Regional Office and disposed off in the manner specified in sub-rule (3).

(2) All proposals, other than those referred to in sub-rule (1) and following proposals, namely:-

(i) dereservation;

(ii) mining;

(iii) hydro electric power projects of more than 25 MW and those falling in a river basin where cumulative impact assessment study to assess the carrying capacity of river basin has not been done or policy decision on allowing the projects in a river basin has not been taken by the Central Government;

(iv) regularisation of encroachment;

(v) ex-post facto approval involving violation of the provisions of the Adhiniyam;

shall be examined and disposed of by the Central Government in the manner specified under these rules.

Provided that, no approval is required for assignment of petroleum exploration licence or petroleum mining lease where the physical possession or breaking of forest land is not involved:

(3) The proposals received under sub-rule (1) shall be examined by the Regional Office in the following manner, namely:-

(i) all proposals involving forest land up to five hectares, shall be examined by the Regional Office for its completeness and after further enquiry or site inspection, as deemed necessary and giving due regard to the aspects listed under clause (ii) of sub-rule (5), 'In-Principle' approval or rejection may be granted by the Regional Office by recording the reasons.

(ii) all linear proposals involving forest land of more than five hectares, all proposals for use of forest land having canopy density upto 0.7 for the purpose of survey irrespective of their extent and all other proposals involving the use of more than five hectares and up to forty hectares forest land, shall be referred, after examination of its completeness, by the Regional Office to the Regional Empowered Committee.

(iii) the Regional Empowered Committee shall examine all proposals referred to it under clause (ii) and after further enquiry or site inspection as deemed necessary and giving due regard to the aspects listed under clause (ii) of sub-rule (5), may grant 'In-Principle' approval or reject the same by recording reasons.

(iv) The decisions taken by the Regional Empowered Committee or the Deputy Director General of Forests to grant 'In-principle' approval or to reject a proposal, in accordance with the power delegated under this rule, as and when necessary or required, may be reviewed by Central Government and decision taken by the Central Government in such matters shall be the final.

(4) Site inspection report shall be prepared for proposals specified in sub-rule (2) by the Regional Office and the same shall be submitted to the Central Government for consideration by the Advisory Committee.

(5) The proposals received by the Central Government shall be examined in the following manner, namely:-

(i) all proposals under sub-rule (2) along with the site inspection report as required under sub-rule (4) or as asked by the Central Government, shall be referred, after examination of its completeness, to the Advisory Committee.

(ii) the Advisory Committee shall examine all proposals referred to it in clause (i), giving due regards, but not limited to, the following, and after further enquiry, as deemed necessary, shall make recommendation to the Central Government for consideration for approval:-

(a) the proposed use of the forest land is not for any non-site specific purpose such as agricultural purpose, office or residential purpose or for the rehabilitation of persons displaced for any reason;

(b) the State Government or the Union territory Administration, as the case may be, has certified that it has considered all alternatives and that no other alternative in the circumstances is feasible and that the required area is the minimum needed;

(c) the State Government or the Union territory Administration, as the case may be, before making his recommendation, has considered all issues having direct and indirect impacts on the diversion of forest land on the forest, wildlife and the environment;

(d) concerned mandates under the National Forest Policy;

(e) whether adequate justification has been given and appropriate mitigation measures have been proposed by the State Government or the Union territory Administration, as the case may be, if the forest land proposed to be used for non-forest purposes forms part of a national park, wildlife sanctuary, tiger reserve, designated or identified tiger or wildlife corridor, or habitat of any endangered or threatened species of flora and fauna or of an area lying in the severely eroded catchment; and

(f) the State Government or the Union territory Administration, as the case may be, undertakes to provide at its cost or at the cost of the user agency the requisite extent of appropriate land, as per rule 13, for the purpose of carrying out compensatory afforestation.

(6) While making recommendations under sub-rule (5), the Committee may also impose conditions or restrictions and such mitigation measures, which in its opinion would offset the adverse environmental impact of diversion of forest land under the proposal.

(7) The Central Government shall, after considering the recommendation of the Advisory Committee, grant 'In-Principle' approval subject to fulfilment of stipulated conditions or reject and communicate the same to the State Government or the Union territory Administration, as the case may be, and to the user agency.

(8) In case the proposal is found incomplete or information provided is found to be incorrect after its examination, the Central Government shall inform the State Government or Union territory Administration and user agency for furnishing the required information within a specified period.

(9) The State Government or Union territory Administration on receipt of communication under sub-rule (8), may furnish the complete information, after which the proposal shall be considered for 'In-Principle' approval under these rules:

Provided, if the information sought pertains to the user agency, the user agency may directly furnish the requisite information to the Central Government with a copy to the State Government or Union territory Administration, and upon receipt of such information from the user agency, the Central Government, if it considers necessary, may seek comments of the concerned State Government or Union territory Administration, as the case may be, on the information furnished by the user agency or consider granting 'In-Principle' approval.

(10) The State Government or the Union territory Administration, if so desire, after obtaining the 'In-principle' approval of linear proposal and deposition of compensatory levies such as compensatory afforestation and Net Present Value and cost of mitigation plans such as of the Wildlife Management Plan and Soil and Moisture Conservation Plan, as applicable, notification of the land identified for raising compensatory afforestation as Protected Forest under Indian Forest Act, 1927 (16 of 1927) or local forest Act and compliance of other statutes including the Schedule Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007), may grant 'working permission' for the commencement of project work before grant of 'Final' approval.

11. Final approval of the proposal.—

(1) The Nodal Officer may, after receipt of the 'In-Principle' approval from the Central Government, communicate the same to the Divisional Forest Officers, District Collectors and Conservator of Forests.

(2) On receipt of a copy of the 'In-Principle' approval, the Divisional Forest Officer shall prepare a demand note containing the item-wise amount of compensatory levies , as applicable, to be paid by the user agency and communicate the same to the user agency, along with a list of documents, certificates and undertakings required to be submitted by them in compliance with the conditions stipulated in 'In-Principle' approval.

(3) The user agency shall, after receipt of the communication, make payment of compensatory levies and hand over the land identified for compensatory afforestation, a compliance report along with copies of documentary evidence including undertaking and certificate in respect of the payment of compensatory levies and handing over of compensatory afforestation land to the Divisional Forest Officer.

(**4**) The Divisional Forest Officer, after having received the compliance report as referred to in sub-rule (3), shall examine its completeness and make his recommendations on the compliance report and forward the same to the Nodal Officer.

(5) the Nodal Officer, after having received the compliance report, ensuring its completeness and obtaining approval of the Principal Chief Conservator of Forests of the State Government or head of the Department in case of Union territory Administration, shall forward such report with his recommendations to the State Government or Union territory Administration, as the case may be.

(6) The Central Government after having received the compliance report and ensuring its completeness may accord 'Final' approval under sub-section (1) of section 2 of the Adhiniyam and communicate such decision to the State Government or Union territory Administration and the user agency.

(7) The State Government or Union territory Administration, as the case may be, after receiving the 'Final' approval of the Central Government under sub-section (1) of section 2 of the Adhiniyam, and after fulfilment and compliance of the provisions of all other Acts and rules made thereunder, as applicable including ensuring settlement of rights under the Scheduled Tribes and Other Traditional Forest

Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007), shall issue order for diversion, assignment of lease or dereservation, as the case may be.

(8) The final order of dereservation under clause (i) of sub-section (1) of section 2 of the Adhiniyam, wherever accorded, shall be published in the official Gazette by the State Government or Union territory Administration, as the case may be, informing dereservation of the forest land;

(9) The whole process of obtaining approval shall be carried out in the online portal developed for this purpose.

(10) Where compliance of condition imposed in the 'In-principle' approval is awaited from the State Government or Union territory Administration, as the case may be, for more than two years, the 'In-Principle' approval shall be deemed to be null and void:

Provided the Central Government may, for the reasons to be recorded in writing, in respect of proposals involving forest land of more than thousand hectares, where 'In-Principle' approval has been obtained, may consider grant of phase-wise 'Final' approval by the competent authority subject to compliance in respect of-

(a) payment of compensatory levies and notification of land identified and accepted for raising Compensatory Afforestation, proportional to the part area for which compliance is submitted; and

(b) any other specific condition that the Central Government may deem fit to have been complied with.

(11) After issue of final approval under sub- rule (7) and Gazette notification under sub-rule (8) the forest land concerned may be handed over or assigned, as the case may be, to the user agency by the State Government or Union territory Administration.

(12) The Regional Office shall monitor the compliance of all conditions imposed at the time of granting 'In-Principle' approval and the State Government or Union territory Administration and the user agency shall also monitor, at least once every year, the compliance of conditions imposed during 'In-Principle' approval and upload the monitoring report in the online portal.

(13) The entire process for processing the proposals by the various authorities in the State shall be completed within the time limit specified in **Schedule-I** appended to these rules.

12. Proposal seeking prior approval of Central Government for working plan.—

(1) The Nodal Officer of the State Government or Union territory Administration shall submit the draft Working Plan of a Forest Division, duly prepared in accordance with the provisions of the National Working Plan Code, along with the recommendation of the State Consultative Committee, in the online portal for prior approval of the Central Government.

(2) The draft Working Plan shall include, *inter alia*, details of forest land diverted, corresponding Compensatory Afforestation lands and status of afforestation thereon.

(3) the draft Working Plan submitted to the Central Government shall be examined by the Regional Office concerned for its conformity with National Working Plan Code, the National Forest Policy and with preamble of Adiniyam for conservation and augmentation of forests and the Regional Office may accord prior approval to the draft Working Plan along with conditions or without conditions or accord approval along with modification of the provision contained in the draft Working Plan and for a period as it deems fit, or reject the same by recording the reasons therefor.

(4) The State Government or Union territory Administration or its designated officer shall carry out the prescriptions of the Working Plan to which the approval has been accorded by the Regional Office with respect to all or specific provision of the Working Plan and for the period for which the Working Plan has been approved.

(5) The State Government or Union territory Administration shall undertake a mid-term review of the approved Working Plan and submit the review report along with its recommendation to the Regional Office and the Regional Office may, after examination, modify the condition of approval or issue a fresh prior approval by modifying the provision of the previously approved Working Plan for the remaining period or reject the recommendations of mid-term review by recording reasons therefor.

(6) The Regional Office may also consider and approve eligible Annual Working Schemes, in case submitted by the State Government or Union territory Administration.

(7) All proposals under clause (iv) of sub-section (1) of section 2, irrespective of the size of forest land involved, shall be submitted online by the State Government or Union territory Administration to the concerned Regional Office.

(8) The proposals received under sub-rule (1) shall be examined by the Regional Office and after enquiry, the Regional Office may grant approval or reject the same by recording the reasons thereof;

(9) The proposals involving whole or part of forest land bearing a canopy density of 0.4 or more or proposals involving clear-felling of forest land of size more than twenty hectares in plains and ten hectares in hills irrespective of canopy density, shall be forwarded to the Regional Empowered Committee and the Regional Empowered Committee shall deal in the manner specified under these rules and while examining the proposal, the Regional Office shall ensure that the final decision is in conformity with the National Working Plan Code, the National Forest Policy and with preamble of Adiniyam for conservation and augmentation of forests.

(10) For the purpose of these rules "clear-felling of forest land" means removal of all natural vegetation in whatever form occurring, by felling, uprooting or burning them and removing them from the forest land over one hectare in size or more, but other types of felling of trees of specified size or species, including their selection felling or coppice felling shall not be considered as clear felling.

13. Creation of Compensatory Afforestation.— (1) The user agency shall provide land which is neither notified as forest under the Indian Forest Act, 1927 (16 of 1927) or any other law nor managed as forest by the Forest Department and it shall also bear the cost of raising compensatory afforestation over such land and the requirement of Compensatory Afforestation land shall be as per the **Schedule-II** annexed to these rules:

Provided that in case the non-forest land or portion thereof provided by the user agency is not fit for raising compensatory afforestation of a specified density, then additional compensatory afforestation shall be raised on a degraded notified or unclassed forest land under the management control of the Forest Department which is twice in size of such shortfall in the given compensatory afforestation land and the user agency shall also bear the additional cost on such account:

Provided further that if the non-forest land being made available for compensatory afforestation already bears vegetation of 0.4 canopy density or more, there shall not be an additional requirement of planting of trees on such land but a programme for improvement of the forest crop shall be implemented by the Forest Department in a time-bound manner:

Provided also in exceptional circumstances when the suitable land required for compensatory afforestation under this clause is not available and the certificate to this effect is given by the State Government or Union territory Administration, as the case may be, the compensatory afforestation may be considered on degraded forest land which is twice in extent to the area proposed to be diverted in case of the Central Government agencies or Central Public Sector Undertakings on case to case basis:

Provided also in exceptional circumstances when the suitable land required for compensatory afforestation under this clause is not available, and the certificate to this effect is given by the State Government or Union territory Administration, as the case may be, the compensatory afforestation may be considered on degraded forest land which is twice in extent to the area proposed to be diverted in case of State Public Sector Undertakings for captive coal blocks on case to case basis:

Provided also in case the user agency acquires any non-forest land for the execution of the project, the exceptions in case of Central Government agencies, Central Public Sector Undertakings and State Public Sector Undertakings as above shall not be applicable.

(2) The specified density for raising compensatory afforestation under this sub-rule shall be such as to develop, a forest of a minimum canopy density of 0.4 or more in the fifth year of start of compensatory afforestation operation, and the area has sufficient vegetation stock to enable it to mature into land with canopy density of minimum 0.7.

(3) In case of non-availability of the non-forest land, the compensatory afforestation can also be raised over the following lands, which will be provided minimum double in extent of the area being diverted or difference between the forest land being diverted and the available non-forest land, as the case may be, is made available and they are notified as Protected Forests under the Indian Forest Act, 1927 (16 of 1927) or local Acts prior to 'Final' approval:

(a) revenue forest lands i.e. land recorded as forest in the Government records but not notified as forest under any law and not managed by the Forest Department viz. revenue lands or zudpi jungle or chhote-bade jhar ka jungle or jungle-jhari land or civil-soyam or orange forest lands and all other such categories of forest lands, provided they are transferred and mutated in the name of State Forest Department;

(b) the degraded Unclassed State Forests in the State of Arunachal Pradesh, shall be considered for compensatory afforestation provided they are transferred and mutated in the name of State Forest Department;

(c) the waste lands in the State of Himachal Pradesh, falling under the category of Protected Forests but have neither been demarcated on the ground nor transferred and mutated in the name of forest department in the revenue records, provided they are transferred and mutated in the name of State Forest Department;

(d) lands falling under section 4 and 5 of the Punjab Land Preservation Act, 1900 in the States of Haryana, Punjab and Himachal Pradesh, which are not under the management and administrative control of the State Forest Department, provided that such lands will be transferred and mutated in the name of State Forest Department, unless as specified and agreed to by the Central Government to notify them under Indian Forest Act 1927 (16 of 1927), without transferring them to the State Forest Department, on case to case basis;

(4) Special dispensation for raising compensatory afforestation over degraded forest land, minimum double in extent, may be considered in respect of following proposals, namely.—

(a) in the States or Union territory Administrations, having forest area more than 33% of their total geographical area and a certificate on non-availability of suitable non-forest land for raising compensatory afforestation has been furnished by the State Government /Union territory Administration in the format specified under **Schedule-III,** appended to these rules;

(b) transmission line projects;

(c) laying of telephone or optical fibre lines;

(d) mulberry plantation undertaken for silkworm rearing;

(e) extraction of minor materials from the river beds;

(f) construction of link roads, small water works, minor irrigation works, school building, dispensaries, hospital, tiny rural industrial sheds of the Government or any other similar work excluding mining and encroachment cases, which directly benefit the people of the area in hill districts and in other districts having forest area exceeding 50% of the total geographical area, provided diversion of forest area does not exceed 5 hectares;

(g) actual impact zone of the field firing range considered for diversion under the Adhiniyam or 10% of the total forest area diverted in case entire area of the field firing range is proposed for diversion;

(h) any degraded forest land for the purpose of compensatory afforestation, selected by the State Government or the Union territory Administration, under this sub-rule, may be accepted by the Central Government when the crown density of such degraded forest is below 40 percent and such areas is not a natural or managed grassland being used for the management and conservation of wildlife; and

(5) In the following categories of proposals, cost of plantation of ten times the number of trees likely to be felled or specified number of trees as may be specified in the order for diversion of forest land (subject to a minimum no. of 100 plants), shall be levied from the user agency towards compensatory afforestation-

(a) clearing of naturally grown trees in forest land or in portion thereof for the purpose of using it for reforestation;

(b) diversion of forest land up to one hectare; and

(c) Underground mining in forest land without surface rights.

(6) No compensatory afforestation shall be charged in respect of renewal of mining lease for the forest area for which land for compensatory afforestation and cost of plantation has already been paid.

(7) In respect of diversion of forest land earmarked for the maintenance of safety zone along the inner boundary of a mine, the provisions of the raising compensatory afforestation, as applicable in the entire forest area proposed for diversion, shall be applicable in lieu of forest land located in the safety zone.

(8) Non-forest land identified for raising compensatory, contiguous to forest land, located in the wildlife corridors and protected areas shall be incentivised as per the provisions provided in the **Schedule-II** appended to these rules;

14. Management of compensatory afforestation.—(1) The land specified under sub-rule (1) of rule 13, shall be demarcated by concrete pillars of suitable size and handed over, free from all encumbrances to the State Forest Department or Union territory Forest Department and the same shall be notified as protected forest under section 29 of Indian Forest Act, 1927 (16 of 1927) or under any other law for the time being in force before the Final approval is granted under the Adhiniyam.

(2) The land identified and earmarked for compensatory afforestation shall be treated and afforested by the State Government or Union territory Administration or user agency as per the compensatory afforestation plan approved as part of the said forest diversion proposal and the work of compensatory afforestation shall start within two years of issue of order of diversion of the corresponding forest land and the Central Government may issue guidelines on the modalities of compensatory afforestation, including agencies that may undertake compensatory afforestation.

(3) Subject to the consent of the State Governments or Union territory Administrations, in case the forest land to be diverted is in a hilly or mountainous State or Union territory having forest cover of more than two-third of its geographical area or situated in any other State or Union territory having forest cover of more than one-third of its geographical area, creation of compensatory afforestation, accredited compensatory afforestation and land banks may be taken up in another State or Union territory Administration:

Provided that, the money towards compensatory afforestation in such cases shall be transferred to the State Compensatory Afforestation Fund of the State or Union territory in which the compensatory afforestation land has been identified and the remaining money of the compensatory levies shall be deposited in the Compensatory Afforestation Fund Management and Planning Authority Fund of the State Government or Union territory Administration in which the forest land has been proposed to be diverted:

Provided further that in cases, where due to unfulfilment of the conditions specified in this sub-rule such as percentage of forest land of the geographical area, it is not possible to raise compensatory afforestation in the same State or Union territory Administration where diversion of forest land is proposed or in other States or Union territory Administration, the Central Government, in public interest, may allow, on case to case basis, compensatory afforestation in other State or Union territory Administration.

(4) (a) A State Government or Union territory Administration as the case may be, for the purpose of compensatory afforestation, may create a land bank under the administrative control of the Department of Forest;

(b) The minimum size of the land bank shall be a single block of twenty five hectares:

Provided that in case a land bank is in continuity of a land declared or notified as forest under the Indian Forest Act, 1927 (16 of 1927) or under any other law for time being in force, protected area, tiger reserve or within a designated or identified tiger or wildlife corridor, there shall be no restriction on size of the land; and

(c) The lands covered under accredited compensatory afforestation earned under sub-rule (5) may be included in the land bank.

(5) (a) The Central Government may formulate an accredited compensatory afforestation mechanism to be used for obtaining prior approval under sub-section (1) of section 2 of the Adhiniyam.

(b) the accredited compensatory afforestation may be earned by a person if he has established afforestation over land on which the Ahiniyam is not applicable and is free from all encumbrances;

(c) an afforestation shall be counted towards accredited compensatory afforestation if such land has vegetation composed predominantly of trees having canopy density of 0.4 or more and the trees are at least five years old;

(d) the accredited compensatory afforestation shall be earned by developing afforestation of one-hectare area with 0.4 or more canopy density, but there shall be no accredited compensatory afforestation for developing an area below 0.4 canopy density or below one-hectare land;

(e) the accredited compensatory afforestation may be swapped for compensatory afforestation proposed under rule (13):

Provided the accredited compensatory afforestation cover a block of minimum of ten hectares and has been fenced as per norms specified for compensatory afforestation in that area:

Provided further that accredited compensatory afforestation over land of any size situated in the continuity of land declared or notified as forest under any law, protected area, tiger reserve or within a designated or identified tiger or wildlife corridor, may be swapped for compensatory afforestation;

(f) the accredited compensatory afforestation earned out of vacation of non-forest lands on account of voluntary relocation of a village from a national park, wildlife sanctuary or tiger reserve and designated or identified tiger or wildlife corridors shall qualify for compensatory afforestation as per **Schedule –II** annexed to these rules, and may be used by a user agency in lieu of compensatory afforestation under rule (13);

(g) the accredited compensatory afforestation identified under this rule shall be demarcated with concrete pillars of suitable size and handed over, free from all encumbrances to Forest Department of the State

Government or Union territory Administration and the same shall be notified as protected forest under section 29 of Indian Forest Act, 1927 (16 of 1927) or under the provision of any other law for the time being in force before the Final approval is granted under the Adhiniyam;

(h) The Central Government, from time to time, may issue detailed guidelines on creation of accredited compensatory afforestation, its stock registry and management for the purpose of its swap for compensatory afforestation land and cost of maintenance thereof up to a period specified by the Central Government.

(i) All entities registered for accredited compensatory afforestation shall register with the Green Credit Registry under the Green Credit Policy Implementation Rules, 2023 and besides their eligibility for compensatory afforestation in lieu of diversion of forest land, the accredited compensatory afforestation will also be eligible for allocation of green credits under the Green Credit Policy Implementation Rules, 2023.

15. Proceedings against persons guilty of offences under the Adhiniyam.-—

(1) The Central Government may, by notification in official gazette, authorise an officer of the rank of Divisional Forest Officer or Deputy Conservator of Forests and above of the State Government or Union territory Administration concerned, having jurisdiction over the forest land in respect of which any offense under the Adhiniyam is committed or violation of the provisions of the said Adhiniyam has been made, to file complaints against such person or authority or organization, prima-facie found guilty of offence under the Adhiniyam or the violation of the rules made thereunder, in the court having jurisdiction in the matter.

(2) The Central Government, after receiving the information with respect to offence committed or violations made either through State Government or Union territory Administration or authorities or any other source or *suo moto*, shall, after examination, communicate the same to the State Government or Union territory and the authorities concerned under whose jurisdiction the offence under the Adhiniyam has been committed or any provision of the said Adhiniyam has been violated, for filing the complaint against the offenders before the court having jurisdiction and it shall act as a prerequisite for the authorised officer before such complaints are filed within a period of forty five days from the receipt of such communication.The State Government and authorities concerned shall submit a periodic report to Regional Office, from time to time, regarding filing of the complaints.

(3) An Officer of the rank of Assistant Inspector General and above, may be authorized by the Central Government, by notification, to initiate legal proceedings and file complaints, against the offences committed under the Adhiniyam.

(4) The officer authorized by the Central Government in sub-rule (1) and (3) may require any officer or any person or any other authority of the State Government or the Union territory Administration, as the case may be, to furnish to it within a specified period any reports, documents, and any other information related to contravention of the Adhiniyam or the rules made thereunder, considered necessary for making a complaint in any court of jurisdiction and every such State Government or officer or person or authority shall be bound to do so.

16. Miscellaneous.—(1) For the purpose of explanation of government records provided under subsection (1) of section 1A of the Adhiniyam, the State Governments and Union territory Administrations, within a period of one year, shall prepare a consolidated record of such lands, including the forest like areas identified by the Expert Committee constituted for this purpose, unclassed forest lands or community forest lands on which the provisions of the Adhiniyam shall be applicable.

(2) The felling of trees on forest lands approved for use for the non-forest purpose under these rules shall be restricted to a bare minimum and to an unavoidable number and shall be done under the supervision of the local Forest Department and the forest produce obtained therefrom shall be handed over to the local Forest Department for disposal in the manner specified by the State Government or Union territory Administration which shall give preference to distribution to local villagers for meeting their domestic bonafide requirement.

(3) The forest land diverted for non-forest purpose under these rules shall be appropriately surveyed jointly by the user agency and the Forest Department or the land-owning Department, demarcated on the ground by way of appropriate permanent boundary marks at the cost of the user agency and handed over by the Forest Department or land-owning Department to the user agency prior to starting of any non-forest use.

(4) For the purpose of forest cover under these rules, the figures and description used in the latest India State of Forest Report published by Forest Survey of India shall be referred.

(5) The Central Government may cancel approval accorded in respect of a proposal, with or without the request of the State Government or Union territory Administration and may decide to refund the compensatory levies deposited, on case to case basis.

(6) The conditions imposed by Central Government for diversion of forest land for the non-forest purpose shall not be changed or modified after a period of two years from the date of grant of final approval unless some exceptional circumstances arise or the Central Government considers it necessary to impose any additional clause of compliance.

(7) The proposals on forest land under litigation or *sub-judice* on account of an issue pertaining to the Indian Forest Act, 1927 (16 of 1927), local forest Act or Adhiniyam will be dealt as per the orders of the Courts or Tribunals passed in such cases and the date of applicability of the Adhiniyam in such lands shall be in accordance with the direction, if any, passed by the Courts or Tribunals.

(8) Any proposal which has already been submitted under the provisions of the Forest (Conservation) Rules, 2003 or Forest (Conservation) Rules, 2022 and are currently under consideration of the various authorities in the State Government or Union territory Administration or the Central Government for grant of 'In-principle' or 'Final' approval shall be dealt in the following manner, namely:-

(i) Any proposals granted 'In-principle' approval shall be dealt under the provisions of the extant rules and be processed and considered for grant of 'Final' approval without amending the conditions stipulated in the 'In-principle' approval; and

(ii) Any provision of the extant rules will be applicable on the proposals which are yet to be granted 'In-principle approval under the Adhiniyam.

Schedule-I

TIME LINE FOR PROCESSING OF PROPOSALS SEEKING PRIOR APPROVAL OF CENTRAL GOVERNMENT

[See rule 8 (1), rule 9, rule 10 and rule 11]

Processing Authorities		**Area (Ha)/working days**			
		Up to 5*	**5 to 40***	**40 to 100***	**More than 100***
A. State Level	Project Screening Committee	0	30	30	30
	DCF/District Collector	10	10	10	20
	Site inspections by DCF/CF/Nodal Officer	5	5	20	20
	Processing by Nodal Officer/ PCCF	5	10	15	15
	State Govt.	10	15	15	15
	Sub-Total	**30**	**70**	**70**	**100**
B. Regional Office	Scrutiny to examine completeness	3	3	3	3
	Examination and processing of the proposal by the Regional Office	5	5	5	5
	Site inspection by Regional Office	0	0	15	15
	Examination and approval by the Regional Empowered Committee	0	20	20	20

	Processing and approval by competent authority (CA)	5	5	5	5
	Communication of approval of CA	2	2	2	2
	Total	**15**	**35**	**50**	**50**
	Total (A+B)	**45**	**105**	**120**	**150**
C. MoEFCC	Scrutiny to examine completeness	3	3	4	4
	Examination and processing of the proposal	6	6	5	5
	Site inspection by Regional Office	10	10	20	20
	Advisory Committee	20	20	20	20
	Approval by competent authority (CA)	10	10	10	10
	Communication of approval of CA	1	1	1	1
	Total	**50**	**50**	**60**	**60**
	Total (A+C)	**85**	**120**	**160**	**160**

*****Time line is prescribed for the proposals which are complete in all respects excluding the time consumed in seeking additional details from the State/UT or User agency.

****

PROPOSED TIME LINE FOR GRANT OF 'FINAL' APPROVAL

Level	Activity	Time (days)
State Level	Issue of demand note for payment of compensatory levies by the user agency	2
	Approval of demand note by the Nodal Officer	3
	Payment of compensatory levies and submission of documents/ certificate by the user agency	5
	Examination of the compliance report by the DFO and forwarding of complete compliance report by DFO to the Nodal Office FC Act, 1980 with intimation to the CF/CCF	5
	Examination of compliance report by the Nodal Officer and issue of shortcomings, if any, to the DFO for compliance, or forwarding of the completed compliance report to the MoEFCC / Regional Office	10
	Sub-Total	**25**
MoEFCC, New Delhi/ Regional Office	Examination of the compliance report, confirmation of remittance of compensatory levies realised from the user agency in to the CAMPA account and issue of shortcomings, if any, or State-II approval	20
	Sub-Total	**20**
	Grand Total	**45**

*****

Schedule II

[See rule 13 and rule 14]

PROVISIONS FOR THE REQUIREMENT OF LAND RELATED TO COMPENSATORY AFFORESTATION

Sl. No.	Description of Compensatory Afforestation Land	Size of Compensatory Afforestation land as compared to forest land to be diverted for non-forest purpose
(1)	(2)	(3)
1.	Land to which provisions of the Adhiniyam are not applicable.	Equivalent.
2.	Land recorded as 'forest' in Government record but does not fulfill all of the following conditions:- (a) notified as forest under any other law for the time being in force (b) managed as forest by Forest Department. (*This dispensation is allowed to certain proposals of Central Government and State Government or Union territory Administration only.)*	Two times.
3.	Degraded notified or unclassed forest land. (*This dispensation is in case of State Public Sector Undertakings for captive coal blocks on case to case basis and Central Government Agencies/Central Public Sector Undertakings on case to case basis involving no acquisition of non-forest land)*	Two times
4.	Land, qualifying for Compensatory Afforestation under Sl. No. (1), provided is of size of twenty-five hectares or more in one block. Compensatory Afforestation land of less than ten hectares shall not be accepted unless the requirement of Compensatory Afforestation land is less than ten hectares in which case the user agency has to bear the additional cost of protection of Compensatory Afforestation so raised for a period of twenty years from the date of planting.	Five *per cent* less for every additional block size of ten hectares or part thereof subject to a maximum of twenty-five per cent rebate. This percentage will be applicable only on the additional block size acquired beyond the minimum size of twenty five hectares.
5.	Land, qualifying for Compensatory Afforestation under Sl. No. (1), that is less than 25 hectares size but more than 10 hectares size in one block If the requirement of Compensatory Afforestation land is less than twenty-five hectares but more than ten hectares in size, the provision of excess land for Compensatory Afforestation shall not be applicable but the user agency has to bear the additional cost of protection of Compensatory Afforestation so raised for a period of twenty years from the date of planting.	Five *per cent.* more for every five hectares smaller block size or part thereof.
6.	Land qualifying for Compensatory Afforestation under Sl. No. (1) above and is located within the notified boundary of a protected area	Twenty-five *per cent.* less

7.	Land qualifying for Compensatory Afforestation under Serial No. (1) or (2) and is located in continuity of a notified boundary of a National Park or a Wildlife Sanctuary or area linking one protected area or tiger reserve with another protected area and designated or identified tiger or wildlife corridors.	Fifteen *per cent.* less.
8.	Land qualifying for Compensatory Afforestation under Sl. No. (1) or (2) and is located adjacent to a forest land notified as forest under Indian Forest Act, 1927 (16 of 1927) or any other law. Accredited Compensatory Afforestation land of any size may be accepted in case it is contiguous to a forest land notified under any law.	Ten *per cent.* less
9.	Compensatory Afforestation land made available from complete and voluntary relocation of a village/ habitation (situated in non-forest land) from a Wildlife Sanctuary, National Park or Tiger Reserve, to a non-forest land outside such Sanctuary, Park or Reserve or area linking protected area or tiger reserve with another protected area and designated or identified tiger or wildlife corridors, as the case may be.	(a) Exemption from payment of Net Present Value of forest land equivalent to the Compensatory Afforestation land by way of vacation of village or habitation from National Park/ Wildlife Sanctuary/ Tiger Reserve. Note: "Net Present Value" shall have the same meaning as assigned in clause (j) of section 2 of the Compensatory Afforestation Fund Act, 2016 (38 of 2016). (b) Accredited Compensatory Afforestation in the ratio of 1:1.25 (Non-forest land: Accredited Compensatory Afforestation earned) so vacated by a village by way of voluntary relocation *(provided that the same shall be notified as part of the Wildlife Sanctuary, National Park or Tiger Reserve and also notified as Protected Forest or Reserved Forest).* (c) Additional Accredited Compensatory Afforestation at the rate of 0.5 ha per relocated family.

Note 1: The user agency or Accredited Compensatory Afforestation developer shall ensure that relocation is voluntary.

Note 2: No compensation under relevant schemes of the Central Government or State Government would be payable to such relocatees or user agency or Accredited Compensatory Afforestation developer.

Note 3: The State Government can also use this provision, provided no central assistance on such scheme is availed.

Schedule-III

CERTIFICATE OF NON-AVAILABILITY OF LAND FOR COMPENSATORY AFFORESTATION IN THE STATE/UNION TERRITORY TO BE ISSUED BY THE STATE GOVERNMENT//UNION TERRITORY ADMINISTRATION

[See rule 13(4)]

No…… Dated…….

I……..., Designation.....(Name of State/ Union Territory) do here by certify that:

i.

i. Relevant records pertaining to non-forest land, revenue lands, *zudpi jungle, chhote jhar ka jungle, bade jhar ka jungle, jungle jhari land, civil-soyam lands* and all other such categories of forest lands

(except the forest land under the management and administrative control of the Forest Department) on which the provisions of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 are applicable, available in each district of…… (name of the State/UT) have been examined; and

ii. I have also conducted such further enquiry as is required to satisfy myself for issue of this certificate. On the basis of examination of relevant records and such further enquiry, as was required for issue of this Certificate, I do hereby certify that non-forest land, revenue lands, *zudpi jungle, chhote jhar ka jungle, bade jhar ka jungle, jungle-jhari land, civil-soyam* lands and all other such categories of forest lands (except the forest land under management and administrative control of the Forest Department) on which the provisions of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 are applicable, which as per the extant guidelines of the Central Government may be utilized for creation of compensatory afforestation in lieu of forest land diverted for non-forest purpose, is not available in the entire (name of State/UT)

Issued under my hand and seal on this.....day of……

Signature & Official Seal

[F. No. FC-11/118/2021-FC]

RAMESH KUMAR PANDEY, Inspect General of Forests

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and Published by the Controller of Publications, Delhi-110054.

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ANNEXURE R/4

File No.FC-11/118/2021-FC

Government of India
Ministry of Environment, Forest and Climate Change
(Forest Conservation Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi-110003

Dated: 18th July, 2022

To

Principal Secretary/ Addl. Chief Secretary
All the State Governments /UT Administrations.

Subject: Applicability of the Forest (Conservation) Rules, 2022- reg.

Madam/Sir,

I am directed to refer to the above mentioned subject and to inform that the Ministry has notified the Forest (Conservation) Rules, 2022 on 28.06.2022 (copy enclosed) wherein new provisions and procedures have been introduced for the processing of the proposals received from various user agencies for prior approval under the Forest (Conservation) Act, 1980. In the aforesaid context, the following is clarified:

i. Provisions of Forest (Conservation) Rules, 2022 shall apply to the proposals submitted online through Parivesh portal and which have not been accepted by the Nodal officer before 28.06.2022. The Guidelines issued by the Ministry in the Handbook of Forest (Conservation) Act, 1980 dated 28th March, 2019 and the Guidelines issued thereafter separately, from time to time, after 28th March 2019 shall apply to such proposals to the extent they are not inconsistent or contrary to the Forest (Conservation) Rules, 2022.
ii. Provisions of Forest (Conservation) Rules, 2003 shall apply to the proposals submitted online through Parivesh Portal and which have been accepted by the Nodal Officer before 28.06.2022.

Digitally Signed by Charan Jeet Singh
Date: 18-07-2022 18:36:01
Reason: Approved

Yours Sincerely
Sd/-
(Charan Jeet Singh)
Scientist-D

Copy to

1. PCCF (HoFF) all States/UTs
2. Regional Officers, All IROs of the MoEF&CC
3. Nodal Officer (FCA), all States/UTs.
4. PS to HMEF&CC/HMoS, EF&CC, New Delhi
5. PPS to Secretary/DGF&SS, MoEF&CC, New Delhi
6. PPS to ADGF (FC)/ADG (WL)
7. Gaurd File

ANNEXURE R/5 [Colly]

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PART – III

Diverson of 0.9689 ha. Forest land for laying part of seawater intake and effuent disposal pipelines and passage related construction for equipment movement for Greenfield Chemical complex at Village: Bada of Taluka Mandvi in favour of GHCL Limited,Ahmedabad.

Online Proposal No. FP/GJ/Others/147527/2021

(To be filed by concerned Chief Conservator of Forests)

14	Whether site, Where the forest land involved is located has been inspected by concerned Chief Conservator of Forests (yes/no). If yes the date of inspection and observation made in from of inspection note to be enclosed.	:	NO.
15	Whether the concerned Chief Conservator of Forests agree with information given in part-II and the recommendations of Deputy Conservator of Forests.	:	Yes.
16	Specific recommendation of concerned Chief Conservator of Forests for acceptance or otherwise of the proposal with detailed reasons.	:	Recommended for diversion of 0.9689 ha. Forest land as per below condition. 1.Preparation and implementation of a Holistic Conservation Plan for mitigation of any negative effects to the Sea Turtle .

Date : 28 /01/2022
Place : Bhuj

(Anita Karn)
Chief Conservator of Forest
Kutch Forest Circle,Bhuj

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PART-IV

File No. FCA-10-12/2021-22

Subject: Diversion of 0.9689 Ha. Forest land for laying part of seawater and effluent disposal pipelines and passage related construction for equipment movement for Greenfield Chemical Complex at Village:Bada of Taluka Mandvi in favour of GHCL Limited, Ahmedabad.

1	Detailed Opinion and specific Recommendation of the State Forest Department for acceptance otherwise of the proposal with remarks. (While giving opinion , the adverse comments made by conservator of Forest of Dy. Conservator of forest should be categorically and critically commented upon)	:~`	Recommended for Sanction **(Dr. Jaipal Singh)** Nodal officer for Forest Conservation Act, Gujarat State, Gandhinagar

Date: ૩૧ /01/2022

Place: Gandhinagar

PART-V

(To be filled in by the Secretary in charge of Forest Department of by any other authorized officer of the State Government not below the rank of an Under Secretary)

State Government File No : FED/FLP/e-file/6/2022/1377/F

Subject : Diversion of **0.9689 ha.** Un-Class Forest land for laying part of Seawater intake and effluent disposal pipeline and passage for related construction equipment movement in Kachchh District in favour of Chief Operating Officer, GHCL Ltd, Ahmedabad.

	Description	Comments
	Recommendation of the State Government : (Adverse comments made by any officer or authority in Part-II or Part-III or Part-IV above should be specified commended upon)	**Recommended** (Prasun Patel) **Under Secretary** **Forest & Environment Deptt.** **Govt. of Gujarat** **Sachivalaya, Gandhinagar**

Date : 16/05/2023

Place : **GANDHINAGAR**

Forest & Environment Dept. Gandhinagar

584

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TimeLine Details

Proposal received date at each stage of flow.

A. General Details

(i). Proposal No. : FP/GJ/Others/147527/2021

(ii). Name of Project for which Forest Land is required : Greenfield Chemical Complex - Seawater intake & effluent disposal pipelines and passage for equipment movement.

(iii). Short narrative of the proposal and Project/scheme for which the forest land is required : Diversion of 0.9689 hectare of Forest Land for Seawater intake & effluent disposal pipelines and passage for equipment movement for Greenfield Chemical complex at Village : Bada of Taluka Mandavi, District Kutch.

(iv). File no. : FC-6/GJB-57/2023-GNR

(v). State : Gujarat

(vi). Category of the Project : Others

(vii). Shape of forest land proposed to be diverted : Linear

(viii). Area of forest land proposed for diversion(in ha.): 0.9689

B. Time Line

Proposal No.	Submitted by User Agency	Query for Shortcoming(if any) by Nodal Officer	Resubmission of Proposal by User Agency	Query by Nodal Officer for submitting Hard Copies	Uploading(by U.A.) of copies of receipt received from DFO & DC	Division	Circle	Nodal Office	State Government	Regional Office	Stage-I Approval on	Compliance Report Submitted by State on	Stage-II Approval on
FP/GJ/Others/147527/2021	21/09/2021	aa		24/09/2021	06/10/2021	**Kutch-West** :06/10/2021	**Kutch Circle** : 07/01/2022 **(Kutch-West)**	**Gujarat** : 28/01/2022	**Gujarat**: 04/02/2022	**Gandhinagar**: 18/05/2023	18/07/2023 By :Regional Office	**Gujarat** 28/12/2023	04/01/2024 By :Regional Office

C. Essential Details Sought History

Communication between Regional Office & State Government	Communication between State Government & Nodal Officer	Communication between Nodal Officer & Circle	Communication between Circle & Division	Communication between Division & User Agency

Query raised by Regional Office (Gandhinagar) on:**23/05/2023** Replied by State Government(Gujarat) on:**29/05/2023** Query raised by Regional Office (Gandhinagar) on:**16/06/2023** Replied by State Government(Gujarat) on:**12/07/2023**	Query raised by State Government (Gujarat) on:**08/12/2022** Replied by Nodal Officer (Gujarat) on:**15/04/2023** Query raised by State Government (Gujarat) on:**23/05/2023** Replied by Nodal Officer (Gujarat) on:**26/05/2023** Query raised by State Government (Gujarat) on:**17/06/2023** Replied by Nodal Officer (Gujarat) on:**05/07/2023**	Query raised by Nodal Officer (Gujarat) on:**15/12/2022** Replied by Circle(Kutch Circle) on:**13/04/2023** Query raised by Nodal Officer (Gujarat) on:**19/06/2023** Replied by Circle(Kutch Circle) on:**30/06/2023**	Query raised by Circle (Kutch Circle) on:**11/01/2022** Replied by DFO (Kutch-West) on:**24/01/2022** Query raised by Circle (Kutch Circle) on:**19/12/2022** Replied by DFO (Kutch-West) on:**12/04/2023** Query raised by Circle (Kutch Circle) on:**27/06/2023** Replied by DFO (Kutch-West) on:**30/06/2023**	Query raised by DFO (Kutch-West) on:**11/10/2021** Replied by UA on :**26/10/2021** Query raised by DFO (Kutch-West) on:**26/10/2021** Replied by UA on :**18/11/2021** Query raised by DFO (Kutch-West) on:**25/11/2021** Replied by UA on :**15/12/2021** Query raised by DFO (Kutch-West) on:**02/01/2023** Replied by UA on :**12/04/2023** Query raised by DFO (Kutch-West) on:**27/06/2023** Replied by UA on :**27/06/2023** Query raised by DFO (Kutch-West) on:**28/06/2023** Replied by UA on :**30/06/2023**

NOTE:- Stage-II Approval accorded by : **Regional Office** .

-TRUE COPY-

ANNEXURE R/6
[Colly]

FORM - A

Form for seeking prior approval of Central Government under section 2 of the Forest(Conservation) Act,1980 for Diversion of fresh forest area

PART - I

(To be filled up by User Agency)

A. General Details

A-1. Project Details

(i). Proposal No. : FP/GJ/Others/147527/2021

(ii). Name of Project for which Forest Land is required : Greenfield Chemical Complex - Seawater intake & effluent disposal pipelines and passage for equipment movement.

(iii). Short narrative of the proposal and Project/scheme for which the forest land is required : Diversion of 0.9689 hectare of Forest Land for Seawater intake & effluent disposal pipelines and passage for equipment movement for Greenfield Chemical complex at Village : Bada of Taluka Mandavi, District Kutch.

(iv). State : Gujarat

(v). Category of the Proposal : Others

(vi). Shape of forest land proposed to be diverted : Linear

(vii). Estimated cost of the Project(Rupees in lacs) : 35000

(viii). Area of forest land proposed for diversion(in ha.): 0.9689

(ix). Non-forest land required for this project(in ha.): 3.7093

(x). Total period for which the forest land is proposed to be diverted(in years): 99

A-2. Details of User Agency

(i). Name : GHCL LIMITED

(ii). Address1 : GHCL HOUSE, OPPOSITE PUNJABI HALL, NAVRANGPURA, AHMEDABAD

(iii). Address2 : NIL

(iv). State : Gujarat

(v). District : Ahmedabad

(vi). Pin : 380009

(vii). Landmark : NAVRANGPURA,AHMEDABAD

(viii). Email address : projectsodaash@gmail.com

(ix). Landline Telephone No. : 0-

(x). Fax No. : 0-

(xi). Mobile No. : 9099093072

(xii). Website (if any) : NIL

(xiii). Legal status of User Agency : Private

A-3. Details of Person Making Application

(i). First Name: NN Radia

(ii). Middle Name: NIL

(iii). Last Name: RADIA

(iv). Gender: Male

(v). Designation: COO

(vi). Address 1: GHCL HOUSE, OPPOSITE PUNJABI HALL, NAVRANGPURA,AHMEDABAD

(vii). Address 2: GHCL HOUSE, OPPOSITE PUNJABI HALL, NAVRANGPURA, AHMEDABAD

(viii). State: Gujarat

(ix). District: Ahmedabad

(x). Tehsil: Ahmedabad City

(xi). Pin: 380009

(xii). Landmark: NAVRANGPURA,AHMEDABAD

(xiii). Email Address: projectsodaash@gmail.com

(xiv). Landline Telephone No.: 79-26434100

(xv). Fax No.: NIL

(xvi). Mobile No.: 9327571402

(xvii). Copy of documents in support of the competence/authority of the person making this application to make application on behalf of the User Agency:

B. Details of land required for the Project

B-1. Details of proposal seeking prior approval of Central Government under the Act for diversion of forest land for the Project already submitted in the past

List of proposal submitted in Past							
S.no	**Proposal Status.**	**Proposal No.**	**Moef File No.**	**Area Proposed for Diversion(Ha.)**	**Area Diverted(Ha.)**	**Date of In-Principle Approval**	**Date of Final Approval**
NIL							

B-2. Details of forest land proposed to be diverted

B-2.1 Details of Divisions involved

Details of Divisions involved			
S.no	**Division Name**	**Forest Land(ha.)**	**Non-Forest Land(ha.)**
1.	Kutch-West	0.9689	3.7093
Total		0.9689	3.7093

B-2.2 Details of Districts involved

District wise breakup			
S.no	**District Name**	**Forest Land(ha.)**	**Non-Forest Land(ha.)**
1.	kutch	0.9689	3.7093
Total		0.9689	3.7093

B-2.3 Village wise breakup

Villages wise breakup			
S.no	**Village**	**Forest Land(ha.)**	**Non-Forest Land(ha.)**
1	bada	0.9689	3.7093
Total		**0.9689**	**3.7093**

B-2.4 Component wise breakup

Component wise breakup			
S.no	**Component**	**Forest Land(ha.)**	**Non-Forest Land(ha.)**
1	Passage for Equipment Movement	0.2224	0.386625
2	Intake 1 & 2	0.22458	1.437
3	Outfall 1 & 2	0.52188	1.885275
Total		**0.96886**	**3.7089**

C. Maps of forest land proposed to be diverted

Division 1. : Kutch-West

(i). Area of forest land proposed to be diverted(in ha.) : 0.9689

(ii). Nature of the Project: Linear

(b). No. of Segments : One

Segment wise details		
Segments	**Segment Area(in ha.)**	**Kml File of Segments (To view KML file on google the same may be downloaded and then open if in google earth install in your computer).**
1.	0.9689	View File

(iii). Copy of Survey of India Toposheet indicating boundary of forest land proposed to be diverted:

(iv). Scanned copy of the Geo-referenced map of the forest land proposed to be diverted prepared by using GPS or Total Station:

D. Justification for locating the Project in forest land and details of alternatives examined:

(i). Copy of note containing justification for locating the Project in forest land:

(ii). Whether a copy of map indicating location of alternative examine is required to be provided: No

(a). Reason for not providing such map: Based on studies carried out by technical experts

E. Employment likely to be generated

(i). Whether the Project is likely to generate employment ?: Yes

(ii). Permanent/Regular Employment(Number of persons): 10

(iii). Temporary Employment(Number of person-days): 40

F. Displacement of People due to the Project, if any

(i). Whether Project involves displacement?: No

G. Details of Cost-Benefit analysis for the Project

(i). Whether the Project requires Cost-Benefit analysis?: No

H. Status of Environmental Clearance

(i). Whether the Project requires Clearance under the Environment (Protection) Act 1986 ? : Yes

(a). Status of the Environmental Clearance to the Project: EC under process

(ii). Environmental Clearance File No.: IA-J-11011/293/2021-IA-II(I)

I. Status of Wildelife Clearance

(i). Whether the Project or a part thereof is located in any Protected Area or their Eco sensitive zone? : No

J. Applicability of special provisions governing Scheduled Areas

(i).Whether the Project or a part thereof is located in a Scheduled Area? : No

K. Status of settlement of rights under the Forest Rights Act,2006 on the forest land proposed to be diverted

(i). Whether the process for settlement of Rights under the Forest Rights Acts 2006 on the forest land proposed to be diverted has been completed? : No

L. Details of land identified for Compensatory Afforestation

(i). Whether non-forest or Revenue forest land is required to be provided by User Agency?: Not Applicable

(ii). Whether the area of non-forest land or Revenue forest land required to be provided by User Agency for raising Compensatory Afforestation is less than area of forest land proposed to be diverted ?: Not Applicable

(iii) . Reason for not providing Non-Forest Land: Not Applicable

Additional information Details

Documents		
S.No	**Documents**	**Remarks**
1		Reply letter to query raised on 16.06.2023
2		NOC from Gujarat Maritime Board
3		DILR measurement sheet
4		Greenfield Chemical Complex MoU

Print

Application for ToR (Category A, B1, and B2 Violation)/EC (Category B2) - Form 1

Basic Information

1. Category of the Project/Activity

1.1. Name of the project proposal	"Greenfield Chemical Complex" of GHCL Ltd.	
1.2. Type of Proposal	New	
1.3. Whether the Project Activity (Construction/ Operation) has been undertaken without obtaining **prior** Environmental Clearance under the provision of EIA Notification 1994/ 2006?	No	
1.4. Whether multiple items (Components) as per the notification involved in the proposal?	Yes	
1.4.1. Item No. as per schedule to EIA Notification, 2006 for Major Activity	4(e) Soda ash Industry	NA
Capacity	1100000	TPA

1.5. Item No. as per schedule to EIA Notification, 2006 for Minor Activity

Activity	Sub Activity	Capacity	Unit
1(d) Thermal Power Plants	Coal/Lignite based plants	120	MW

2. Whether project/activity attracts the General Condition specified in the Schedule of EIA Notification?	No
3. Whether any Protected Areas Notified Under the Wild Life (Protection) Act, 1972 are located within 10 km of the project site	N/A
4. Whether any Severely Polluted Areas as identified by the CPCB from time to time located in proximity to the project site	No
5. Whether any Critically Polluted Areas as identified by the CPCB from time to time located in proximity to the project site	N/A
6. Whether any Notified Eco-Sensitive area notified under Environmental (Protection) Act, 1986 located in proximity to the project site	N/A
7. Whether any Inter-State Boundaries and International Boundaries located in proximity to the project site	N/A
8. Whether any Eco-sensitive Zone notified/proposed to be notified under Environment (Protection) Act, 1986 located within 10 km of the project site	No
9. Whether any forest land present within 10 km of the project site	No
10. Category of the Project as per EIA Notification, 2006	A
11. Whether Proposal has interlinked / interdependent projects or activities?	No
11.1. Reason thereof	CPP (Captive Co-generation power plant) is a part of major activity Soda Ash production

	activity Soda Ash production
12. Whether any Forest Land involved in the project or part thereof	Yes
12.1. Whether In-principle approval (Stage-I) or Final approval (Stage-II) of Forest Clearance under Forest (Conservation) Act, 1980 available for the entire forestland involved in the project?	No
12.2. Proposal No./Project ID	FP/GJ/Others/147527/2021
12.3. Date of submission of Application	21/09/2021
12.4. Forest Area applied for diversion (in Ha)	0.9689
13. Whether NBWL recommendation is required?	No

14. Land Acquisition Details

Type of Land	In case of non-forest land, please specify	Type of privately owned land	Type of land in terms of ownership	Supporting documents			Status of Land Acquisition
				Document Name	Remarks	Document	

Project Details

14. Details of CTE

14.1. Whether consent under Air & Water Act has been obtained from SPCB / UTPCC?	Yes
14.1.1. Reference Number of Consent obtained from SPCB / UTPCC	CTE-48987
14.1.2. Date of consent issued	09/09/2021
14.1.3. Validity of consent (Valid up to)	09-09-2028
14.1.4. Upload copy of consent order	EC To NOC.pdf
15. Whether the project/activity located in Notified Industrial Area?	No
16. Whether the project/activity located in CRZ or ICRZ area?	Yes
16.1. CRZ Classification	CRZ I (A)
16.2. Location type	Non-Eroding Coast
Whether any of the following ecological sensitive areas or morphological features present in the project area?	
16.3. Mangroves	No
16.4. Corals and Coral reefs	No
16.5. Sand dunes	Yes
16.6. Biologically active mudflats	No
16.7. National parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected areas under the provisions of Wildlife (Protection) Act, 1972 or Forest (Conservation) Act, 1980 or Environment (Protection) Act, 1986	No

16.8. Salt marshes	No
16.9. Turtle nesting grounds	No
16.10. Horseshoe crabs' habitat	No
16.11. Sea gross beds	No
16.12. Nesting grounds of birds	No
16.13. Areas of structures of archeological importance and heritage sites	No
16.14. Any other (Please specify)	N/A
16.15. Whether recommendation of the SCZMA obtained	No
16.15.1. Status of application	Application Submitted
16.15.1.1. Date of Application	2021-10-11T00:00:00.000+00:00
16.15.1.2. Application/file Number	GHCL/AHD/GCZMA/VND/20-22/01
16.15.1.3. Current Status of application	Presentation done on 17-01-2022, Communication by GCZMA dated on 01-02-2022
17. Whether the project proposed to be located in Territorial waters (Off-shore)	No
18. Whether project/activity attracts the Specific Condition specified in the Schedule of EIA Notification?	No

Product Details

19. Details of Products & By-products

Name of Product	Product / By Product	Quantity / Capacity	Unit	Mode of Transport / Transmission	Remarks
Captive Co-generation Power plant Steam (CFBC boilers)	Product	120	Mega Watt (MW)	Power and Steam	
Light Soda Ash	Product	1100000	Tons per Annum (TPA)	Road	Dense Soda ash and sodium Bicarbonate is conversion of Light Soda ash

20. Whether any other Environmental Sensitive area exists within 10 Km from the project/activity boundary?	Yes
20.1. Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No
20.2. Areas which are important or sensitive for ecological reasons- Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Yes

Name	Shortest distance from the project boundary in Km	Remarks
Arabian Sea	0.4	Distance is approximate.

20.3. Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Sea turtle nesting	8	Distance is approximate. As per site study carried by ZSI, GOI, for the proposed project: ZSI did not encounter any sea turtle and fresh/old nests or crawl marks of turtles on the beach. Since many of the factor for selection of a suitable nesting site are not conducive. And report is part of EIA report.
20.4. Inland, coastal, marine or underground waters	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Vengdi river	0.5	Vengdi river is just passing approx. 0.5 km towards west. The pond as water body inside the project boundary, however will be retained as water reservoir based on acquisition of land.
20.5. Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
NH 41	4.12	N/A
20.6. Defence installations	No	
20.7. Densely populated or built-up area	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Mandvi	18.8	N/A
20.8. Areas occupied by sensitive man-made land uses	Yes	
Name	Shortest distance from the project boundary in Km	Remarks
Vipassana Meditation Centre	0.61	N/A
20.9. Areas containing important, high quality or scarce resources	Yes	
	Shortest	

Name	Shortest distance from the project boundary in Km	Remarks
Unclass forest	0	Outside the project site.

20.10. Areas susceptible to natural hazards which could cause the project to present environmental problems similar effects	Yes

Name	Shortest distance from the project boundary in Km	Remarks
Seismic Zone V	0	N/A

21. Status of collection of baseline data	Already collected
Period of baseline data collection	
21.1. From	01/12/2019
21.2. To	28/02/2020
22. Seasons of collection	Winter
23. Number of Monitoring locations for	
23.1. Meteorology (Nos.)	1
23.2. Ambient Air Quality (Nos.)	10
23.3. Surface Water Quality (Nos.)	6
23.4. Ground Water Quality (Nos.)	11
23.5. Ground water level (Nos.)	4
23.6. Noise Level (Nos.)	10
23.7. Soil Quality (Nos.)	10
23.8. Summary on the baseline situation	Baseline Summary.pdf
23.9. Map showing the monitoring locations	Baseline Maps.pdf

Consultant Details

24. Whether QCI/NABET Accredited EIA Consultant engaged?	Yes
24.1. Accreditation No. / Organization Id	ORG000357
24.2. Name of the EIA Consultant Organization	T. R. Associates and Environment Private Limited (formerly known as T. R. Associates)
24.3. Address	A-401, S.G Business Hub, Between Sola Bhagwat and Gota overbridge, near Urniya Campus, S.G. Highway, Ahmedabad 380060
24.4. Mobile No.	9825371099

24.5. E-mail Id	adm.trassociates@gmail.com
24.6. Category of Accreditation (Eligible for Category A / Eligible for Category B)	A
24.7. Sector(s) of Accreditation	4,9,13,14,17,21,38,8,23
24.8. Validity of Accreditation	2026-08-04

जहाँ है हरियाली ।
वहाँ है खुशहाली ॥

IL&FS | Environment

TECHNICAL EIA GUIDANCE MANUAL
FOR
SODA ASH INDUSTRY

Prepared for
The Ministry of Environment and Forests
Government of India










by
IL&FS Ecosmart Limited
Hyderabad

September 2010

IL&FS | Environment

PROJECT TEAM

Project Coordination **Ministry of Environment & Forests**	**Dr. Nalini Bhat** Advisor, Ministry of Environment and Forests **Dr. T. Chandni** Director, Ministry of Environment and Forests
Core Project Coordination Team **IL&FS Environment**	**Mr. Mahesh Babu** CEO **Mr. N. Sateesh Babu** Vice President & Project Director **Mr. B.S.V. Pavan Gopal** Manager –Technical **Mr. Vijaya Krishna. D** Senior Environmental Engineer **Ms. Chaitanya Vangeti** Assistant Manager **Ms. Suman Benedicta Thomas** Technical Writer
Resource Person	**Mr. V. N. Desai** Vice President, M/s.Nirma Limited
Expert Core & Peer Committee **Chairman**	**Dr. V. Rajagopalan, IAS** Additional Secretary Ministry of Chemicals & Fertilizers
Core Members	**Dr. R. K. Garg** Former Chairman, EIA Committee, Ministry of Environment and Forests **Mr. Paritosh C. Tyagi** Former Chairman, Central Pollution Control Board **Prof. S.P. Gautam** Chairman, Central Pollution Control Board **Dr. Tapan Chakraborti** Director, National Environmental Engineering Research Institute **Mr. K. P. Nyati** Former Head, Environmental Policy, Confederation of Indian Industry **Dr. G.K. Pandey** Former Advisor, Ministry of Environment and Forests **Dr. Nalini Bhat** Advisor, Ministry of Environment and Forests **Dr. G.V. Subramaniam** Advisor, Ministry of Environment and Forests **Dr. B. Sengupta** Former Member Secretary, Central Pollution Control Board **Dr. R. C. Trivedi** Former Scientist, Central Pollution Control Board
Peer Member	**Mr. N. K. Verma** Former AD, Central Pollution Control Board
Member Convener	**Mr. N. Sateesh Babu** Project Director

7. Details on requirement of raw materials (salt, lime-stone, coke, ammonia, brine, additives, *etc.*), its source and storage at the plant.
8. Details of handling ammonia and risk assessment.
9. Details on requirement of energy (fuels, electricity) and water along with its source and authorization from the concerned department.
10. Details of power consumption and standby arrangements like DG sets *etc.*
11. Details of the proposed methods of water conservation and recharging.
12. Details of liquid emissions such as wastewater from distillation, brine purifications, cooling waters, *etc.* – its quantity, quality and control schemes.
13. Details on water balance including water use, quantity of effluent generated, recycled and reused and discharged to receiving water body.
14. Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect of all concerned/regulated environmental parameters.
15. Details on gaseous emissions from calcinations, precipitation, filtration, *etc.,* such as CO_2, CO, NOx, ammonia, SOx, H_2S, particulate dust, *etc.,* – its quantity, quality and control technologies.
16. Details of air borne dust management.
17. Details of CO_2 emissions including its quantum per tonne of soda ash.
18. Details of fugitive emissions and their control measures
19. Management plan for solid waste generation (fines of lime stone, grits, brine sludge *etc.*), storage, utilization and disposal modes.
20. In case of coastal plants details on extraction of sea water and effluent disposal, development of solar salt works based on sea water evaporation, etc,.
21. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
22. Details regarding infrastructure facilities such as sanitation, fuel storage, sanitation, rest room, *etc.,* to the workers during construction and operation phase.
23. Details on locating the residential colony on upwind direction.
24. In case of expansion of existing industries, remediation measures adopted to restore the environmental quality if the groundwater, soil, crop, air, *etc.*, and a detailed compliance to the prior environmental clearance/consent conditions.
25. Any litigation pending against the project and /or any direction /order passed by any Court of Law related to the environmental pollution and impacts in the last two years, if so, details thereof.

Description of the environment

26. The study area shall be up to a distance of 10 km from the boundary of the proposed project site.
27. Location of the project site and nearest habitats with distances from the site to be demarcated on a toposheet (1: 50000 scale).
28. Landuse based on satellite imagery including location specific sensitivities such as national parks / wildlife sanctuary, villages, industries, *etc.,* for the study area.

29. Demography details of all the villages falling within the study area.
30. Topography details of the project area.
31. The baseline data to be collected from the study area w.r.t. different components of environment viz. air, noise, water, land, and biology and socio-economic (please refer Section 4.4.2 for guidance for assessment of baseline components and identify attributes of concern). Actual monitoring of baseline environmental components shall be strictly according to the parameters prescribed in the ToR and shall commence after finalization of ToR by the competent Authority.
32. Geological features and geo-hydrological status of the study area.
33. Details on groundwater quality and surface water quality of nearby water sources and other surface drains. The parameters of water quality may include Cl^-*, Ca^{2+}*, Na^+*, SO_4^{2-}*, NH_4^+, Suspended solids* *etc*. (* - As applicable)
34. Details on existing ambient air quality and expected, emissions for PM10, PM 2.5, SO_2*, NOx*, CO_2*, CO*, NH_3*, *etc*., and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards. (* - As applicable)
35. The air quality contours may be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any and wind roses.
36. Details on noise levels at sensitive/commercial receptors.
37. Site-specific micro-meteorological data including mixing height.
38. One season site-specific data excluding monsoon season.
39. Proposed baseline monitoring network for the consideration and approval of the Competent Authority.
40. Ecological status (terrestrial and aquatic) of the study area such as habitat type and quality, species, diversity, rarity, fragmentation, ecological linkage, age, abundance, *etc.*
41. If any incompatible landuse attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC. Incompatible landuse attributes include:
    - Public water supply areas from rivers/surface water bodies, from ground water
    - Scenic areas/tourism areas/hill resorts
    - Religious places, pilgrim centers that attract over 10 lakh pilgrims a year
    - Protected tribal settlements (notified tribal areas where industrial activity is not permitted)
    - Monuments of national significance, World Heritage Sites
    - Cyclone, Tsunami prone areas (based on last 25 years);
    - Airport areas
    - Any other feature as specified by the State or local government and other features as locally applicable, including prime agricultural lands, pastures, migratory corridors, *etc.*
42. If ecologically sensitive attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC. Ecological sensitive attributes include:

- National parks
- Wild life sanctuaries
- Tiger reserve/elephant reserve/turtle nesting ground
- Mangrove area
- Wetlands
- Reserved and protected forests
- Any other closed/protected area under the Wild Life (Protection) Act, 1972.
- Any other eco – sensitive areas *etc,*.

43. If the location falls in Valley, specific issues connected to the natural resources management shall be studied and presented.

44. If the location of the project and its associate facilities are near seashore: A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the project and associate facilities w.r.t. CRZ along with landuse map. Marine impact assessment studies for seawater intake and effluent disposal if applicable.

45. In case of coastal plants discharging effluent in to the sea provide details on bathymetry, sediment quality, fisheries studies, marine ecological/biological studies *etc*.

Anticipated environmental impacts and mitigation measures

46. Anticipated generic environmental impacts due to this project are indicated in Table 4-2, which may be evaluated for significance and based on corresponding likely impacts VECs may be identified. Baseline studies may be conducted for all the concerned VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures (please refer Chapter 4 of the manual for guidance).

47. Tools as given in Section 4.4.3 may be referred for the appropriate assessment of environmental impacts and same may be submitted in draft ToR for consideration and approval by EAC.

48. While identifying the likely impacts, also include the following for analysis of significance and required mitigation measures:

    - impacts due to transportation of raw materials and end products on the surrounding environment
    - impacts due to wastewater generated from brine purification, distillation and other processes on surface water, soil and groundwater
    - impacts due to gaseous emissions - CO_2, CO, NOx, ammonia, SOx, H_2S, particulate dust, *etc.*
    - impacts due to fugitive emissions
    - impacts due to noise
    - impacts due to solid waste generated from slaker operations, fine lime stone from screening operations, *etc.*
    - impact on health of workers due to proposed project activities, *etc.*

49. Proposed odour control measures

50. In case of likely impact from the proposed project on the surrounding reserve forests, if any. Plan for the conservation of wild fauna in consultation with the State Forest Department.

51. Modeling studies for predicting the impacts, requirement of dredging, beach protection, cyclone/ tsunami bunds *etc*,.

-TRUE COPY-

તાત્કાલીક ખરી નકલ મેળવવાની અરજી

માનનીય મામલતદાર સાહેબશ્રી માંડવી-કચ્છ.

પત્ર નં. જમન/વશી ૬૮૭/~~૨૦૨૪~~ 09/2024/, તા.૧૫-૬-૨૦૨૪ થી જી.એચ.સી.એલ કંપની ને બાડા ગામની સરકારી જમીન હે.૭૬.૯૬ ચો.મી કેમીકલ કોમ્પલેક્ષ ના ઔધોગીક હેતુ માટે મળવાની માંગણી સામે વાધાં બાબતે અમો અરજદાર વાંધેદાર હોવાથી આ બાબત અંગેના આપના વિભાગ તરફ થી સાધનીક કાગળો ની નકલ મળવાથી અમો અમારો જવાબ રજુ કરી શકીએ છીએ. જેથી આ અરજી કરી રહયા છીએ,

આ બાબતેના સંદર્ભ પત્ર- મે.શ્રી.પ્રાત અધિકારી સાહેબ મુદરાના પત્રનં.જમન/વશી/૮૦૦/૨૦૨૪ તા.૨૧-૫-૨૦૨૪ ના બિડાણ સહિતની નકલ તાત્કાલીક આપવા પુરી પાડશો, ત્યારબાદ જ અમો આ બાબતે અમો અમારો વાંધો રજુ કરી શકીશુ જેથી ન્યાયના હિતમાં આ સાધનીક કાગળોની નકલ બાદ જ વાંધાઓ રજુ કરવા યોગ્ય મુદત આપવા નમ્ર અરજ છે.

(આ સાથે આપના વિભાગના **પત્રનં.જમન/વશી ૬૮૭/~~૨૦૨૪~~ 09/2024/, તા.૧૫-૬-૨૦૨૪ વાળાની** નકલ સામેલ છે)

આ કામે માંગણી થયેલ થી નિયત ફી ની રકમ અમો ભરી આપવા સહમત છીએ.

તા:૨૮-૬-૨૦૨૪

સ્થળ:માંડવી-કચ્છ.

સામતસિંહ કે. સોઢા

.....ફરજી.....

વિધરકના નેજ

બાડા

(મો.નં. 98254 22524)

સરનામું:-

મયુર લેબોરેટરી સામે

ગવર્મેન્ટ

સર્કલ પાસે

માંડવી. કચ્છ.



TO GET TRUE COPY IMMIDIATELY.

BEFORE MAMLATDAR SAHEB SHRI MANDVI – KUTCH

Letter No. Jaman/Vashi 687/062024, dated 15/6/2024, regarding the objection against the demand of GHCL to get government land measuring 76.96 square meters in Bada village for industrial purposes of Chemical Complex, we, the applicant, are the respondents and after receiving a copy of the material papers from our department regarding this matter, we can submit our reply. Therefore, we are making this application,

Please provide a copy of the reference letter in this matter - Mr. Prant Adhikari Saheb Mundra's letter No. Jaman / Vashi / 800 / 2024 dated 21/5/2024 along with the enclosure immediately, only after that we will be able to present our objection in this matter. Therefore, in the interest of justice, it is a humble request to give a suitable time to present objections and adjourn the matter as only after receiving the copy of these instrumental papers.

[A copy of our department's letter No. Jaman/Vashi 687/06/2024, dated 15/6/2024 is enclosed herewith]

We agree to pay the prescribed fee amount as requested for this work.

Date: 28-6-2024 Sd/

Place: Mandvi- Kutch

Samantsinh K Sodha
Trustee
Vipashyana Kendra
Bada
(Mob. No. 9825422524)
Address: Mayur Laboratory & Blood Bank , Aazad Chowk, Mandvi Kutch

-TRANSLATED COPY-

604

186

change.org

Start a petition

ANNEXURE R/8

Petition details Comments



Save Dhamma Sindhu Vipassana Meditation Centre from massive chemical plant by GHCL in Bada

Started 12 March 2025

8,877
Signatures

10,000
Next Goal

258 people signed today

Sig this petition

Why this petition matters

Started by **Save Bada**

The Dhamma Sindhu Vipassana Meditation Centre in Bada, Kutch, and its surrounding environment is under imminent danger due to the planned construction of a soda ash factory by Gujarat Heavy Chemicals Limited (GHCL) just 0.5km distance from the center.
Project Details

WE WILL LOSE DHAMMA SINDHU FOREVER IF THIS PROJECT GOES AHEAD.

GHCL has received ALL environment clearance and project has been given the go ahead by the government. In the meantime, there is a petition filed in National Green Tribunal. First hearing is scheduled on 25.03 2025. **Petition Copy**

We are urgently calling all vipassana meditators across the world to come forward and support in this endeavor to fight this case.

This proposal threatens our cherished center where people practicing vipassana since more than 30 years, a profound meditation technique restored in contemporary India by the respected Padma Bhushan laureate, Shri S. N. Goenka ji.

Soda ash production poses significant environmental risks across multiple domains air pollution, water pollution, soil pollution, noise and thermal pollution.

There's ample evidence of the negative impact of soda ash factories on the environment and local communities globally (World Health Organisation report, 2011).

We need your support in imploring our lawmakers and GHCL to reconsider the planned industrial activity and explore alternatives that fulfil economic interests without compromising the integrity of Dhamma Sindhu vipassana centre and nearby Bada village in Mandhvi Kutch Gujarat.

We need your support in preserving the tradition of Vipassana and the health of our environment.

We have created a Google form for ALL Vipassana meditators who would like to give Dhamma services to protect dhamma Sindhu.

We urgently need experts who can help us in this campaign in relation to

- Water Pollution

258 people signed today

Sig this petition

- Soil Pollution

606 188

- Noise Pollution
- Lawyers specifically with interest in public litigation matters and environmental matters OR any kind of service you can give.
  Please fill this form and we will connect with you.

Google Form for Dhamma Seva to Protect Dhamma Sindhu

Please sign the petition and share with others.

"धम्म सिंधु" विपश्यना केंद्र ,कच्छ और टिकाऊ ग्रामीण अर्थव्यवस्था की रक्षा करें।

कच्छ के मांडवी के बाड़ा में धम्म सिंधु विपश्यना ध्यान केंद्र और इसके आसपास का वातावरण गुजरात हेवी केमिकल्स लिमिटेड (GHCL) द्वारा केंद्र से सिर्फ 0.5 किमी की दूरी पर सोडा ऐश फैक्ट्री के नियोजित निर्माण के कारण खतरे में है।

(परियोजना विवरण संलग्न)

अगर यह परियोजना आगे बढ़ती है तो हम "धम्म सिंधु" को हमेशा के लिए खो देंगे।

GHCL को कई पर्यावरण मंजूरी मिल चुकी हैं और सरकार ने परियोजना को आगे बढ़ाने की अनुमति दे दी है।

हालांकि, इस बीच, राष्ट्रीय हरित अधिकरण (NGT) में एक याचिका दायर की गई है। पहली सुनवाई 25.03 2025 को निर्धारित है।

(याचिका की प्रति संलग्न)

*हम दुनिया भर के सभी विपश्यना साधकों से आग्रह कर रहे हैं कि वे आगे आएं और इस मामले को लड़ने के इस प्रयास में अपना समर्थन दें। यह "सेवा" इस विपश्यना केंद्र को संरक्षित करने के लिए है, जहाँ पिछले 34+ वर्षों में, कुछ लाख साधक (दुनिया भर से) विपश्यना का अभ्यास करके लाभान्वित हुए हैं, जो कि समकालीन भारत में पद्म भूषण पुरस्कार विजेता, "श्री एस. एन. गोयनका जी"; पू. गुरुजी द्वारा 55 साल पहले पुनर्स्थापित की गई एक गहन ध्यान तकनीक है।

सोडा ऐश उत्पादन कई क्षेत्रों में महत्वपूर्ण पर्यावरणीय जोखिम पैदा करता है जैसे कि
* वायु प्रदूषण,
* जल प्रदूषण,
* मृदा प्रदूषण,
* शोर और
* तापीय प्रदूषण।

*सोडा ऐश उत्पादकों के पर्यावरण और सामाजिक प्रभावों पर वैश्विक रूप से [illegible] हैं (लिंक

✊ 258 people signed today

खोज करने के लिए आग्रह करने में आपके समर्थन की आवश्यकता है जो धम्म सिंधु विपश्यना केंद्र और मांडवी, कच्छ गुजरात में निकटवर्ती बाडा गांव की अखंडता से समझौता किए बिना आर्थिक हितों को पूरा करते हैं।

हमें विपश्यना केंद्र और हमारे पर्यावरण के स्वास्थ्य को संरक्षित करने में आपकी सेवा की आवश्यकता है।

हमने सभी विपश्यना साधकों के लिए एक Google फ़ॉर्म बनाया है जो धम्म सिंधु की रक्षा के लिए धम्म सेवाएँ देना चाहते हैं।

*कृपया इस फ़ॉर्म को भरें और हम आपसे संपर्क करेंगे।

*हमें तत्काल ऐसे विशेषज्ञों की भी आवश्यकता है जो GHCL के विरुद्ध निम्न मामलों में साक्ष्य प्रस्तुत कर सकें

* जल प्रदूषण
* तटीय भू-आकृति विज्ञान
* वायु प्रदूषण
* मृदा प्रदूषण
* ध्वनि प्रदूषण
*विशेष रूप से सार्वजनिक मुकदमेबाजी मामलों और पर्यावरण मामलों में रुचि रखने वाले वकील या कोई भी सेवा जो आप दे सकते हैं।

- कृपया इस याचिका पर हस्ताक्षर करें और अन्य समूहों में साझा करें।

"ધમ્મ સિંધુ" વિપશ્યના કેન્દ્ર ,કચ્છ અને ટકાઉ ગ્રામ્ય અર્થતંત્ર નું રક્ષણ કરો.

બાડા, માંડવી, કચ્છમાં આવેલ ધમ્મ સિંધુ વિપશ્યના ધ્યાન કેન્દ્ર અને તેની આસપાસનું વાતાવરણ કેન્દ્રથી માત્ર 0.5 કિમીના અંતરે ગુજરાત હેવી કેમિકલ્સ લિમિટેડ (GHCL) દ્વારા સોડા એશ ફેક્ટરીના આયોજિત બાંધકામને કારણે નિકટવર્તી જોખમમાં છે.

(પ્રોજેક્ટ વિગતો જોડાયેલ છે)

જો આ પ્રોજેક્ટ આગળ વધશે તો અમે "ધમ્મા સિંધુ"ને હંમેશ માટે ગુમાવી દઈશું.

જીએચસીએલને વિવિધ પર્યાવરણીય મંજૂરી મળી છે અને સરકાર દ્વારા પ્રોજેક્ટને આગળ વધવાની મંજૂરી આપવામાં આવી છે.

જો કે, તે દરમિયાન, નેશનલ ગ્રીન ટ્રિબ્યુનલ (NGT)માં એક પિટિશન દાખલ કરવામાં આવે છે.
પ્રથમ સુનાવણી 25.03 2025 ના રોજ સુનિશ્ચિત થયેલ છે.
(પીટીશન કોપી - જોડાયેલ)

*અમે વિશ્વભરના તમામ વિપશ્યના ધ્યાન કરનારાઓને આ કેસ લડવાના આ પ્રયાસમાં આગળ આવવા અને સમર્થન આપવા તાકીદે બોલાવીએ છીએ. આ "સેવા" માટે છે. આ વિપશ્યના કેન્દ્રને સાચવીને, જ્યાં છેલ્લા 34+ વર્ષોમાં, વિપશ્યનાની પ્રેક્ટિસ કરીને (વિશ્વભરમાંથી) લાખો ધ્યાન કરનારા લાભ મેળવ્યો છે,

✊ 258 people signed today

* વાયુ પ્રદૂષણ,

608 190
* જળ પ્રદૂષણ,
* જમીનનું પ્રદૂષણ,
* અવાજ અને
* થર્મલ પ્રદૂષણ.

* વૈશ્વિક સ્તરે પર્યાવરણ અને સ્થાનિક સમુદાયો પર સોડા એશ ફેક્ટરીઓની નકારાત્મક અસરના પૂરતા પુરાવા છે (વર્લ્ડ હેલ્થ ઓર્ગેનાઈઝેશન રિપોર્ટ, 2011).

*આયોજિત ઔદ્યોગિક પ્રવૃત્તિ પર પુનર્વિચાર કરવા અને ધમ્મ સિંધુ વિપશ્યના કેન્દ્ર અને કચ્છ ગુજરાતના માંડવીમાં નજીકના બાડા ગામની અખંડિતતા સાથે સમાધાન કર્યા વિના આર્થિક હિતોને પરિપૂર્ણ કરતા વિકલ્પોની શોધ કરવા અમારા નેતાઓ, ધારાશાસ્ત્રીઓ અને GHCLને વિનંતી કરવા માટે અમને તમારા સમર્થનની જરૂર છે.

વિપશ્યના કેન્દ્ર અને આપણા પર્યાવરણના સ્વાસ્થ્યને બચાવવા માટે અમને તમારી સેવાની જરૂર છે.

અમે તમામ વિપશ્યના ધ્યાન કરનારાઓ માટે એક Google ફોર્મ બનાવ્યું છે જેઓ ધમ્મ સિંધુના રક્ષણ માટે ધમ્મ સેવાઓ આપવા માંગે છે.

*કૃપા કરીને આ ફોર્મ ભરો અને અમે તમારી સાથે જોડાઈશું.

*અમને તાત્કાલિક એવા નિષ્ણાતોની પણ જરૂર છે જેઓ GHCL વિરુદ્ધના સંબંધમાં પુરાવા આપી શકે

* જળ પ્રદૂષણ
* કોસ્ટલ જીઓમોર્ફોલોજી
* વાયુ પ્રદૂષણ
* જમીનનું પ્રદૂષણ
* ધ્વનિ પ્રદૂષણ
*વકીલો ખાસ કરીને પબ્લિક લિટીગેશન બાબતો અને પર્યાવરણીય બાબતોમાં રસ ધરાવતા હોય અથવા કોઈપણ પ્રકારની સેવા તમે આપી શકો.

- કૃપા કરીને આ અરજી પર સહી કરો અને અન્ય જૂથોમાં શેર કરો.

"धम्म सिंधू" विपश्यना केंद्र ,कच्छ आणि शाश्वत ग्राम अर्थव्यवस्थाचे रक्षण करा.

बाडा, मांडवी, कच्छ येथील धम्म सिंधू विपश्यना ध्यान केंद्र आणि त्याच्या सभोवतालचे वातावरण केंद्रापासून अवघ्या ०.५ किमी अंतरावर गुजरात हेवी केमिकल्स लिमिटेड (GHCL) द्वारे सोडा ॲश कारखान्याच्या नियोजित बांधकामामुळे धोक्यात आले आहे.

(प्रकल्प तपशील संलग्न)

✊ 258 people signed today

GHCL या नियोजित बांधकामामुळे आणि आसपास होणाऱ्या [illegible]

तथापि, या दरम्यान, राष्ट्रीय हरित न्यायाधिकरण (NGT) मध्ये याचिका दाखल केली आहे.
पहिली सुनावणी २५.०३.२०२५ रोजी होणार आहे.

(याचिकेची प्रत - संलग्न)

*आम्ही जगभरातील सर्व विपश्यना साधकांना तातडीनं आवाहन करत आहोत की त्यांनी या खटल्याचा सामना करण्याच्या या प्रयत्नात पुढे येऊन पाठिंबा द्यावा. ही "सेवा" साठी आहे.
या विपश्यना केंद्राचे जतन करून, जिथे गेल्या ३४+ वर्षांत, काही लाख (जगभरातील) ध्यानकर्ते विपश्यना करून लाभले आहेत,
आदरणीय पद्मभूषण पुरस्कार विजेते "श्री एस एन गोयंका जी" ;पु.गुरुजी यांनी समकालीन भारतात 55 वर्षांपूर्वी हे गहन ध्यान पद्धत पुनर्संचयित केलेले .

सोडा राख उत्पादनामुळे अनेक क्षेत्रांमध्ये महत्त्वपूर्ण पर्यावरणीय धोके निर्माण होतात उदा.
* वायू प्रदूषण,
* जल प्रदूषण,
* माती प्रदूषण,
* आवाज आणि
* थर्मल प्रदूषण.

*जागतिक स्तरावर सोडा राख कारखान्यांच्या पर्यावरणावर आणि स्थानिक समुदायांवर होणाऱ्या नकारात्मक प्रभावाचे भरपूर पुरावे आहेत (जागतिक आरोग्य संघटनेचा अहवाल, 2011).

*आम्हाला आमचे नेते, खासदार आणि GHCL यांना नियोजित औद्योगिक क्रियाकलापांचा पुनर्विचार करण्यासाठी आणि धम्म सिंधू विपश्यना केंद्र आणि कच्छ गुजरातमधील मांडवी येथील जवळील बाडा गावाच्या अखंडतेशी तडजोड न करता आर्थिक हितसंबंधांची पूर्तता करणारे पर्याय शोधण्यासाठी तुमच्या पाठिंब्याची गरज आहे.

विपश्यना केंद्र आणि पर्यावरणाचे आरोग्य जपण्यासाठी आम्हाला तुमची सेवा आवश्यक आहे.

आम्ही सर्व विपश्यना ध्यान करणाऱ्यांसाठी एक Google फॉर्म तयार केला आहे जे धम्म सिंधूचे रक्षण करण्यासाठी धम्म सेवा देऊ इच्छितात.

***कृपया हा फॉर्म भरा आणि आम्ही तुमच्याशी संपर्क साधू.**

*आम्हाला तातडीने तज्ञांची गरज आहे जे जीएचसीएलच्या विरोधात पुरावे देऊ शकतात

* जल प्रदूषण
* कोस्टल जिओमॉर्फोलॉजी
* वायू प्रदूषण

✊ 258 people signed today

610 192

* कृपया या याचिकेवर स्वाक्षरी करा आणि इतर गटांमध्ये शेअर करा.

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ANNEXURE R/9

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E-CHALLAN
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REVENUE DEPARTMENT
GOVERNMENT OF GUJARATI

Application Number	**20241100972662**	Printed On dated	**12/06/2024 12:57:54**

Transaction Number	Account Head	Amount (Rs.)	Bank CIN	Date	Bank Branch
20240912273061017	Registration Fee (0030-03-104-00)	**26900.00**	**5700001355100301209 2452149**	**12-09-2024**	SBIEPAY
Page Fee	**(45)900**	Other	0	Postage	0.00
Registration Fee	**26000.00**	Fee Exemption	No	Consideration Amount	26000000.00
Total Amount	**26900.00**	In Words	**Rupees Twenty Six Thousand Nine Hundred Only**		

(Particulars of the payye)			
Name	**Mahendra Maghji Gala**	(Office District)	Ahmedabad
Address	**301, Gimar Tower, Ram Tekdi, Nr. Tata Tower Severy, Mumbai City (Mumbai City) Mumbai City (Mumbai City) Maharashtra (Maharashtra) 400015**	Name of the office	**S.R.O.- Mandvi**
(Mobile Number)	**9879233437**	E-mail	Lakhanibrothers5@gmail.com
PAN Number	**AADPG2793H**	Year	**2024-2025 One time**

Seal of Sub-registrar Mandvi-

(Particulars of the property)	**Bada Ta. Mandvi Survey Number 426 (Old Survey Number 347), Total Hector 8-57-56 Are.**

(Remark)	

M Sd/- Mahendra in English V Sd/- illegible in Gujarati B Sd/- Bharat Gangji in English H Sd/- illegible in English J Sd/- Javerben Kishanji Chhadva in Gujarati

Sd/- illegible in English Sd/- illegible in English Sd/- R.H. Shah in English

Sd/- illegible
Sub-registrar Mandvi
09 DEC 2024

Remark:

(1) E-challan of registration fee shall be deemed valid for four months only according to the Rule 4(7) of the Gujarat Registration Fee E-payment & Refund Rules, 2020.
(2) Time limit of the stamp duty paid by E-challan is up to 6 month from the date of duty paid by the E-challan according to the Section 52 of the Gujarat Stamp Act 1958.
(3) To temper in the E-challan or prepare false Challan is becomes criminal offense.

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Absolute Sale Deed of Rs.26,00,000/- Only

.....

Irrigation address of old tenure situated in the center of the village Shri Bada of Taluka Sub-district Mandavi, District Kutchh, which is registered in joint name of us the seller by Account No. 225 at the records of revenue record. Revenue Survey No. 426 (Old Survey No. 347) thereof, Hector 8-57056 Are thereof, land revenue Rs.22.40 Paisa, address namely “Shiyawalo” is situated. Absolute sale deed of the address like that of Rs.26,00,000/-...

Seal of Sub-registrar Mandvi-

Sd/- illegible in English Sd/- illegible in English

Sd/- illegible in English Sd/- R.H. Shah in English

This absolute sale deed has been executed between the below parties on dated 13th September 2024 on Bhadarva Sud-10 of Vikram Samvat 2080 on below particulars.

The party of the first Part:- Purchasers

(1) Mahendra Maghji Gala, age 70 years, Occupation-agriculture, Religion-Jain, Gimar

Tower, Room No. 301, Ram Tekdi Road, Nr. Tata Tower Sevari, Mumbai-400015

Basis of identity:- PAN Card No.AADPG2793H

(2) Bharat Gangaji Gala, age 59 years, Occupation-agriculture, Religion-Jain, Res. 501/502, Haveli C.H.S., Chandavarkar Road, Opp. Avishkar Tower, Borivali West, Mumbai-Mahrashtra- 400092

Basis of identity:- PAN Card No.AACPG0614J

(3) Vasant Keshavji Savla, age 70 years, Occupation-agriculture, Religion-Jain, Res. Room No. 602, Plot No. 345, Milan Laxmi Apartment, Chandavarkar Road, Matunga, Mumbai-400019

Basis of Identity:- PAN Card No. AAFPS1379F

(4) Hasmukh Ratilal Hariya, age 65 years, Occupation-agriculture, Religion-Jain, Res. 379/14, Vashudha Co. Op. Hos. Society, Shankar Matham Road, Opp. Jain Clinic, Matunga, Mumbai 400019

Basis of Identity:- PAN Card No. AAAPH4115P

Hereinafter, shall be referred or known as “You the purchasers” in this absolute sale deed. In the context of meaning thereof, said “Purchasers” and their heirs,

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successors, inheritors, executors, administrators etc. all are included.

The party of the second part:- Seller

Seal of Sub-registrar Mandvi-

(1) Sha Javerbai Vishanji Chhadva, age 91 years, Occupation-retired, Religion-Jain, Res. 103, Balaji Sadan, K.A. Subramaniyam Road, S.I.E.S. High School, Matunga, Mumbai-400019

Basis of identity:- PAN Card No.AACPC7624C

(2) Sha Nayan Vishanji Chhadva, age 51 years, Occupation-agriculture, Religion-Jain, Res. 103, Balaji Sadan, K.A. Subramaniyam Road, S.I.E.S. High School, Matunga, Mumbai-400019

Basis of identity:- PAN Card No. ACVPC6857G

(3) Priti Vishanji W/O Hemant Shah, age 58 years, Occupation-housewife, Religion-Jain, Res. 16, Third Floor, Sunder Villa, Premnagar, J.N. Road, Nr. Apna Bazar, Mulund West, Mumbai, Maharashtra-400080

Basis of identity:- PAN Card No.ACVPC6857G

(4) Sonal Vishanji W/O Nilesh Dodhiya, age 54 years, Occupation-housewife, Religion-Jain, Res. Flat No. 602, Prachi Residency, Phase-2, Baner, Pune City, Pune-411045

Basis of identity:- PAN Card No.ABAPD0946M

Sd/- illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

Hereinafter, shall be referred or known as “We the sellers” in this absolute sale deed. In the context of meaning thereof, said “Sellers” and their heirs, successors, inheritors, executors, administrators etc. all are included.

(1) Irrigation address of old tenure situated in the center of the village Shri Bada of Taluka Sub-district Mandavi, District Kutchh, which is registered in joint name of us the seller by Account No. 225 at the records of revenue record. Revenue Survey No. 426 (Old Survey No. 347) thereof, Hector 8-57056 Are thereof, land revenue Rs.22.40 Paisa, address namely “Shiyawalo” is situated. Said address like that of absolute, joint ownership and possession, enjoyment, address free from encumbrance of us the seller is there. Address like that is absolutely sold in present reasonable price Rs.26,00,000/- in words Rupees Twenty-Six Lakhs Only with our ownership-possession and enjoyment all right-share till the sun-moon endure. Rs.26,00,000/- in words Rupees Twenty-Six Lakhs Only the consideration

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thereof is received to us the sellers from you the purchasers only below particulars.

Rs.6,50,000/- only is received to Sha Javerbai Vishanji Chhadva for the said sold address as under.

Seal of Sub-registrar Mandvi-

- **Detail of the amount received from the Mahendra Maghji Gala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of Baroda Lalbaug, Mumbai	Cheque	000205	1,62,500/-	14/06/2024

- **Detail of the amount received from the Hasmukh Ratilal Hariya:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of India Maheshwari Udhan Mumbai	NEFT	BKIDN24166835221	1,62,500/-	14/06/2024

Rs.6,50,000/- only is received to Sha Nayan Vishanji Chhadva for the said sold address as under.

- **Detail of the amount received from the Bharat Gangji Gala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	The Sareswat Co. Op. Bank Ltd.	NEFT	SRCBO24166606456	1,62,500/-	14/06/2024

Sd/- illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

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	Borivali, Mumbai				

Nature of the deed: Deed of Absolute Sale Consideration: Rs.26,00,000/-
Village: Mandvi, Ta. Mandvi Rev. S. No.:- 426 (Old Survey No.347), Ar. 85756.00 Sq. Mt.

M Sd/- Mahendra in English V Sd/- illegible in Gujarati B Sd/- Bharat Gangji in English
H Sd/- illegible in English J Sd/- Javerben Kishanji Chhadva in Gujarati

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Yes Bank, Matunga, Mumbai	NEFT	YESOB41661798935	1,62,500/-	14/06/2024

Seal of Sub-registrar Mandvi-

- **Detail of the amount received from the Hasmukh Ratilal Hariya:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of India Maheshwari Udhan Mumbai	NEFT	BKIDN24166834778	1,62,500/-	14/06/2024

Rs.6,50,000/- only is received to Priti Vishanji W/O Hemant Shah for the said sold address as under.

- **Detail of the amount received from the Mahendra Maghji Gala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of Baroda, Lalbaug, Mumbai	Cheque	000206	1,62,500/-	14/06/2024

- **Detail of the amount received from the Bharat Gangji Gala:-**

Sd/- illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

Nature of the deed: Deed of Absolute Sale Consideration: Rs.26,00,000/-
Village: Mandvi, Ta. Mandvi Rev. S. No.:- 426 (Old Survey No.347), Ar. 85756.00 Sq. Mt.

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	The Saraswat Co. Op. Bank Ltd, Borivali, Mumbai	NEFT	SRCB024166606456	1,62,500/-	14/06/2024

- **Detail of the amount received from the Vasant Keshavji Savala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Yes Bank, Matunga, Mumbai	NEFT	YESOB41661798008	1,62,500/-	14/06/2024

- **Detail of the amount received from the Hasmukh Ratilal Hariya:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of India Maheshwari Udhan Mumbai	NEFT	BKIDN241668331916	1,62,500/-	14/06/2024

Rs.6,50,000/- only is received to Sonal Vishanji W/O Nilesh Dodhiya for the said sold address as under.

- **Detail of the amount received from the Mahendra Maghji Gala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of Baroda,	NEFT	BARBR24166334228	1,62,500/-	14/06/2024

	Lalbaug, Mumbai				

- **Detail of the amount received from the Bharat Gangji Gala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	The Saraswat Co. Op. Bank Ltd, Borivali, Mumbai	NEFT	SRCB024166605261	1,62,500/-	14/06/2024

- **Detail of the amount received from the Vasant Keshavji Savala:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Yes Bank, Matunga, Mumbai	NEFT	YESOB41661799107	1,62,500/-	14/06/2024

- **Detail of the amount received from the Hasmukh Ratilal Hariya:-**

Sr. No.	Bank & Branch	Nature	Cheque/Ref. No.	Amount	Date
1	Bank of India Maheshwari Udhan Mumbai	NEFT	BKIDN24166834134	1,62,500/-	14/06/2024

Such as, total amount Rs.26,00,000/- in words Rupees Twenty Six Lakhs Only is received to us the sellers from you the purchasers. We the sellers are

acknowledging the receipt thereof and by selling above address to you the purchasers with all trees, leaves, grassland, fencing, clods, debris and rights acquired by easement and all kinds of right, share, wealth, usage etc. of said address in consi

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the sellers have handed over pe clear possession on ownership right by this absolute sale deed.

(2) Four boundaries of said selling address are as under.

Towards North:- Addresses of Survey No. 427, 428, 434 and 435 are situated.

Towards South:- Addresses of Survey No. 424 and 425 are situated.

Towards East:- Chhelo of Langai and Check dam is situated, Survey No. thereof is 406.

Towards West:- Address of Survey No. 436 is situated.

Seal of Sub-registrar Mandvi-

Way and flow of water:-

Way of said address is situated from the center of the addresses of Survey No. 427 and 434 situated at north side. And, flow of rain water is situated as per natural slope from ancient time from old time.

Sd/- illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

(3) Except us the sellers, any kind of right share of any other is not there in the address being sold with description, measurement and in detail. We the seller have not created any kind of encumbrance, charge, debt, oral consideration on said sold address and not done or get done any kind of such act so that,

Nature of the deed: Deed of Absolute Sale Consideration: Rs.26,00,000/-
Village: Mandvi, Ta. Mandvi Rev. S. No.:- 426 (Old Survey No.347), Ar. 85756.00 Sq. Mt.

e

M Sd/- Mahendra in English V Sd/- illegible in Gujarati B Sd/- Bharat Gangji in English
H Sd/- illegible in English J Sd/- Javerben Kishanji Chhadva in Gujarati

ıe, we the sellers are giving such assurance and reliance. Said address of clear ownership right of us the sellers. However, debt-oral consideration, right-share, charge lien, etc. may be created or rate-claim, promise-objection, Chum-chocho, cry –quarrel may be created by any person in future related to said address or related the right of us the seller to sale the same then, we the sellers shall be bound to give reply thereof.

(4) We the sellers are hereby giving further assurance and undertaking that, our titles of said address are absolute clear and marketable and said address is absolute free from encumbrance and without risk and except us

the sellers, any kind of right, claim or wealth of any other is not there about that and by giving such firm trust and faith to you the purchasers, by taking fully paid money of said consideration, we the sellers have sold said address to you the purchase sale deed and handed ove and clear possession thereof to you the purchasers.

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Seal of Sub-registrar Mandvi-

(5) Whenever and wherever, whatever legal deeds, papers, assurances, signatures, things, affidavits, bonds etc. may be required time to time to you the purchasers or their attorneys, workers advocates etc. to prove the rights titles of said selling address, then and there sellers shall have to executed such deeds, papers, assurance, signatures, things, affidavits, bonds etc. by request of the purchasers.

(6) Hereinafter, you the purchasers are entitled to enjoy, to live, allow to live, sale, exchange, mortgage, gift or to do as you please to do with the selling address from sky up to deep abyss of the earth till the sun-moon endures. And, whatever wealth may be available from said

illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

address that is belong to the destiny of you the purchasers and any kind of share as relatives right, interest, part or interest relation of us the sellers or our heirs, successors etc. are not existed therein. You are entitled to use or enjoy said address as you feel like doing. We the sellers or our heirs, successors, etc. any other has nothing to do with that. All entitlements related to that are belong to you the purchasers.

(7) We the seller have paid all kinds of taxes-government or semi government of said selling address till date such as, government tax, panchayat tax, special cess, education cess etc. all and however, if that is found outstanding then, we the seller is responsible to pay the same. You the purchasers shall pay such all kinds of future taxes etc. (of after the date of absolute sale deed).

(8) Whatever signature, testimony, agreement, reply, affidavit, bond of us the seller may be required to transfer said address in the name of you the purchasers, we the sellers are bound

to execute signature, testimony, agreement, reply, affidavit, bond there.

(9) We the sellers have hereby not executed deal or exchange agreement with any person previously related to said selling address and we the sellers have not taken any kind of loan from any government, semi-government offices, from any person or establishment, from bank of firm, from any government society or from any other places on said address or on any part thereof till date or not given in security. And, we have not mortgaged said address or put under lien or charge with anyone. By giving such trust and assurance, we the sellers have sold said address to you the purchasers.

(10) We the sellers have handed over following grounds pertaining to the said selling address to you the purchasers.

1. Extract copies of computerized revenue record and manual record.

(11) Sp. Power of attorney registered by D. Serial No. 5078/24 of dt.01-03-2024 at Joint Sub-

registrar, Mumbai City 3 office has been issued for the same to Sha Nayan Vishanji Chhadva of Serial No. 2 out of the sellers from Serial No. 1 out of the sellers to register this deed at Mandvi Sub-registrar office and any kind of procedure which may be required to complete incidental in reference of above work. Power, right and attorney has been issued to the power of attorney holder so that, this power of attorney holder can complete the procedure about sale by presenting on behalf of Serial No. 1 out of the sellers. Hereby giving such assurance and faith to the power or attorney holder.

(12) Reasonable present market price of said address can be deemed as much as Rs.26,00,000/- and this deed thereof has been written on the e-stamping stamp paper of Rs.1,27,400/-as per the government rule.

(13) We the sellers have sold the address selling like that to you the purchasers with condition, limit-permit thereof with all the rights of easements of us the sellers today in Rs.26,00,000/-. We the sellers have get written

this deed thereof with our willingness, good faith and with sense cleverness and without any influence, pressure or temptation voluntarily at Mandvi-Kut admitted, agreed and boun and our heirs, inheritors-successors, assignees etc.

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Place: Mandvi-Kutchh

Date: 13-09-2024

Here----------Sign Here----------Witness

Seal of Sub-registrar Mandvi-

1.Sd/- Javerben Kishanji Chhadva In Gujarati

(Javerbai Vishanji Sha)

1.Sd/- illegible in English

(Nilesh Kunvarji Dedhiya)

2.Sd/- illegible in English

(Nayan Vishanji Shah)

Sd/- illegible in English

(Monal Nayan Chhadva)

3.Sd/- illegible in English

(Priti Vishanji W/O Hemant Shah)

4.Sd/- illegible in English

(Sonal Vishanji W/O Nilesh Dedhiya)

Sd/- illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

Sd/- illegible in English Sd/- illegible in English
Sd/- R.H. Shah in English

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Photograph of the property's identity

Affixed photograph of the sold property

Seal of Sub-registrar Mandvi-

Postal address of the property: Address of Survey No. 426 (Old Survey No. 347), Hector 8-57-56 Are thereof, Land revenue Rs.22.40 Paisa, address namely "Shiyawalo" is situated.

Sd/- illegible in English Sd/- illegible in English Sd/- R.H. Shah in English

M Sd/- Mahendra in English V Sd/- illegible in Gujarati B Sd/- Bharat Gangji in English H Sd/- illegible in English J Sd/- Javerben Kishanji Chhadva in Gujarati

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Schedule as per Section-32-a of the Registration Act 1908

We are doing following brief description of the particulars mentioned in the deed.

1		Nature of the deed under the Gujarat Stamp Act.	Conveyance/Sale Conveyance/Sale		
2		Consideration	2600000.00		
3		Market Price	0.00		
4	1	Description of the property to be transferred	Bada, Ta. Mandvi-Kutchh, Survey Number 426 (Old Survey Number 347) total Hector 8-57-56 Are		
		Description of the found boundaries of the immoveable property North West --- | --- East South	North	Addresses of Survey No. 427, 428, 434 and 435 are situated.	
			East	Chhelo of Langai and Check dam is situated, Survey No. thereof is 406.	
			South	Address of Survey No. 424 and 425 is situated	
			West	Address of Survey No. 4365 is situated.	
5		By doing calculation in accordance with all the matters affecting the stamp duty as per Section-28 of the Gujarat Stamp Act 1958, have used apt stamp duty.			
6		Executor of the deed is entitled to execute said deed, we the executor of the deed is given assurance thereof. We have provided above true information. If any false information is given then, can institute procedure of penalty and criminal before us under Registration Act 1908 and Stamp Act 1958. Putting signature hereunder after reading understanding the same.			
7		➢ Imprisonment up to seven (7) years or punishment of penalty or both can be done for making false averments before sub-registrar under Section-82 and 83 of the Registration Act-1908. ➢ Eligibility of paying stamp duty in accordance with Section-62 and Sectio-28 of the Gujarat Stamp Act-1958 and face affecting and offence of not mentioning the circumstance is punishable under this section. Vendor of the deed and vendee of the deed both are eligible for punishment, such provision is not under our knowledge.			

Seal of Sub-registrar Mandvi-

Vendor of the deed				
	Name	Photograph	Thumb impression	Signature
1	Sha Javerbai Vishanji Chhadva	Affixed photograph of the Sha Javerbai Vishanji Chhadva	Thumb impression of Sha Javerbai Vishanji Chhadva	Sd/- Javerben Vishanji Chhadva in Gujarati
2	Sha Nayan Vishanji Chhadva	Affixed photograph of the Sha Nayan Vishanji Chhadva	Thumb impression of Sha Nayan Vishanji Chhadva	Sd/- illegible in English

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5248	12-44
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Schedule as per Section-32-a of the Registration Act 1908

We are doing following brief description of the particulars mentioned in the deed.

3	Priti Vishanji Chhadva W/O Hemant Shah	Affixed photograph of the Priti Vishanji Chhadva W/O Hemant Shah	Thumb impression of Priti Vishanji Chhadva W/O Hemant Shah	Sd/- illegible in English
4	Sonal Vishanji Chhadva W/O Nilesh Dedhiya	Affixed photograph of the Sonal Vishanji Chhadva W/O Nilesh Dedhiya	Thumb impression of Sonal Vishanji Chhadva W/O Nilesh Dedhiya	Sd/- illegible in English
Vendee of the deed				
	Name	Photograph	Thumb impression	Signature
1	Mahendra Maghji Gala	Affixed photograph of the Mahendra Maghji Gala	Thumb impression of Mahendra Maghji Gala	Sd/- illegible in English
2	Bharat Gangji Gala	Affixed photograph of the Bharat Gangji Gala	Thumb impression of Bharat Gangji Gala	Sd/-Bharat Gangji in English
3	Vasant Keshavji Savla	Affixed photograph of the Vasant Keshavji Savla	Thumb impression of Vasant Keshavji Savla	Sd/- illegible in English

Seal of Sub-registrar Mandvi-

Application Number: 20241101520478	Print Date:12/09/2024 18:51:20	Page 1 of 3

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Schedule as per Section-32-a of the Registration Act 1908

We are doing following brief description of the particulars mentioned in the deed.

4	Hasmukh Ratilal Hariya	Affixed photograph of the Hasmukh Ratilal Hariya	Thumb impression of Hasmukh Ratilal Hariya	Sd/- illegible in English

Seal of Sub-registrar Mandvi-

Application Number: 20241101520478	Print Date:12/09/2024 18:51:20	Page 1 of 3

VILLAGE FORM NUMBER 7

(Promulgation Entry No.3155 dt.27-05-2017)

723

District : **Kutch**
Taluka : **Mandvi**
Village: **Bada**
Block/Survey Number: **723**
Nature of tenure: **Old Tenure (O.T.)**
Usage of the land: **Agriculture usage**
Name of the field: **Tukri**
Other particulars :
Old block/Survey Number: **474**
Entry numbers pertaining to old survey number:
237, 562, 1908, 1916, 1940, 2251, 2561, 2603*, 2666, 2696 I***
Entry numbers of other rights and encumbrances pertaining to old survey numbers:
237 I***

Proper Land	Area Hec.Are. Sq.Mtr.	Account Number	Area Hec.Are. Sq.Mtrs.	Land Revenue	Entry Numbers and Name of Occupiers
Non-irrigated	**1-15-61**				**3155, 3446,**
Total Area	**1-15-61**	**1080**	**1-15-61**	**2.40**	**Sha. Mahendra Maghji Gala(3446)**
Shape Rs.	**2.40**				
Judi & Special Cess Rs.	**0.00**				
Water Part Rs.	**0.00**				
Details of Tenant		**Details of Other rights and encumbrances** **3155,**			

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No.5248	30-44
2024	

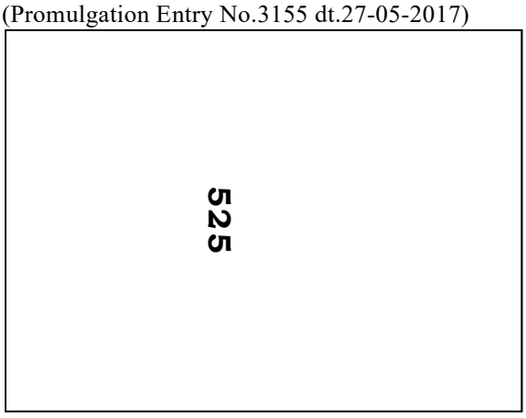
Code
1010824122529268

Round Rubber Seal of Mamlatdar Office Mandvi (Kuchchh)

Digitally Signed by:
DS Revenue department 9
Government of Gujarat
Date: 09-12-2024 11:34:07 IST
Mamlatdar office, Mandvi

VILLAGE FORM NUMBER 7

(Promulgation Entry No.3155 dt.27-05-2017)



District : **Kutch**
Taluka : **Mandvi**
Village: **Bada**
Block/Survey Number: **525**
Nature of tenure: **Old Tenure (O.T.)**
Usage of the land: **Agriculture usage**
Name of the field: **Vada**
Other particulars :
Old block/Survey Number: **359/2**
Entry numbers pertaining to old survey number:
359/2 I***
Entry numbers of other rights and encumbrances pertaining to old survey numbers:
131, 1273, 2138, 2538 I***

Proper Land	Area Hec.Are. Sq.Mtr.	Account Number	Area Hec.Are. Sq.Mtrs.	Land Revenue	Entry Numbers and Name of Occupiers
Non-irrigated	0-86-06				3155,
Total Area Shape Rs. Judi & Special Cess Rs. Water Part Rs.	0-86-06 3.55 0.00 0.00	900	0-86-06	3.55	Bharat Gangaji Gala (2538)
Details of Tenant		Details of Other rights and encumbrances 3155,			

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2024	

Code
1010824122529343

Round Rubber Seal of Mamlatdar Office Mandvi (Kuchchh)

Digitally Signed by:
DS Revenue department 9
Government of Gujarat
Date: 09-12-2024 11:36:31 IST
Mamlatdar office, Mandvi

MND	
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2024	

VILLAGE FORM NUMBER 7

(Promulgation Entry No.3155 dt.27-05-2017)

604

District : **Kutch**
Taluka : **Mandvi**
Village: **Bada**
Block/Survey Number: **604**
Nature of tenure: **Old Tenure (O.T.)**
Usage of the land: **Agriculture usage**
Name of the field: **Vadi**
Other particulars :
Old block/Survey Number: **428/2**
Entry numbers pertaining to old survey number:
428/2 I***
Entry numbers of other rights and encumbrances pertaining to old survey numbers:
8*, 37, 2335, 2854, 2855, 2856, 2857 I***

Proper Land	Area Hec.Are. Sq.Mtr.	Account Number	Area Hec.Are. Sq.Mtrs.	Land Revenue	Entry Numbers and Name of Occupiers
Non-irrigated **Non-cultivated Well**	**0-85-00** **0-01-01**				**3155,**
Total Area **Shape Rs.** **Judi & Special Cess Rs.** **Water Part Rs.**	**0-86-01** **3.00** **0.00** **0.00**	**138**	**0-86-01**	**3.00**	**Sha Kantilal Keshavji Savla(2335)** **Sha Vasant Keshavji Savla(2355)** **Sha Ramesh Keshavji Savla(2335)** **Sha Kirtikumar Keshavji Savla(2335)** **Vasanti Kirtii Savla(2854)** **Hiral Kirti Savla(2854)** **Twinkle Kirti Savla W/O Bhavin Keniya(2854)** **Gunvantiben Ramesh Savla(2855)** **Paras Ramesh Savla(2855)** **Vaishali Ramesh Savla W/O Chetan Dand (2855)** **Vasanti Vasant Savla(2856)** **Heman Vasant Savla(2856)** **Kashmira Vasant Savla W/O Mehul Bheda(2856)** **Jasmita Vasant Savla W/O Viral Shah(2856)** **Ramila Kantilal Savla(2857)** **Sanjay Kantilal Savla(2857)** **Sandeep Kantilal Savla(2857)** **Sachin Kantilal Savla(2857)**
Details of Tenant		**Details of Other rights and encumbrances** **3155,**			

Code
1010824122529646

Round Rubber Seal of Mamlatdar Office Mandvi (Kuchchh)

Digitally Signed by:
DS Revenue department 9
Government of Gujarat
Date: 09-12-2024 11:15:58 IST
Mamlatdar office, Mandvi

#Rejected & Disputed *- Cancelled
Status on dt.27-05-2017 12:45:26 effect of last entry given
Courtesy: National Informatics - Science Center, Gujarat State

Copy of Sale/ Received Rs. 5.00/- (in word Rupees Five Only)

MND	
5248	33-44
2024	

VILLAGE FORM NUMBER 7

(Promulgation Entry No.3155 dt.27-05-2017)

243

District : **Kutch**
Taluka : **Mandvi**
Village: **Bada**
Block/Survey Number: **243**
Nature of tenure: **Old Tenure (O.T.)**
Usage of the land: **Agriculture usage**
Name of the field: **Kandhodo**
Other particulars :
Old block/Survey Number: **284/p 2/p 1**
Entry numbers pertaining to old survey number:
176, 500, 706, 707, 2039 I***
Entry numbers of other rights and encumbrances pertaining to old survey numbers:
1065 I***

Proper Land	Area Hec.Are. Sq.Mtr.	Account Number	Area Hec.Are. Sq.Mtrs.	Land Revenue	Entry Numbers and Name of Occupiers
Non-irrigated	0-89-08				3155,
Total Area Shape Rs. Judi & Special Cess Rs. Water Part Rs.	0-89-08 3.40 0.00 0.00	686	0-89-08	3.40	Hariya Hasmukh Ratilal(1711)
Details of Tenant		Details of Other rights and encumbrances 3155,			

Code
1010824122529707

Round Rubber Seal of Mamlatdar Office Mandvi (Kuchchh)

Digitally Signed by:
DS Revenue department 9
Government of Gujarat
Date: 09-12-2024 11:47:39 IST
Mamlatdar office, Mandvi

√

#Rejected & Disputed *- Cancelled
Status on dt.27-05-2017 12:45:05 effect of last entry given
Courtesy: National Informatics - Science Center, Gujarat State

Copy of Sale/ Received Rs. 5.00/- (in word Rupees Five Only)

MND	
5248	34-44
2024	

VILLAGE FORM NUMBER 7

(Promulgation Entry No.3155 dt.27-05-2017)

426

District : **Kutch**
Taluka : **Mandvi**
Village: **Bada**
Block/Survey Number: **426**
Nature of tenure: **Old Tenure (O.T.)**
Usage of the land: **Agriculture usage**
Name of the field: **Shiyawalo**
Other particulars :
Old block/Survey Number: **347**
Entry numbers pertaining to old survey number:
192, 250, 1044, 1045, 2402 I***

Seal of Sub-registrar Mandvi-

Proper Land	Area Hec.Are. Sq.Mtr.	Account Number	Area Hec.Are. Sq.Mtrs.	Land Revenue	Entry Numbers and Name of Occupiers
Non-irrigated	**8-57-56**				**3155, 3688,**
Total Area **Shape Rs.** **Judi & Special Cess Rs.** **Water Part Rs.**	**8-57-56** **2240** **0.00** **0.00**	**225**	**8-57-56**	**22.40**	**Sha Javerbai Vishanji(2402)** **Shah Nayan Vishanji(2402)** **Priti Vishanji W/O Hemant Shah(3688)** **Sonal Vishanji W/O Nilesh Dedhiya(3688)**
Details of Tenant		**Details of Other rights and encumbrances** **3155,**			

Code
1010824122529142

Round Rubber Seal of Mamlatdar Office Mandvi (Kuchchh)

Digitally Signed by:
DS Revenue department 9
Government of Gujarat
Date: 09-12-2024 11:30:48 IST
Mamlatdar office, Mandvi

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#Rejected & Disputed *- Cancelled
Status on dt.17-10-2021 01:05:28 effect of last entry given
Courtesy: National Informatics - Science Center, Gujarat State

Copy of Sale/ Received Rs. 5.00/- (in word Rupees Five Only)

MND	
5248	38-44
2024	

Deed Number **5248** dt.**09-12-2024**
Check List as per Sub-Section-3 of Section-34 of the Registration Act-1908

Sr.No.	Question	Reply (Yes or No)
Questions to be asked to the vendor, consenting person or their Power of Attorney.:-		
1	Is deed of property transfer/sale (sale) of the agriculture/non-agriculture property of (Survey Number/Block Number/T.P. Number/F.P. Number etc.) **347, 426** of revenue village **Bada** as mentioned in the deed executed?	**Yes**
2	Is deed for **85756** Sq. Mt. agriculture/non-agriculture property as mentioned in the deed get done?	**Yes**
3	Is an amount of consideration on details as mentioned in the deed received?	**Yes**
4	Whether we have get executed any kind of agreement, sale, gift of this property to any other previously or not?	**No**
5	Any loan may be taken on said property and is encumbrance thereof is pending at present?	**No**
6	After reading, read over, understanding, details mentioned in the deed thoughtfully, you yourself have put signature/thumb impression on your own, are you accepting the same?	**Yes**
7	Is person issuing power of attorney alive on the date of deed?	**Yes**
8	Whether power of attorney executants have put signature/ thumb impression in the deed of P.O.A. or not?	**Yes**
9	Whether agreement of power of attorney is under execution on the date of deed or not?	**Yes**
10	Have you brought such persons with you who know you to give introduction?	**Yes**
(Questions to be asked to the introductory)		
1	Person(s) writing the deed, who has given agreement, do you know them personally?	**Yes**
2	Name written in the deed and person agreed, are they only one person?	**Yes**
3	Any person has not given agreement by holding false name, are you giving confirmation about that?	**Yes**

Seal of Sub-registrar Mandvi-

Signature of writing person /consenting person/P.A.

1	Sd/- illegible in English	1	Sd/- illegible in English

Signature of introductory

2	Sd/- illegible in English	2	Sd/- illegible in English
3	Sd/- illegible in English	Sd/- illegible S.R.O.- Mandvi Sub-registrar	
4			
5			
6			

MND	
5248	39-44
2024	

Deed Number **5248** dt.**09-12-2024**
Check List as per Sub-Section-3 of Section-34 of the Registration Act-1908

7	---
8	---

Seal of Sub-registrar Mandvi-

MND
2024

MND	
5248	40-44
2024	

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Submitted in Sub-registrar office of **Mandvi** between **13** to **14** o'clock on dated **9th** month **December** of year **2024** by Serial Number **5248**.	Receipt Number:202404600011984 Received Fee: Rs. Paisa Registration Fee: 26000.00 Photo Fee Side/folio(45): 900 Other Fee: 0.00 Total Aggregate Rs. 26900.00

Seal of Sub-registrar Mandvi-

Affixed Photograph of with Thumb Impression

Sha Nayan Vishanji Chhadva

Sd/- illegible in English

Sha Nayan Vishanji Chhadva

Nature of the deed: Conveyance/Sale: Conveyance/Sale
20240912273061017

Sd/- illegible in English
Suthar Maheshbhai Madevbhai
Sub-registrar
Mandvi

Sd/- illegible in English
Suthar Maheshbhai Madevbhai
Sub-registrar
Mandvi

Sr. No.	Name of the deed executor	Address of the deed executor	Name of the power of attorney holder	Address of the power of attorney holder
1	Sha Javerbai Vishanji Chhadva	103, Balaji Sadan, K.A. Subramaniyam Road, S.I.E.S. High School, Matunga, Mumbai 400019	Sha Nayan Vishanji Chhadva	103, Balaji Sadan, K.A. Subramaniyam Road, S.I.E.S. High School, Matunga, Mumbai City (Mumbai City), Mumbai City (Mumbai City, Maharashtra (Mahrastra),400019

Power of attorney holder of the deed executor as above is accepting that, vendors have given in writing this deed.

Sd/- illegible
Suthar Maheshbhai Madevbhai
Sub-registrar
Mandvi

MND
2024

MND	
5248	41-44
2024	

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Sr. No.	Name & address of party	Age	Photograph	Impression of L.H.T.	Sign
Seller 1	Sha Nayan Vishanji Chhadva a power of attorney holder (Section 33) of Sha Javerbhai Vishanji Chhadva 103, Balaji Sadan, K.A. Subramaniyam Road, S.I.E.S. High School, Matunga, Mumbai City (Mumbai City), Mumbai City (Mumbai City, Maharashtra (Mahrastra),400019 PAN NO.ACVPC6857G	51	Computer Photograph print of Sha Nayan Vishanji Chhadva	Computer print of thumb impression of Sha Nayan Vishanji Chhadva	Sd/- illegible in English
Seller 2	Sha Nayan Vishanji Chhadva 103, Balaji Sadan, K.A. Subramaniyam Road, S.I.E.S. High School, Matunga, Mumbai City (Mumbai City), Mumbai City (Mumbai City, Maharashtra (Mahrastra),400019 PAN NO.ACVPC6857G	51	Computer Photograph print of Sha Nayan Vishanji Chhadva	Computer print of thumb impression of Sha Nayan Vishanji Chhadva	Sd/- illegible in English
Seller 3	Priti Vishanji Chhadva W/O Hemant Shah 16, Third Floor, Sunder Villa, Premnagar, J.N. Road, Nr. Apna Bazar, Mulund West, Mumbai City (Mumbai City), Mumbai City (Mumbai City, Maharashtra (Mahrastra),400080 PAN NO.ACVPC6857G	58	Computer Photograph print of Priti Vishanji Chhadva W/O Hemant Shah	Computer print of thumb impression of Priti Vishanji Chhadva W/O Hemant Shah	Sd/- illegible in English
Seller 4	Sonal Vishanji Chhadva W/O Nilesh Dedhiya 602, Parchi Residency, Phase-2, Baner, Pune City, Pune, Pune (Pune), Pune (Pune), Maharashtra (Mahrastra),411045 PAN NO.ABAPD0946M	54	Computer Photograph print of Sonal Vishanji Chhadva W/O Nilesh Dedhiya	Computer print of thumb impression of Sonal Vishanji Chhadva W/O Nilesh Dedhiya	Sd/- illegible in English

Seal of Sub-registrar Mandvi-

Deed writer is admitting to given in writing this deed

MND
2024

MND	
5248	42-44
2024	

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1.	Shahbaz Hasan Bholim Mota Salaya, Mandvi-Kutch, Mandvi (Mandvi), Kachchh (Kutch), Gujarat (Gujarat), 370465	Computer Photograph print of Shahbaz Hasan Bholim	Thumb Impression of Shahbaz Hasan Bholim
2.	Juned Abdulla Chaki Machhipith, Mandvi-Kutch, Mandvi (Mandvi), Kachchh (Kutch), Gujarat (Gujarat), 370465	Computer Photograph print of Juned Abdulla Chaki	Thumb Impression of Juned Abdulla Chaki

They are saying that, the personally knows the seller and giving their introduction.

Seal of Sub-registrar Mandvi-

1. Sd/- illegible in English
2. Sd/-illegible in English

Date: 9th Month December-2024

Sd/- illegible in English
SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

Circular Number:ILR/VHT/347/2014/13001 to 13364

Procedure completed under Section-34, 35, 58 and 59 of Registration Act-1908 since, introducers have given assurance to their introduction and explained on the details of the deeds to Vendor No. **1 to 4** as per Circular Number: ILR/VHT/347/2014/13001 to 13364 of dt.22-05-2015 and Circular Number: ILR/VHT/347/2014/32392 to 32757 of dt.11-11-2011 of Registration Sir Inspector, Guj. St. Gandhinagar **3-3-2020**

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SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

MND
2024

MND	
5248	43-44
2024	

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Form No.1 about deciding market price is submitted
Dt.09-12-2024

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SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

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(1) PAN No./I.G.R. Number is mentioned as per provision of Income Tax Act 1962. Verification thereof has been made.

Seal of Sub-registrar Mandvi-

Seller Number: **1,2,3,4**

Purchaser Number: **1,2,3,4**

Consented person:---

Date: 09-12-2024

Sd/- illegible in English
SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

Certified/self-attested evidences about identification of seller, purchaser and introductory are submitted herewith.
Date.09-12-2024

Sd/- illegible in English
SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

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Original and certified copy of the power of attorney

is submitted.

Date: 09-12-2024

Sd/- illegible in English
SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

Seal of Sub-registrar Mandvi-

Registered vide Number **5248** on Book Number 1

Date: 09-12-2024

Sd/- illegible in English
SUTHAR MAHESHBHAI MADEVBHAI
Sub-registrar
Mandvi

Seal of Sub-registrar Mandvi-

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Page 1 Monday, April 07, 2025
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ANNEXURE R/10

2022 SCC OnLine SC 1469

In the Supreme Court of India

(BEFORE B.R. GAVAI AND B.V. NAGARATHNA, JJ.)

Civil Appeal Nos. 2407-2412 of 2021

State of Uttar Pradesh and Others ... Appellant(s);

Versus

Uday Education and Welfare Trust and Others ... Respondent(s).

With

Civil Appeal Nos. 3144-3146 of 2022
Civil Appeal Nos. 3132-3134 of 2022
Civil Appeal Nos. 3135-3137 of 2022
Civil Appeal No. 3138 of 2022
Civil Appeal Nos. 4061-4062 of 2022
Civil Appeal No. 3141 of 2022
Civil Appeal Nos. 2547-2548 of 2020
Civil Appeal Nos. 3142-3143 of 2022
Civil Appeal Nos. 3147-3149 of 2022

Civil Appeal Nos. 2407-2412 of 2021, Civil Appeal Nos. 3144-3146 of 2022, Civil Appeal Nos. 3132-3134 of 2022, Civil Appeal Nos. 3135-3137 of 2022, Civil Appeal No. 3138 of 2022, Civil Appeal Nos. 4061-4062 of 2022, Civil Appeal No. 3141 of 2022, Civil Appeal Nos. 2547-2548 of 2020, Civil Appeal Nos. 3142-3143 of 2022 and Civil Appeal Nos. 3147-3149 of 2022

Decided on October 21, 2022

The Judgment of the Court was delivered by

B.R. GAVAI, J.:— A For the reasons stated in the applications for impleadment/intervention, the same are allowed.

2. This bunch of appeals challenges the order dated 18th February 2020, passed by the learned National Green Tribunal, Principal Bench, New Delhi (hereinafter referred to as "the learned NGT") in Original Application Nos. 313, 335 and 396 of 2019, thereby quashing and setting aside the notice dated 1st March 2019 issued by the State of Uttar Pradesh for establishing new wood based industries (hereinafter referred to as "WBIs") and also setting aside all the provisional licenses given in pursuance thereof.

3. The appeals also challenge the orders dated 18th March 2020, 2nd December 2020, and 21st December 2020 vide which the review applications filed by the State of Uttar Pradesh and the provisional license holders have been rejected.

4. Civil Appeal Nos. 2407-2412 of 2021 are filed by the State of Uttar Pradesh. The rest of the Civil Appeals are filed by the provisional license holders, who were granted licenses in pursuance of the notice dated 1st March 2019, issued by the State of Uttar Pradesh.

FACTUAL BACKGROUND

5. For the sake of convenience, we will refer to the facts as found in Civil Appeal Nos. 2407-2412 of 2021 filed by the State of Uttar Pradesh.

6. There are series of orders passed by this Court and the Central Empowered Committee (hereinafter referred to as "CEC") appointed by this Court, issuing various

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directions for prohibiting/regulating the felling of trees as well as the establishment of WBIs. We will refer to them extensively in the subsequent paragraphs.

7. In pursuance of the order passed by this Court dated 5th October 2015 in Writ Petition (Civil) No. 202 of 1995 (*T.N. Godavarman Thirumalpad* v. *Union of India*), the Ministry of Environment and Forest and Climate Change ("MOEFCC" for short) issued Wood Based Industries (Establishment and Regulation) Guidelines 2016 (hereinafter referred to as "2016 Guidelines") vide Notification No. S.O. 3456 (E) dated 11th November 2016.

8. Subsequent to the 2016 Guidelines, timber assessment for Trees Outside Forest ("TOF" for short) in the State of Uttar Pradesh for WBIs was done for the period between February 2017 and December 2017 by the Forest Survey of India ("FSI" for short). The FSI thereafter submitted its report, which contains district wise, species wise and diameter class wise number of stems (trees), volume and annual potential production of timber from TOF in rural areas of all the districts of the State.

9. In pursuance of the 2016 Guidelines, the matter was placed before the State Level Committee ("SLC" for short) for grant of licenses to various WBIs. The SLC in its meeting held on 4th May 2018, considered the matter about the grant of licenses to various WBIs after taking into consideration the availability of wood in the State of Uttar Pradesh for determining the amount of timber available for new WBIs. In the said meeting, it was also decided that, in order to determine the correct number of new licenses to be issued to WBIs under different categories against the timber available in the State, a reassessment may be done by the Indian Plywood Industries Research and Training Institute ("IPIRTI" for short).

10. In the meeting of the SLC, held on 7th September 2018, since it was found that the capacity of plywood units is taken as fixed by the 2016 Guidelines, which, in turn, was based on the assessment of IPIRTI, a decision was taken that there was no need for the fresh assessment of the capacity by IPIRTI.

11. In pursuance of the aforesaid decision, E-lottery was held on 12th December 2018 for grant of licenses to various WBIs for the establishment of WBIs in 8 categories. Between 12th December 2018 and 31st December 2018, online letters of offer were issued to 1348 successful applicants. Subsequently, in the months of February and March 2019, provisional licenses were issued to 1215 successful applicants in the 8 categories to set up their WBIs. Subsequent thereto, on 1st March 2019, a notice was issued by the Government of Uttar Pradesh communicating the grant of provisional licenses to the newly selected WBIs.

12. Being aggrieved thereby, Original Application No. 313 of 2019 came to be filed by Uday Education and Welfare Trust before the learned NGT in March 2019. Vide order dated 28th March 2019, the learned NGT directed the State Government to submit a report from the Joint Committee comprising of the representative of Principal Secretary (Forest), U.P. and the Principal Chief Conservator of Forest, U.P. to examine the issues.

13. Being aggrieved by the notice dated 1st March 2019 issued by the State Government, Original Application Nos. 335 and 396 of 2019 also came to be filed by Samvit Foundation and U.P. Timber Association respectively before the learned NGT.

14. In pursuance of the directions issued by the learned NGT, the Joint Committee Report came to be submitted on 3rd August 2019. Vide order dated 6th August 2019 passed in Original Application nos. 313, 335 and 396 of 2019, the learned NGT directed the State Government to review the notice dated 1st March 2019 with regard to the establishment of new WBIs by 1350 units strictly in terms of the judgment of this Court in the case of *T.N. Godavarman* v. *Union of India*. Vide order dated 1st

October 2019, the learned NGT directed the status quo to be maintained.

15. The State of Uttar Pradesh filed an Interlocutory Application No. 732 of 2019 in O.A. Nos. 313, 335 and 396 of 2019, seeking modification of the order dated 6th August 2019 and the order dated 1st October 2019. Vide order dated 18th December 2019, the learned NGT issued directions to the State Government to provide certain data. Subsequently, vide the impugned order dated 18th February 2020, the learned NGT allowed the said Original Applications and quashed and set aside the notice dated 1st March 2019 issued by the State Government for establishing new WBIs and all the provisional licenses given.

16. Being aggrieved thereby, Civil Appeal (Diary) No. 12004 of 2020 was filed before this Court. Vide order dated 26th October 2020, this Court dismissed the said appeals as withdrawn with a liberty to file review application before the learned NGT. Vide orders dated 18th March 2020, 2nd December 2020, and 21st December 2020, the learned NGT rejected the Review Applications.

17. The appellants, therefore, approached this Court being aggrieved by the orders passed by the learned NGT in the Original Applications as well as in the Review Petitions.

SUBMISSIONS

18. We have heard Shri Vikas Singh, Shri P.S. Patwalia and Mr. Rana Mukherjee, learned Senior Counsel appearing on behalf of the State of Uttar Pradesh, Shri V. Giri, Shri Syed Waseem Qadri, Shri V.K. Uniyal, Shri Vinay Navare, Shri V.K. Shukla, learned Senior Counsels, Ms. Prerna Singh, and Mr. Rudraksh Gupta, learned counsels appearing on behalf of the appellants, who were granted provisional licenses. We have also heard Shri Dhruv Mehta and Shri Brijender Chahar, learned Senior Counsels appearing on behalf of the respondent No. 1.

19. Shri Vikas Singh, learned Senior Counsel, submitted that the decision of the State Government to establish WBIs is in accordance with the 2016 Guidelines issued by the MOEFCC. He submits that the timber requirement by 1215 new WBIs, which were issued provisional licenses is only 12.35 lakh cubic meters per year, whereas the total timber available in the State is 80.30 lakh cubic meters per year. It is, therefore, submitted that, as such, the requirement is not even 20% of the total availability of timber. Learned Senior Counsel submitted that the only authorized agency in the country to conduct a survey of the forest as well as TOF is FSI. It is submitted that the object of IPIRTI is not to conduct a survey of either forest or TOF. It is submitted that, as a matter of fact, the learned NGT itself has directed such a study to be conducted by FSI, who has already undertaken similar studies for many States like Punjab, Maharashtra and others. It is submitted that when the survey with regard to availability of timber in the State of Uttar Pradesh was done by the very same agency, the learned NGT fell in gross error in again directing the State Government to conduct such a survey through the FSI.

20. It is submitted that even the MOEFCC had supported the stand taken by the State of Uttar Pradesh and, therefore, the learned NGT ought not to have interfered with the decision of the State Government.

21. Shri P.S. Patwalia, learned Senior Counsel also submitted that the decision of the State Government was in tune with the decision of this Court dated 18th May 2007 and 5th October 2015 passed in Writ Petition (Civil) No. 202 of 1995 (*T.N. Godavarman Thirumulpad* v. *Union of India*). It is submitted that when an expert body like the FSI had done an elaborate study, there was no reason for the learned NGT to have sat in appeal over the same. He further submits that though a detailed affidavit has been filed on behalf of the State of Uttar Pradesh in compliance with the order of the learned

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NGT dated 18th December 2019, regarding the availability of timber, the learned NGT has totally ignored the same.

22. Shri V. Giri, learned Senior Counsel, submits that the learned NGT erred in passing orders which have vitally affected the rights of the citizens who were granted provisional licenses. He submits that the order impugned is totally in breach of the principles of natural justice. It is submitted that, from the perusal of the record, it is clear that the State of Haryana while calculating its requirement for wood also takes into consideration the import from the State of Uttar Pradesh. It is submitted that when there is excess wood available in the State of Uttar Pradesh, there is no reason why the same should be permitted to be exported to the State of Haryana at the cost of entrepreneurs in the State of Uttar Pradesh.

23. Shri Vinay Navare, learned Senior Counsel, submitted that the timber used in the WBIs is from the trees which are agro-based. He submits that though the State of Uttar Pradesh had adopted an elaborate procedure right from June 2018 till the grant of licenses, the applicants before the learned NGT had taken no steps. Shri Navare submits that only after the provisional licenses were issued and 632 out of 1215 WBIs provisional license holders had already been established and commenced operations, the applications were entertained and the orders were passed to the prejudice of the WBIs. It is submitted that Section 19(1) of the National Green Tribunal Act, 2010 (hereinafter referred to as "the NGT Act") mandates following of the principles of natural justice. It is submitted that though the applications for impleadment were made by the WBIs, the applicants were not granted an opportunity of being heard.

24. Shri V.K. Uniyal, learned Senior Counsel submitted that the learned NGT had erred in using the word "allotted". It is submitted that there is no question of allotment of timber to the WBIs and they are required to purchase the same from the open market.

25. Shri V.K. Shukla, learned Senior Counsel submitted that the State Government decided to grant provisional licenses for 8 different categories of WBIs. The requirement of raw material for different categories of WBIs is different. It is submitted that the learned NGT has grossly erred in considering all categories of WBIs together and setting aside the licenses granted to all of them. It is submitted that the said industries are established in pursuance of the National Agro Forestry Policy of 2014 and as such the learned NGT ought not to have interfered.

26. Ms. Prerna Singh, learned counsel appears for the appellants, who have been granted provisional licenses for plywood (press only) category. She submits that for plywood (press only) industries, there is no requirement of consumption of timber directly. It is submitted that initially veneer is manufactured out of round/fresh timber. Veneer then so manufactured is glued and pressed together to manufacture plywood. It is submitted that the learned NGT has considered the requirement of timber as twice the actual requirement. She submits that in the State of Uttar Pradesh, veneer is manufactured in surplus, which is exported to the State of Haryana.

27. Shri Rudraksh Gupta, learned counsel, submits that the learned NGT has failed to take into consideration the report of the National Poplar Commission of India.

28. All the learned counsel appearing on behalf of the appellants, in unison, submit that the original applicants before the Court were not *bonafide* litigants. It is submitted that there are reasons to believe that the proceedings were initiated at the instance of either the existing WBIs in the State of Uttar Pradesh to prevent competition or they were filed at the instance of the WBIs in the State of Haryana who were importing timber from the State of Uttar Pradesh at cheaper rates.

29. Shri Dhruv Mehta, learned Senior Counsel appearing on behalf of the respondent No. 1, on the contrary, submits that this Court has repeatedly held that the principles of sustainable development, the precautionary principle and the polluter

pays principle are to be followed consistently. He raised a preliminary objection on the ground that in view of Section 22 of the NGT Act, the scope of an appeal before this Court could be limited to that of Section 100 of the Civil Procedure Code, 1908. It is, therefore, submitted that unless a substantial question of law is raised, the appeal could not be tenable.

30. Shri Dhruv Mehta submits that this Court vide order dated 12th December 1996 has specifically prohibited the felling of trees in any forest, public or private. He further relies on the report of CEC dated 15th March 2005 to buttress his submission that WBIs can be permitted only if they exclusively use timber derived from poplar and eucalyptus species or agriculture waste products. It is submitted that the said guidelines also specifically provided that if the unit is found to have used any timber other than poplar and eucalyptus whether from a legal source or otherwise, the license granted to the unit shall be liable to be cancelled. He further relies on the report of CEC dated 12th October 2006. He submits that an assessment has to be done on the basis of the district-wise survey about timber availability from the TOF category. He submits that the said report of CEC itself would reveal that the assessment of the State is much less than what was initially projected by the State Government. He submits that unless the timber availability for the new WBIs is assessed and the SLC examines and recommends its approval, it is not permissible to establish new WBIs.

31. Shri Mehta further submits that the report of CEC dated 18th April 2007, accepted by this Court vide its order dated 18th May 2007, would show that the availability of timber for WBIs in the State of Uttar Pradesh is only 45.70 lakh cubic meters per year. Learned Senior Counsel submits that taking into consideration the fact that presently many imported machines from China are being used, the capacity of the existing units has gone much higher and, therefore, the timber which is available in the State of Uttar Pradesh would not be sufficient to meet the demand of the existing industries.

32. Shri Mehta submits that when SLC in its meeting dated 4th May 2018 had decided to get a report from IPIRTI, there was no occasion for it to review its decision in its subsequent meeting dated 7th September 2018. He submits that the Senior Officer of the Forest Department of the rank of Chief Conservator of Forest, Kanpur Division, Kanpur recommended that the report from IPIRTI should be obtained before deciding to issue the new licenses. It is submitted that the letters of the said officer dated 11th September 2019 and 20th April 2018 have been ignored by the SLC.

33. Shri Dhruv Mehta further submits that Annexure-I to the 2016 Guidelines is in contravention of the recommendations of CEC, which takes the requirement of timber for plywood unit as “NIL”.

34. The learned Senior Counsel submits that vide Notification dated 20th July 2012, the State of Uttar Pradesh had notified 7 species of trees in the prohibited category. However, vide another Notification dated 31st October 2017, the said trees were taken out of the prohibited category. The learned NGT had set aside the said Notification of 2017 by order dated 11th September 2018. It is submitted that the said order of the learned NGT has been accepted by the State of Uttar Pradesh and a fresh notification has been issued on 7th January 2020, again bringing the said trees in the prohibited category. The learned Senior Counsel submits that while assessing the availability of timber, the trees under the said prohibited category have also been taken into consideration. He submits that if 20.75 lakh cubic meters is deducted from the availability of the timber, then the timber available in the State would be much less.

35. The learned Senior Counsel further submits that the survey has not been conducted for all the districts and has been conducted only for 30 districts and,

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therefore, the survey itself is erroneous.

36. The learned Senior Counsel further submits that FSI, while conducting the survey, has not taken into consideration the rotation period and, therefore, the survey is erroneous on the said count also. Learned Senior Counsel, in support of his submissions, relies on the judgment of this Court in the cases of *Common Cause* v. *Union of India*[1], *Mantri Techzone Private Limited* v. *Forword Foundation*[2], *Municipal Corporation of Greater Mumbai* v. *Ankita Sinha*[3] and *Pragnesh Shah* v. *Dr. Arun Kumar Sharma*[4].

37. Shri Dhruv Mehta, relying on the judgment of this Court in the case of *Ankita Sinha* (supra), submits that this Court itself has considered the learned NGT to be a special Tribunal and held that it will even have jurisdiction to take suo motu cognizance of the environmental issues. He, therefore, submits that the arguments made on behalf of the appellants with regard to locus are without substance.

38. Shri Vikas Singh, learned Senior Counsel, in rejoinder, submits that the only distinction between the prohibited trees and non-prohibited trees is that the non-prohibited trees can be felled without permission, whereas prohibited trees can be felled only in certain circumstances and only after the requisite permission is granted. He submits that the perusal of the FSI survey would reveal that even after the timber requirement for 1215 new units is taken into count, the State, still, will have 26.36 lakh cubic meters in reserve. He submits that if the new WBIs are permitted, it would result in more farmers going in for agro forestry in the State, which, in turn, will increase the forest cover. It is submitted that said 1215 units are likely to give employment to around 80000 people. Learned Senior Counsel, therefore, submits that the impugned orders deserve to be quashed and set aside.

EARLIER ORDERS OF THIS COURT

39. For appreciating the rival submissions, it will be apposite to refer to certain orders passed by this Court.

40. This Court in the case of *T.N. Godavarman* (supra) passed an order on 12th December 1996. The relevant part thereof is as under:

> "6. Each State Government should within two months, file a report regarding -
>
> (i) the number of saw mills, veneer and plywood mills actually operating within the State, with particulars of their real ownership;
>
> (ii) the licenced and actual capacity of these mills for stock and sawing;
>
> (iii) their proximity to the nearest forest;
>
> (iv) their source of timber.
>
> 7. Each State Government should constitute within one month, an Expert Committee to assess:
>
> (i) the sustainable capacity of the forests of the State qua saw mills and timber based industry;
>
> (ii) The number of existing saw mills which can safely be sustained in the State;
>
> (iii) The optimum distance from the forest, qua that State, at which the saw mill should be located."

41. Vide subsequent order dated 4th March 1997[5], this Court directed thus:

> "6. All unlicensed saw mills, veneer and plywood industries in the State of Maharashtra and the State of Uttar Pradesh are to be closed forthwith and the State Government would not remove or relax the condition for grant of permission/licence for the opening of any such saw mill, veneer and plywood industry and it shall also not grant any fresh permission/licence for this purpose. The Chief Secretary of the State will ensure strict compliance of this direction and file a compliance report within two weeks."

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42. Vide order dated 9th May 2002, this Court constituted CEC for monitoring of the implementation of the orders passed by this Court and for placing non-compliances of the cases before it.

43. Vide order dated 29th October 2002[6], this Court further directed thus:

> "44. No State or Union Territory shall permit any unlicensed sawmills, veneer, plywood industry to operate and they are directed to close all such unlicensed unit forthwith. No State Government or Union Territory will permit the opening of any sawmills, veneer or plywood industry without prior permission of the Central Empowered Committee. The Chief Secretary of each State will ensure strict compliance with this direction. There shall also be no relaxation of rules with regard to the grant of licence without previous concurrence of the Central Empowered Committee.
>
> 45. It shall be open to apply to this Court for relaxation and or appropriate modification or orders qua plantations or grant of licences."

44. Vide order dated 1st September 2006, this Court allowed licenses to be issued to the closed sawmills, Veneer and Plywood units as per availability of timber and eligibility and seniority as per CEC recommendation.

45. In pursuance of the orders passed by this Court, SLC was constituted by the State of Uttar Pradesh for verification and compilation of information about closed WBIs.

46. The FSI conducted its assessment and assessed the annual availability of wood from TOF in the State of Uttar Pradesh at 55.61 lakh cubic meters vide report dated 3rd April 2007.

47. On the basis of the report of the FSI, the SLC assessed the annual availability of timber for WBIs from TOF at 53.01 lakh cubic meters. CEC further reduced the same to 43.70 lakh cubic meters. However, it added 2.00 lakh cubic meters per year as timber available from government forests, and, therefore, assessed the annual availability of timber at 45.70 lakh cubic meters.

48. It is to be seen that in its report itself, the CEC included 17.77 lakh cubic meters of timber from the prohibited species. This Court considered the report of CEC and passed the following order on 18th May 2007:

> "The matters relate to Saw Mills, Plywood and Veneer Units.
>
> The CEC has considered the availability of wood for the industries, which was assessed as 43.70 lakh cu. mt from trees outside forests and 02.00 lakh cu. mt from Government Forests.
>
> It has also assessed the units into four categories.
>
> We accept the CEC's recommendations. The Saw Mills, Plywood and Veneer Units may be permitted, on the basis of the recommendations made by the CEC. Licences may be given by the State Level Committees.
>
> If there are any objections regarding grant of licences, the parties would be at liberty to submit their applications before the CEC for consideration."

49. It could thus be seen that in 2007 itself, this Court had accepted the recommendations of the CEC wherein the CEC had computed the total availability of timber and had also taken into consideration the availability of timber from the prohibited category.

50. Vide order dated 29th February 2008, this court considered the issue regarding the manufacturing of Medium Density Fiber board (MDF) and Particle board in the States of Punjab, Uttarakhand and Karnataka. While considering the same, this Court passed the following order:

> "The matter relates to the manufacturing of Medium Density Fiber board (MDF)

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and Particle Board in the States of Punjab, Uttarakhand and Karnataka. CEC has filed its report and stated that there is a growing trend to use more and more MDF/Particle Board in place of industrial timber. The MDF/Particle Board help in reducing the pressure on natural forests. The lops and tops and small wood available from the plantations of eucalyptus, poplar, etc. raised on the non-forest can be used by MDF/Particle Board plants."

51. In view of the permissions granted by this Court, the licenses were granted to the unlicensed sawmills which were closed on account of the orders passed by this Court taking into consideration the availability of timber between 2007 and 2010. However, it is to be noted that the said licenses were granted only to the units which were closed and not to the new units.

52. The matter again came up for consideration before this Court on 30th April 2010, when this Court passed the following order:

"(II) after meeting the requirement of the licensed wood based industry, the units permitted by this Hon'ble Court and the units whose category is yet to be finalised, the plywood/veneer units falling in category IV may be considered for grant of license to the extent of timber availability and strictly in the order of seniority, subject to the one-time payment of Rs. 9 lakhs per press in respect of the veneer units and compliance of the other conditions that have been stipulated. The one-time payment of penalty will be in addition to the normal licence fee and the other charges, if any, payable to the U.P. Forest Department. As decided earlier, the above said amount should be kept in a designated interest bearing bank account and should be utilized only after the scheme in this regard is approved by this Hon'ble Court;"

53. It could thus be seen that this Court permitted granting of additional licenses if additional timber was found to be available.

54. The CEC in its meeting held on 26th May 2010 with the SLC and representatives of WBIs Associations in the State of Uttar Pradesh, after taking into consideration the capacity of timber for Vertical Band Saw (VBS) sawmill, modified/reduced the value of capacity of timber for VBS sawmills upto 10 Horse Power from 540 to 270 cubic meters per year for the State of Uttar Pradesh in line with other States. As such, additional 9,58,230 cubic meters of timber became available for licenses from 3,549 such VBS units. In view of this position between 2010 and 2015, licenses came to be issued by the State of Uttar Pradesh to unlicensed WBIs, which were closed earlier by the order of this Court, as per the criteria recommended by the CEC and accepted by this Court.

55. The matter again came up for consideration before this Court on 5th October 2015 with regard to WBIs, when this Court passed the following order:

"CATEGORY I - MATTERS RELATING TO WOOD BASED INDUSTRIES:

We have heard Shri Harish Salve, learned *amicus curiae,* Shri Ranjit Kumar, learned Solicitor General of India, Shri K.K. Venugopal, learned senior counsel and other learned senior counsel/counsels. Accordingly, we pass the following orders:

(i) The State Level Committees for Wood-Based Industries ("SLCs") are, subject to the compliance of the prescribed guidelines and procedure, authorized to take decisions regarding the grant of license/permission to the wood-based industries;

(ii) In each State/UT for which the SLC has so far not been constituted, the SLC under the Chairmanship of the Principal Chief Conservator of Forests with a representative of the Ministry of Environment and Forest and Climate Change ("MoEFCC") and an officer of the State Forest Department/Industries

Department not below the rank of the Chief Conservator of Forests/equivalent rank will immediately be constituted;

(iii) The MoEF is authorized to issue appropriate guidelines in conformation with the orders and directions issued by this Court and also the existing guidelines to the SLCs relating to assessment of timber availability for wood-based industries and grant of license/permission to the wood-based industries including addition of new machineries and also utilization of amounts recovered from the wood-based industries and connected matters;

(iv) Any person aggrieved by the decision taken by the SLC may file an appeal before the MoEFCC seeking appropriate relief within 60 days' time. If, for any reason, any person is aggrieved by the orders so passed in the appeal, he may prefer an appropriate petition/application/appeal before the appropriate forum/Court for grant of appropriate relief(s).

We also permit the MoEFCC to condone the delay, if any, in filing an appeal, if sufficient cause is made out by the applicant(s)/appellant(s)"

56. It is thus seen that vide the said order, SLCs were authorized to take decisions regarding the grant of license/permission to the WBIs. Vide the said order, it was also directed to constitute SLC under the Chairmanship of the Principal Chief Conservator of Forest with a representative of MOEFCC and an officer of the State Forest Department/Industries Department not below the rank of the Chief Conservator of Forests/equivalent rank. This Court further directed the SLCs to be constituted in each State/Union Territory for which the SLC was not yet constituted. The MOEF was also authorized to issue appropriate guidelines in conformity with the orders and directions issued by this Court and also the existing guidelines to the SLCs relating to the assessment of timber availability for WBIs. Appeals could be filed before MOEFCC against the decision of the SLC.

MOEFCC GUIDELINES

57. In accordance with the directions issued by this Court vide order dated 5th October 2015, the MOEFCC issued 2016 Guidelines on 11th November 2016. The 2016 Guidelines provided for the constitution of the SLC as well as the powers and functions of SLC. Under clause 4 of the 2016 Guidelines, the SLC was authorised to assess the availability of timber for wood based industrial units in the State/UT every five years. The SLC was also authorised to approve appropriate locations for setting up of wood based industrial units. It was also authorized to approve the name of wood based industrial units which may be considered for grant of fresh license or enhancement of the existing licensed capacity.

58. Clause 5 of the 2016 Guidelines provides for the assessment of the availability of timber for wood based industrial units. It requires that the quantity of timber would be assessed by commissioning the study, preferably in collaboration with institutes/universities of repute, once in five years. Under clause 6 of the 2016 Guidelines, the timber requirement for various units as assessed by IPIRTI was given in Annexure I. The said Annexure I reads thus:

"The Indian Plywood Industry Research and Training Institute (IPlRTI), Bangalore an autonomous body under the Ministry of Environment, Forest and Climate Change has assessed the timber requirement per unit for peeling length of 4 feet and 8 feet size in the plywood/veneer units as 5 cu.mt and 11 cu.mt. respectively per day on an average of 8 working hours per day. By assuming that the peeling units work for 8 hours per day on an average for 300 days in a year the normal timber requirement of the peeling length of 4 feet size in veneer units is 1500 cu.mt. The total timber requirement for the stand alone veneer units may be assessed by calculating the equivalent number of 4 feet length machines and by taking its normal installed capacity as 1500 cu.mt. per annum.

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The timber requirement of a plywood unit may be taken as 'nil' on the ground that the round timber is used as timber in the veneer units only and that the plywood units are the secondary users which use the veneer as the raw material produced by the veneer units. The plywood units use presses of various sizes such as 8 × 4 × 6, 8 × 4 × 12, 8 × 4 × 15, 4 × 4 × 7, 4 × 4 × 10. A 8 × 4 × 10 capacity press can produce upto 10 plywood pieces of 8′ × 4′ size per hour whereas a 8 × 4 × 15 capacity press can produce upto 15 plywood pieces of 8′ × 4′ size per hour and so on. The normative installed capacity of the plywood units will accordingly depend upon the number and the type of presses. This number and type of presses installed in each of the plywood unit may be assessed and thereafter equivalent number or presses of 8 × 4 × 10 capacity may be calculated. The normative annual timber requirement for a integrated plywood unit having a 8 × 4 × 10 capacity press may be taken as 2000 cu.mt. per annum, and accordingly the total requirement of timber for the plywood units should be calculated."

59. It could thus be seen that even as per the assessment of the IPIRTI, the timber requirement of a plywood unit is required to be taken as 'NIL' on the ground that the round timber is used as timber in the veneer units only and that the plywood units are the secondary users which use the veneer as raw material. It could thus be seen that the plywood units use presses of various sizes.

60. In pursuance of the 2016 Guidelines, the SLC was reconstituted in the State of Uttar Pradesh under the Chairmanship of Principal Chief Conservator of Forest/Head of Forest Department on 17th May 2017. Vide Notification dated 11th September 2017, the MOEFCC amended the 2016 Guidelines.

61. Subsequently, in accordance with the 2016 Guidelines, the SLC assessed the availability of timber for WBIs in the State of Uttar Pradesh, through the FSI. For assessing the availability of timber, the FSI conducted a survey and arrived at the annual potential production of timber from TOF in rural areas of all the districts of the State. FSI assessed the annual potential production from TOF at 77.74 lakh cubic meters. Subsequent to the survey and assessment, the SLC in its meeting dated 4th May 2018 considered the matter for grant of license to various WBIs. The SLC decided to get the reassessment done by IPIRTI to determine the correct number of new licenses to be issued to WBIs under different categories against the available timber. However, subsequently, the SLC, in its meeting dated 7th September 2018, found that IPIRTI had not done any new study/assessment of the consumption of timber by various WBIs in any State/Union Territory. It was also found that the State of Haryana had adopted the timber consumption figures based on the CEC figures of 2007. It was therefore unanimously resolved by the SLC that there was no need for any fresh study/assessment for the consumption of timber by WBIs to be conducted by IPIRTI and to adopt the figures for WBIs as were referred to in the 2016 Guidelines. It further found that the CEC in its meeting dated 26th May 2010 had reduced the annual consumption of timber of sawmills upto 10 Horse Power or less HP to 270 cubic meters from 540 cubic meters.

62. On the basis of the decision of the SLC, e-lottery was held. After following the procedure, provisional licenses were issued to 1215 successful applicants in 8 categories of WBIs in February and March 2019. After the issuance of provisional licenses, on 1st March 2019, the State Government issued a Notice with regard to grant of provisional licenses to the newly selected WBIs which came to be challenged before the learned NGT by way of filing the aforesaid Original Applications by the respondents. The learned NGT after passing various interlocutory directions finally passed the impugned order and quashed and set aside the notice dated 1st March 2019 issued by the State Government and provisional licenses given in pursuance

thereof. As such we are required to examine the correctness of the decision of the learned NGT.

CONSIDERATIONS

63. The learned NGT while passing the impugned order has set aside the notice of the State of Uttar Pradesh on the following grounds:

(1) that the WBIs can be allowed to operate only after ensuring timber and raw material availability to sustain such industries and this has to be determined in actual terms and not on mere assumptions;

(2) that it is difficult to accept the stand of the State of Uttar Pradesh that there was availability of timber/raw material to sustain the new WBIs;

(3) that it is the stand of the State of Uttar Pradesh that the total potential availability of timber per year in the State of Uttar Pradesh is 80.30 lakh cubic meters, which includes 2.56 lakh cubic meters from the Government forests and 77.74 lakh cubic meters from TOF. Out of 80.30 lakh cubic meters, 71.8 lakh cubic meters were stated to be available from 22 species and 8.50 lakh cubic meters from the other species. Out of 22 species, there are 10 species that are prohibited from felling and as such, 20.75 lakh cubic meters from these 10 species are liable to be excluded;

(4) that the major contribution is from Eucalyptus (28 lakh cubic meters) and Poplar species (15 lakh cubic meters), a total of which is 43 lakh cubic meters. Thus, the figure is not actual but presumptive;

(5) that the standard error percentage adopted by the FSI is not correct and is much higher;

(6) that the total availability of timber for consumption including that from the government forests would not be more than 40-45 lakh cubic meters per year;

(7) that the potential availability of 77.74 lakh cubic meters from TOF as given in the affidavit has been overestimated.

64. It is to be noted that after this Court allowed the licenses to be issued to the closed sawmills vide order dated 1st September 2006, the SLCs were constituted. The permissions were to be granted on the recommendations of the CEC. Vide order dated 18th May 2007, this Court had also accepted the recommendation of the CEC. Vide another order dated 30th April 2010, this Court permitted additional licenses to be granted if additional timber was available. Accordingly, licenses were granted between 2010 and 2015. Vide subsequent order dated 5th October 2015, this Court allowed the grant of license/permission to unlicensed WBIs in the country. This Court had directed the reconstitution of the SLCs for WBIs. In pursuance of the directions issued by this Court, the 2016 Guidelines were issued by the MOEFCC. As per the 2016 Guidelines, the SLC was reconstituted in the State of Uttar Pradesh on 17th May 2017.

65. One of the duties which was cast upon the SLC was to assess the availability of timber for wood based industrial units in the State. The SLC was to assess the availability of timber by commissioning studies, preferably in collaboration with institutes/universities of repute, once in five years. In accordance with the 2016 Guidelines, the FSI conducted the survey and submitted its report in March 2018. It will be relevant to refer to the relevant part of the Foreword of the said report of the FSI.

> "In the recent past, a number of requests were received for establishment of wood based industries in the state for which the raw material would come from outside the forest areas. Since accurate assessment of TOF is needed for effective planning & management, Uttar Pradesh Forest Department requested FSI to make Agro-Climatic zone wise assessment on the basis of inventory already done during its regular course of inventory conducted in the State. As per the final report, the

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total stems as estimated from the study is 299.43 million with a volume of 79.40 m. cum. The total yield in the Uttar Pradesh is estimated 7.8 million cum.

The report gives an assessment of the growing stock existing outside state forest reserves. The report has also indicated district-wise, species-wise and girth class-wise number of stems and volume in each Agro-Climatic Zone wise of inventoried districts. I am confident that this report would provide useful data for arriving at informed policy and programme interventions to give a fillip to forestry sector in the state besides providing benchmark data for tree crop in non-forest area."

66. After conducting the survey, the FSI has come to a finding that the State of Uttar Pradesh had an annual potential production of 77,74,521 cubic meters of timber. For conducting the survey, the FSI acquired satellite data for the inventoried districts of Uttar Pradesh State from National Remote Sensing Centre, Hyderabad. The entire gambit of scientific methodology was applied. The data processing was carried out independently for all the inventoried districts of Uttar Pradesh. It will be relevant to refer to the following part of the report of the FSI:

"The data processing was carried out independently for all the inventoried districts of Uttar Pradesh. Estimates of stems per ha and volume per ha were generated according to species and diameter class for block, linear and scattered stratum under each district. Estimated stems and their volumes were generated according to species and diameter class by aggregating stem per hectare and volume per hectare over the entire Rural CNF Area of each stratum for each district by combining the estimated stems and volumes under block, linear and scattered stratum. By aggregating the estimates of stems and volume of all the three strata, the estimates of stems and volumes according to species and diameter class has been prepared for Rural area separately."

67. The FSI had also divided the State of Uttar Pradesh into 9 Agro-climatic zones to generate the estimate of growing stock and annual potential production. District-wise production was estimated before concluding that 77,74,521 cubic meters of timber was the annual potential production. The contention of the respondents that the rotation method was not applied is totally incorrect. It will be relevant to refer to paragraph 5.4 of the said report, which reads thus:

"5.4 Estimates of Annual Potential Production of Wood from TOF (Rural)

Yield of a forest depends on several factors such as its structure, growth, density, productive capacity of site etc. The estimate of yield been generated for rural area using growing stock estimates. The Uttar Pradesh Forest Department was supplied the complete list of tree species which were found in the survey. The Uttar Pradesh Forest Department was asked to indicate tree species being used as 'timber' and 'non timber' and rotation period of specified timber species. *The Uttar Pradesh Forest Department informed that they do not have rotation period of all species and requested Forest Survey of India to use their rotation period used for estimation of annual potential production of wood.* The species are arranged into two groups; one containing the species having timber values and another containing rest by agro-climatic zone wise. The yield has been calculated using Von Mentel formula as given below:

Yield= 2GS/R

Where GS : Growing Stock

R : rotation period

Using the information of timber value, growing stock and rotation period in the above mentioned formulae species wise yield were calculated. The Agro-Climatic Zone wise yield has been given in Annexure-11."

[emphasis supplied]

68. The standard error was also determined by applying the appropriate scientific method.

69. The FSI, hence, considered various aspects before concluding and submitting its 101 page report.

70. It could thus be seen that the estimation as arrived at by the FSI was by applying a proper and adequate scientific method.

71. However, it is surprising that the learned NGT has brushed aside such a scientific exercise by merely observing that the figures arrived at were by estimation and not realistic.

72. The FSI has published a paper on "Trees Outside Forest Resources in India". The contributors to the said paper are (1) Dr. Subhash Ashutosh, DG, FSI; (2) Prakash Lakhchaura, DDG, FI, (3) Kamal Pandey, DD, FI; (4) Dr. Sourav Ghose, Proj. Scientist D; (5) Sushila Tripathi; and (6) H.K. Tripathi. The paper shows that the timber and panel products of TOF origin have emerged as the major alternative to timber from forests and thus TOF have significantly obviated pressure from forests. The report shows that, the extent of TOF in the country has been assessed at 29.38 m hectare, which is around 8.94% of the total geographical area of the country. The report further shows that based on the recommendations of the National Commission on Agriculture (NCA, 1976), the Government of India launched a social forestry program in the late seventies on a large scale. The paper further shows that, these days satellite data in a wide range of spectral, spatial, radiometric and temporal resolutions are available from various Remote Sensing Agencies of several countries. It further shows that there has been a rapid advancement in the development of digital image processing software. It, therefore, observes that the desired mapping of natural resources with reasonable accuracy is possible. The report refers to the methodology of assessment of TOF in different countries of the world and refers to various authorities. It refers to different types of methodologies used for different periods; the first one being from 1991 to 2001; the second period being from 2001 to 2016; and the third period being from 2016 onwards. The report shows that the State of Maharashtra has the highest potential annual yield of timber in India followed by the States of Uttar Pradesh and Karnataka.

73. It will be relevant to refer to the conclusion of the said paper, which is as follows:

> "5. Conclusion
>
> TOF play a significant role in the socioeconomic lives of people both in rural and urban areas of the country by enriching the people and society at large economically as well as ecologically. The management of TOF assumes high significance in the country for realizing much higher potential which it offers in generating wood based economy and ecosystem services including carbon sequestration. Periodic assessment of TOF resources including its spatial distribution is prerequisite for its scientific management in the country. FSI is mandated with this task however there is need for continuous improvement in the methodology and inclusion of more number of variables in the assessment. The organization will have to be further strengthened particularly in terms of man power, to address the emerging information needs on TOF. There has been regular refinement in methodologies in the last three decades to quantify TOF resources using various statistical designs and estimates with better precision. The advancement of technologies in the field of remote sensing, satellite image processing and availability of high resolution satellite data made the methodology much precise and easier. The progression of science may further refine the existing method of TOF assessment in near future.
>
> TOF also act as an important source for timber and fuel wood to meet the

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demands of fast growing population of the country. There is a need to put focus on increasing the growing stock per hectare or yield of TOF by better management and planning. There is also a need for a separate policy on TOF to ensure its expansion and sustainable management for multiple ecological benefits, timber production, carbon sequestration and for obviating pressure from the natural forests.

Occupying nearly 9% of the geographical area of the country, TOF are significant natural, renewable resource which make vital contribution to the agro-ecology, socio -economy of the rural areas, environmental amelioration in the urban areas and feed wood based industries with the raw material and thus generate significant employment. TOF form a nearly 38% of the carbon sink in forest & tree cover of the country. TOF offers the path for achieving the national policy goal of 33% of forest & tree cover in the country. Through expansion of TOF, particularly in agro-forestry and on culturable waste lands, India can substantially increase its carbon sink to achieve its international commitments of NDC and LDN by 2030."

74. It could thus be seen that the FSI has also emphasized the need of promoting TOF. It has been observed that TOF are significant natural, renewable resources which make vital contributions to the agro-ecology, socio-economy of the rural area, and environmental amelioration in the urban area and feed WBIs with raw material and thus generate significant employment.

75. It is our considered view that, when the estimation was done by the FSI by applying the scientific method and had arrived at the conclusion based on satellite data, such a report could not have been brushed aside by the learned NGT lightly.

76. Insofar as the finding of the learned NGT that the survey also takes into consideration the prohibited trees, the felling of which is not permissible, it will be relevant to note that the Notification dated 7th January 2020 issued by the Government of Uttar Pradesh provides that the prohibited trees shall not be felled till 31st December 2025 except under unavoidable circumstances, such as when a tree is dead or dying or it constitutes a danger to persons or property, or its felling is necessary for executing development work approved by the Government, or if the fruit bearing capacity of such tree has declined substantially. Such trees cannot be felled unless permission to fell such tree has been obtained in writing from the competent authority. The tree owners are also required to maintain 10 trees in place of each tree felled. It is thus clear that there is no absolute prohibition for felling the trees which are in the prohibited category. However, the same can be done only in exceptional circumstances.

77. It is to be noted that the prohibited trees also include trees like Mango, Jamun, etc. which are fruit bearing trees. After a particular number of years, the fruit bearing capacity of such trees drastically reduces and as such, the farmers normally fell such trees and go in for replantation of the orchard. Apart from that, it is to be noted that the CEC itself approved the availability of timber for the State of Uttar Pradesh in its report dated 19th April 2007, which included 17.77 lakh cubic meters of prohibited trees. The said report of the CEC was approved by this Court vide its order dated 18th May 2007.

78. It is further to be noted that in pursuance of the order of the learned NGT dated 28th March 2019, a Committee of Experts [Joint Committee comprising of representative of Principal Secretary (Forest), U.P. and Principal Chief Conservator of Forest, U.P.] had submitted its report on 3rd August 2019. Not only this, but in pursuance of the directions issued by the learned NGT on 18th December 2019, another detailed affidavit was filed on behalf of the State Government on 21st January 2020, giving therein the details about the availability of timber. It was specifically stated in the said affidavit that eucalyptus and poplar are the main species of TOF and

80% of the wood is derived therefrom. It was further pointed out that the farmers in the State of Uttar Pradesh were not getting remunerative prices and are forced to sell their produce at a very cheap rate mainly to middlemen. It was also pointed out that there would be an expected investment of about Rs. 3000 crore in the State with the establishment of new WBIs. The same would employ more than 80000 people, mostly in the rural areas of the State. However, all these factors have been ignored by the learned NGT.

79. As such, the learned NGT has grossly erred in deducting the availability of timber from the prohibited trees. By now, it is more than settled that the Courts should not enter into an area that is the domain of the experts. FSI, which is undisputedly an expert body, had arrived at its estimation based on the scientific method. The learned NGT could not have sat in appeal over the opinion of the expert.

80. It is relevant to note that MOEFCC, in pursuance of the directions issued by the learned NGT had filed its opinion on 18th December 2019. It will be relevant to refer to paragraph 8 of the said opinion.

> "8. That based on the examination of available documents in light of the provisions of the Wood Based Industries (Establishment and Regulation) Rules, 2016, MoEFCC is of the opinion that the State of U.P. has followed the Wood Based Industries (Establishment and Regulation) Guidelines, 2016 (as amended in 2017) issued by MoEFCC. The availability of wood in the State has also been assessed by the SLC through FSI. The Ministry is, therefore, of the view that the SLC may approve setting up of new industries in the State if it is satisfied that sufficient timber is available legally to run the new wood based industries."

81. The learned NGT has failed to take into consideration the stand of the MOEFCC, which also supported the stand of the State that sufficient timber was available legally to run the new WBIs.

82. Insofar as the contention of the learned counsel for the respondents that, though in the meeting of the SLC dated 4th May 2018, it was decided to get the assessment done by IPIRTI, the SLC in its meeting dated 7th September 2018 did a volte-face and decided not to get the assessment done from IPIRTI, the perusal of the minutes of the meeting of the SLC dated 7th September 2018 would reveal that it was found that the IPIRTI had not done any new study/assessment of the consumption of timber by various WBIs in any State/Union Territory. It was noticed that, as per the report of the FSI, the TOF available was 77,74,522 cubic meters. Adding the timber available in the forest area of 2,57,273 cubic meters, the total quantity of availability of timber was 80,31,795 cubic meters. It is to be noted that the SLC had taken note of the letter dated 29th August 2018 issued by the Director, IPIRTI, where he had communicated that no assessment pertaining to the annual consumption of timber by Veneer and Plywood Industries was undertaken by the IPIRTI during the last two years in any State of the country. It was found that the 2016 Guidelines itself provided for annual consumption of timber based on the report of IPIRTI. In this premise, it was found that there was no need to conduct a fresh study/assessment for the consumption of timber by WBIs by IPIRTI. It was decided to accept the figures as provided in the 2016 Guidelines.

83. It can thus be seen that the decision of the SLC for not getting the assessment done by the IPIRTI is based on sound reasons. When the 2016 Guidelines itself provided for the consumption of timber by WBIs based on the report of the IPIRTI, there was no purpose to again get the assessment done by IPIRTI. The scope of judicial review has been succinctly explained by this court in the case of *Tata Cellular* v. *Union of India*[7], which has been consistently followed in a catena of cases. This Court, in the said case, observed thus:

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"77. The duty of the court is to confine itself to the question of legality. Its concern should be:

1. Whether a decision-making authority exceeded its powers?
2. Committed an error of law,
3. committed a breach of the rules of natural justice,
4. reached a decision which no reasonable tribunal would have reached or,
5. abused its powers.

Therefore, it is not for the court to determine whether a particular policy or particular decision taken in the fulfilment of that policy is fair. It is only concerned with the manner in which those decisions have been taken. The extent of the duty to act fairly will vary from case to case. Shortly put, the grounds upon which an administrative action is subject to control by judicial review can be classified as under:

(*i*) Illegality : This means the decision-maker must understand correctly the law that regulates his decision-making power and must give effect to it.

(*ii*) Irrationality, namely, Wednesbury unreasonableness.

(*iii*) Procedural impropriety.

The above are only the broad grounds but it does not rule out addition of further grounds in course of time. As a matter of fact, in *R.* v. *Secretary of State for the Home Department, ex Brind* [[1991] 1 A.C. 696], Lord Diplock refers specifically to one development, namely, the possible recognition of the principle of proportionality. In all these cases the test to be adopted is that the court should, "consider whether something has gone wrong of a nature and degree which requires its intervention"."

84. Applying the aforesaid principle to the present case, it cannot be said that the decision-making process has been vitiated either on account of illegality, irrationality or procedural impropriety.

85. With regard to the contention of Shri Dhruv Mehta, learned Senior Counsel, that Annexure I to the 2016 Guidelines providing the timber requirement of a plywood unit to be taken as "NIL" is contrary to the CEC recommendations is concerned, we do not find any substance in the said submission. Firstly, 2016 Guidelines have been issued by the MOEFCC in pursuance of the directions issued by this Court dated 5th October 2015. In any case, the raw material for plywood industries is 'Veneer' and the raw material for veneer is 'timber'. We find substance in the contention of the appellants that, if timber is to be considered again as a raw material for plywood, then it will amount to showing the consumption of the same timber more than once, which is, in fact, not consumed. It is not in dispute that veneer is a raw material for plywood, which is derived from timber. The same timber is used for deriving veneer and such veneer, which is used for manufacturing plywood, cannot be counted twice. In any case, as long as the 2016 Guidelines which are issued in pursuance of the directions issued by this Court are not set aside, the contention in that regard is without substance.

86. That leads us to consider the contention of the respondents that this Court has repeatedly emphasized the principles of sustainable development, the precautionary principle and the polluter pays principle. No doubt that the protection of the environment is of utmost importance. It is the duty of this generation to protect the environment for future generations.

CONCLUSION

87. It cannot be disputed that Section 20 of the NGT Act itself directs the learned Tribunal to apply the principles of sustainable development, the precautionary principle and the polluter pays principle. Undisputedly, it is the duty of the State as

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well as its citizens to safeguard the forest of the country. The resources of the present are to be preserved for the future generations. However, one principle cannot be applied in isolation of the other.

88. It is necessary that, while protecting the environment, the need for sustainable development has also to be taken into consideration and a proper balance between the two has to be struck.

89. A body having expertise in the field, i.e. the FSI, upon a scientific study, has concluded that there is sufficient timber available in the State of Uttar Pradesh. Not only that, but the respondents themselves have placed on record a project report on "Study to know the percentage and value of the raw material sourced through U.P. Forests by Plywood and Khair (Kattha) Industries in U.P.". The said report is prepared by RAK Management Consultants on the instructions of the Department of Planning, Economic and Statistics Division, Government of Uttar Pradesh. The said report itself shows that the consultants, during the field survey, observed resentment among the plywood manufacturers against the process of issuing new licenses to the WBIs by the State Government.

90. The report further goes on to show that on average 1500-1700 trucks/tractor trollies of the eucalyptus and popular wood from all over Haryana, Punjab, Himachal Pradesh and Uttar Pradesh go to Yamuna Nagar, Haryana daily. Out of the said trucks/trollies, approximately 300-350 tractor trollies and some other small vehicles per day come from Uttar Pradesh. The report shows that approximately 5 to 6 lakh metric tons of timber per year is exported to Yamuna Nagar. The said material belongs to the western districts of Uttar Pradesh, i.e. Muzaffarnagar, Saharanpur, Shamli, Baghpat and Meerut. It is stated that there is no sufficient market for this produce in the said area. The report further finds that the western districts of Uttar Pradesh, i.e. Meerut, Muzaffarnagar, Saharanpur, Baghpat and Shamli, etc. do not have sufficient number of plywood and veneer units and as such, they are not sufficient for the entire farmers' produce available in the said area. The report itself shows that the western districts need around 80-85 plywood and veneer units. The report goes on further to show that there is dissatisfaction among the already existing industrialists about the assessment made by the FSI.

91. It is further to be noted that the State has specifically pointed out before the learned NGT that on the establishment of WBIs, an investment of about Rs. 3000 crore was likely to be attracted in the State; employment opportunities to over 80000 people will be available and the farmers of the State would get a more remunerative price. This would result in more impetus for large-scale plantation and agro-forestry. The State also emphasized that this will reduce dependence on traditional/cash crops and also reduce migration of people to urban areas. It is also emphasized that if the new WBIs are permitted, it will reduce the import of WBIs produce. However, all these aspects have not been taken into consideration by the learned NGT.

92. It will be relevant to note that the Forest Research Institute, Dehradun, Uttarakhand has published 'Country Report of Poplars and Willows Period : 2012-2015'. The report states that the timber from poplar and willow is the backbone of vibrant plywood, board, match, paper and sports goods industries. The report further states that in tune with Indian Agroforestry Policy 2014, the plantation of poplar has been promoted. It further states that the Planning Commission of India has given special grants to certain States for the diversification of agriculture where farmers are advised to move away from paddy cultivation to sustain agricultural production. Poplar and eucalyptus are among the few trees promoted under this diversification plan. The report states that Poplar plays a significant role in rural development by generating employment for many categories of skilled, semi-skilled and unskilled workers.

93. The paper on "Trees Outside Forest Resources in India" published by the FSI,

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cited supra, also emphasizes that TOF are significant natural, renewable resources which make vital contributions to the agro-ecology, socio-economic improvement of the rural areas, environmental amelioration in the urban areas and feed WBIs with raw material and thus generate significant employment. TOF form nearly 38% of the carbon sink in the forest and tree cover of the country. It states that TOF offers the path for achieving the national policy goal of 33% of forest and tree cover in the country. It states that through the expansion of TOF, particularly in agro-forestry and on culturable waste lands, India can substantially increase its carbon sink to achieve its international commitments of NDC and LDN by 2030.

94. As already discussed herein above, the majority of TOF is from two species, i.e. Poplar and Eucalyptus. These trees are fast growing. If a market is available for the said trees, there will be impetus to the farmers for large scale plantations. The rotation in these species is quite fast. This will, in turn, increase the green coverage. We are of the considered view that the learned NGT has taken a lopsided view. It has failed to take into consideration the concerns expressed by the State. The learned NGT has committed patent error in ignoring the expert's report and sitting in appeal over the same. The learned NGT has also failed to take into consideration the stand taken by the MOEFCC, which supported the stand of the State. As already discussed herein above, the State had emphasized many advantages of granting new licenses to WBIs. It was also emphasized that the timber from the State of Uttar Pradesh was being exported to the State of Haryana. However, none of these aspects have been considered by the learned NGT. We are, therefore, of the considered view that the impugned orders of the learned NGT are not sustainable in law.

95. There is another reason, in our view, why the order of the learned NGT would not be sustainable. Though, on the date on which the review applications were rejected, 1215 provisional licenses were already granted and 633 units had already been established and commenced production, the learned NGT has passed the impugned order which adversely affects their interest. Either some of such industries ought to have been impleaded in their representative capacity or a public notice should have been given so that such license holders could have represented their case. However, the said contention is lightly brushed aside by the learned NGT by holding that, since the issue is related to the general decision of the State which is applicable uniformly to all the proposed provisional licensees, it is not necessary to consider the issue raised in the impleadment applications. It is more than a settled law that the principles of natural justice are required to be followed even in administrative actions when such actions adversely affect the rights of the citizens. When the learned NGT exercised its judicial powers, it could not have ignored the principles of natural justice, which, even under Section 19(1) of the NGT Act, it is bound to follow.

96. Another aspect that needs consideration is that a serious issue was raised before the learned NGT by the appellants herein with regard to the credentials and *bonafides* of the original applicants.

97. When the matter was heard by us, we too made pertinent queries to Shri Mehta and Shri Chahar with regard to the credentials of the applicants before the learned NGT. One applicant is Uday Education and Welfare Trust; the second applicant is Samvit Foundation and the third applicant is U.P. Timber Association. Undisputedly, the U.P. Timber Association was a litigant interested in the litigation. However, insofar as the other original applicants, i.e. Uday Education and Welfare Trust and Samvit Foundation, for whom Shri Dhruv Mehta and Shri Brijender Chahar, learned Senior Counsel are appearing, specific queries with regard to the activities undertaken by the said original applicants were made as to whether they were involved in any activity with regard to the protection of the environment; had they at least been engaged in promoting plantation; what were the aims and objectives of the said original applicants; and what are the sources of funding, etc. Shri Mehta and Shri Chahar,

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learned Senior counsel, fairly submitted that apart from the fact that they (original applicants) had previously filed some public interest litigations wherein orders were passed in their favour, they had no other information.

98. Shri Dhruv Mehta, learned Senior Counsel has rightly relied on the judgment of this Court in the case of *Ankita Sinha* (supra) to submit that the learned NGT is empowered to take suo motu cognizance. This Court has held that, taking into consideration the nature of functions of the learned NGT, it cannot be equated with other Tribunals and in environmental matters, it will also have a power to take *suo motu* cognizance. However, when the credentials and *bonafides* of a litigant approaching the learned NGT are seriously raised, the same cannot be ignored.

99. We find that before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and *bonafides* of the applicants must be tested. In the present case, there is scope to infer that the litigation could be at the behest of the existing WBIs who wanted to avoid competition and continue to get raw material at a cheaper rate. There is also scope to infer that it could be at the behest of the WBIs in the adjoining Yamuna Nagar district of Haryana where lakhs of tons of timber is exported from the State of Uttar Pradesh. There is scope to infer that it could be in the interest of middlemen who are engaged in exporting timber from Uttar Pradesh to Haryana. We would, therefore, only request the learned NGT that, when credentials and *bonafides* of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to adversely affect the rights of many, it should ensure the *bonafides* and credentials of such litigants.

100. Though we are allowing the appeals, setting aside the orders of the learned NGT, and upholding the action of the State Government in granting licenses, we would like to remind the State and its authorities that it is their duty to protect the environment. The State and its authorities should ensure that necessary steps are taken for arresting the problem of declining forest and tree cover. The State and its authorities should make meaningful and concerted efforts to ensure that the green cover in the State of Uttar Pradesh is not reduced and to ensure that it increases.

101. The conservation of forest plays a vital role in maintaining the ecology. It acts as processors of the water cycle and soil and also as providers of livelihoods. As such, preservation and sustainable management of forests deserve to be given due importance in formulation of policies by the State. In this regard, it will be apposite to refer to certain earlier pronouncements of this Court.

(a) In the case of *Samatha* v. *State of A.P.*[8], a three-Judge Bench of this Court after referring to the earlier judgment in the case of *State of H.P.* v. *Ganesh Wood Products*[9] observed that, even while considering the grant of renewal of mining leases, the provisions of the Forest (Conservation) Act, 1980 and the Environment (Protection) Act, 1986 would apply. This Court held that the MOEF and all the States have a duty to prevent mining operations affecting forests. It further observed that, whether mining operations are carried on within the reserved forest or other forest area, it is their duty to ensure that the industry or enterprise does not denude the forest to become a menace to human existence nor a source to destroy flora and fauna and biodiversity. It has further been held that if it becomes inevitable to disturb the existence of forests, there is a concomitant duty upon the State to reforest and restore the green cover and to ensure adequate measures to promote, protect and improve both man-made and natural environment, flora and fauna as well as biodiversity. It further held that there can be no distinction between government forests and private forests in the matter of forest wealth of the nation and in the matter of environment and

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ecology.

(b) In the case of *Essar Oil Ltd.* v. *Halar Utkarsh Samiti*[10], this Court discussed the need for a balance between the economic and social needs and development on the one hand and environment considerations on the other. It was observed that laws on environment should be to create harmony between the two since neither one can be sacrificed at the altar of the other. In this regard, the observations of this Court in the case of *Indian Council for Enviro-Legal Action* v. *Union of India*[11] were quoted as under:

> "While economic development should not be allowed to take place at the cost of ecology or by causing widespread environment destruction and violation; at the same time, the necessity to preserve ecology and environment should not hamper economic and other developments. Both development and environment must go hand in hand, in other words, there should not be development at the cost of environment."

(c) In the case of *Maharashtra Land Development Corporation* v. *State of Maharashtra*[12] reference was made to *Glanrock Estate Private Limited* v. *State of Tamil Nadu*[13] wherein it was observed as under:

> "*27.* …. Forests in India are an important part of the environment. They constitute [a] national asset. In various judgments of this Court delivered by the Forest Bench of this Court in *T.N. Godavarman Thirumulpad* v. *Union of India* (Writ Petition No. 202 of 1995), it has been held that 'intergenerational equity' is part of Article 21 of the Constitution.
>
> *28.* What is intergenerational equity? The present generation is answerable to the next generation by giving to the next generation a good environment. We are answerable to the next generation and if deforestation takes place rampantly then intergenerational equity would stand violated.
>
> *29.* The doctrine of sustainable development also forms part of Article 21 of the Constitution. The 'precautionary principle' and the 'polluter pays principle' flow from the core value in Article 21.
>
> *30.* The important point to be noted is that in this case we are concerned with vesting of forests in the State. When we talk about intergenerational equity and sustainable development, we are elevating an ordinary principle of equality to the level of overarching principle."

(d) Of course, one cannot ignore one of the several dicta of this Court in *T.N. Godavarman Thirumulkpad* v. *Union of India*[14] wherein this Court enunciated the definition of "forest" in the following words:

> "4. The Forest Conservation Act, 1980 was enacted with a view to check further deforestation which ultimately results in ecological imbalance; and therefore, the provisions made therein for the conservation of forests and for matters connected therewith, must apply to all forests irrespective of the nature of ownership or classification thereof. The word "forest" must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2(*i*) of the Forest Conservation Act. The term "forest land", occurring in Section 2, will not only include "forest" as understood in the dictionary sense, but also any area recorded as forest in the Government record irrespective of the ownership. This is how it has to be understood for the purpose of Section 2 of the Act. The provisions enacted in the Forest Conservation Act, 1980 for the conservation of forests and the matters connected therewith must apply clearly to all forests so understood irrespective of the ownership or classification thereof…"

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102. Though we find that for the sustainable development of the State and on account of the availability of the timber, sanction of granting licenses can be permitted to continue, however, as a responsible State, it needs to ensure that environmental concerns are duly attended to. We, therefore, direct the State Government to ensure that while granting permission for felling trees of the prohibited species, it should strictly ensure that the permission is granted only when the conditions specified in the Notification dated 7th January 2020 are satisfied. The State Government shall also ensure that when such permissions are granted to the applicants, the applicants scrupulously follow the mandate in the said notification of planting 10 trees against 1 and maintaining them for five years.

103. In the result, the appeals are allowed. The impugned orders passed by the learned National Green Tribunal, Principal Bench, New Delhi in Original Application Nos. 313, 335 and 396 of 2019 as well as in the Review Applications are quashed and set aside.

104. Pending applications, if any, shall stand disposed of. No costs.

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[1] (2017) 9 SCC 499

[2] (2019) 18 SCC 494

[3] 2021 SCC OnLine SC 897

[4] 2022 SCC OnLine SC 79

[5] (1997) 3 SCC 312

[6] (2008) 16 SCC 337

[7] (1994) 6 SCC 651

[8] AIR 1997 SC 3297 : (1997) 8 SCC 191

[9] (1995) 6 SCC 363

[10] (2004) 2 SCC 392

[11] (1996) 5 SCC 281

[12] (2011) 15 SCC 616

[13] (2010) 10 SCC 96

[14] (1997) 2 SCC 267 : AIR 1997 SC 1228

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Item No.04 Court No.1

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
(THROUGH PHYSICAL HEARING WITH HYBRID MODE)

Appeal No.05/2021/EZ
(I.A. No.78/2021/EZ)

IN THE MATTER OF:

Anand Kumar Jha
Son of Shri Bhalchandra Jha,
Resident of Type-B, Dakra,
Dakra Colliery,
Ranchi .....Appellant(s)

Versus

1. Union of India,
Through its Secretary,
Ministry of Environment, Forests and Climate Change,
Indira Paryavaran Bhawan, Jor Bagh Road,
New Delhi-11003;

2. Jharkhand State Pollution Control Board,
Through its Member Secretary,
H.E.C., Dhurwa,
Ranchi-834004;

3. State of Jharkhand,
Through Chief Secretary,
Project Bhawan, Doranda,
Ranchi-834002;

4. Damodar Valley Corporation (DVC),
Through its Chairman-cum-Managing Director DVC Towers,
VIP Road, Kolkata-700054

.....Respondent(s)

Date of hearing: 15.05.2023

CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER

For Appellant(s) : Mr. Kaustav Dhar, Advocate (in Virtual Mode)

For Respondent(s) : Mr. Apurba Ghosh, Advocate for R-1,
Mr. Ashok Prasad, Advocate for R-2 (in Virtual Mode),
Ms. Aishwarya Rajyashree, Adv. for R-3 (in Virtual Mode),
Mr. Sanjay Upadhyay, Advocate a/w
Mr. Prasun Mukherjee, Advocate and
Mr. Deepak Agarwal, Advocate for R-4

ORDER

1. This Appeal has been filed by the Appellant seeking quashing of the Environmental Clearance dated 28.04.2021 granted to the Respondent No.4, Damodar Valley Corporation (DVC), for Tubed Coalmine Project of 6 MTPA in the District of Latehar, Jharkhand.

2. The contention of the Appellant is that the said mining block is located in an area of 460 ha; the EIA report of the project does not estimate the background concentration of Mercury (Hg) and Chromium (Cr) in Particulate Matter as required by Standard ToR No.15; there is no detailed timeline, maps etc. provided in the EIA report with respect to Additional ToR No.15; no details have been given in the EIA report regarding ecological restoration and mine reclamation plan prepared with local/native species found in the area as was required by Additional ToR No.3; the Palamau Tiger Reserve and other Protected areas are in close proximity to the site of the Tubed Coalmine Project and there is no presence of Schedule-I species which appears to be unlikely.

3. In the present Appeal the Environmental Clearance dated 28.04.2020 is under challenge, as such the Tribunal raised a preliminary objection regarding limitation.

4. Learned Counsel for the Appellant has relied upon the judgment of the Hon'ble Supreme Court dated 23.09.2021 in *Miscellaneous Application No. 665 of 2021 in SMW(C) No. 03 of 2021; Re: Cognizance for Extension of Limitation*. It is mentioned therein that the limitation period has itself been extended by the Hon'ble Supreme Court by the said judgment in cases where limitation would have expired during the period from 15.03.2020 till 02.10.2021.

5. The Respondent No.4, Damodar Valley Corporation, has filed counter-affidavit dated 26.04.2022 wherein a preliminary objection of limitation has been taken. The second ground of objection is whether the Appellant can be permitted to maintain the present Appeal as an 'aggrieved person'.

6. We will first take up the second issue namely as to whether the Appellant can be said to be an aggrieved person within the meaning of Section 16 and 18 of the National Green Tribunal Act, 2010 to entitle him to maintain the present Appeal. Section 16 of National Green Tribunal Act, 2010, reads as under: -

> *"**16. Tribunal to have appellate jurisdiction**-*
> *Any person aggrieved by, -*
>
> *(a) an order or decision, made, on or after the commencement of the National Green Tribunal Act, 2010, by the appellate authority under section 28 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);*
>
> *(b) an order passed, on or after the commencement of the National Green Tribunal Act, 2010, by the State Government under section 29 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);*
>
> *(c) directions issued, on or after the commencement of the National Green Tribunal Act, 2010, by a Board, under section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);*
>
> *(d) an order or decision made, on or after the commencement of the National Green Tribunal Act, 2010, by the appellate authority under section 13 of the Water (Prevention and Control of Pollution) Cess Act, 1977 (36 of 1977);*
>
> *(e) an order or decision made, on or after the commencement of the National Green Tribunal Act, 2010, by the State*

Government or other authority under section 2 of the Forest (Conservation) Act, 1980 (69 of 1980);

(f) an order or decision, made, on or after the commencement of the National Green Tribunal Act, 2010, by the Appellate Authority under section 31 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);

(g) any direction issued, on or after the commencement of the National Green Tribunal Act, 2010, under section 5 of the Environment (Protection) Act, 1986 (29 of 1986);

(h) an order made, on or after the commencement of the National Green Tribunal Act, 2010, granting environmental clearance in the area in which any industries, operations or processes or class of industries, operations and processes shall not be carried out or shall be carried out subject to certain safeguards under the Environment (Protection) Act, 1986 (29 of 1986);

(i) an order made, on or after the commencement of the National Green Tribunal Act, 2010, refusing to grant environmental clearance for carrying out any activity or operation or process under the Environment (Protection) Act, 1986 (29 of 1986);

(j) any determination of benefit sharing or order made, on or after the commencement of the National Green Tribunal Act, 2010, by the National Biodiversity Authority or a State Biodiversity Board under the provisions of the Biological Diversity Act, 2002 (18 of 2003),

may, within a period of thirty days from the date on which the order or decision or direction or determination is communicated to him, prefer an appeal to the Tribunal:

Provided that the Tribunal may, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal within the said period, allow it to be filed under this section within a further period not exceeding sixty days.

7. Section 18 of the National Green Tribunal Act, 2010 reads as under: -

> ***18. Application or appeal to Tribunal-***
>
> *(1) Each application under sections 14 and 15 or an appeal under section 16 shall, be made to the Tribunal in such form, contain such particulars, and, be accompanied by such documents and such fees as may be prescribed.*
>
> *(2) Without prejudice to the provisions contained in section 16, an application for grant of relief or compensation or settlement of dispute may be made to the Tribunal by--*
>
> *(a) the person, who has sustained the injury; or*
>
> *(b) the owner of the property to which the damage has been caused; or*
>
> *(c) where death has resulted from the environmental damage, by all or any of the legal representatives of the deceased; or*
>
> *(d) any agent duly authorised by such person or owner of such property or all or any of the legal representatives of the deceased, as the case may be; or*
>
> *(e) any person aggrieved, including any representative body or organization."*

8. In the paragraph-1 under the heading 'Facts' in the Memo of Appeal the Appellant has described himself as a resident of Village Dakra in Ranchi District of Jharkhand and he *"is stated to be concerned by the environmental impact of the mining activities of the Respondent No.4 in the State of Jharkhand".* It is stated that the Appellant has been observing for the past several years that the air quality in various parts of the State of Jharkhand especially in the region around the coal mines has severely deteriorated due to large number of coal mines in Jharkhand. The Appellant is stated to have observed that due to pollution being caused, there is an

increase in the respiratory illness in the persons residing in the region and he has been raising the issue of pollution and other environmental issues due to coal mines in electronic and other media. It is also stated that the Appellant being a resident of Jharkhand is concerned by the grant of Environmental Clearance to Tubed Coal Mines Project of Respondent No.4 and hence has filed the present Appeal.

9. In our opinion, merely saying that he is concerned with pollution in Jharkhand, the Appellant cannot be said to be a 'person aggrieved' within the meaning of Section 16 and Section 18 of the National Green Tribunal Act, 2010. The Tubed Coal Mines Project of the Respondent No.4 is located in Latehar District of Jharkhand. The Appellant is not a resident of Latehar District nor has he stated that he is a resident of any of the villages which may fall within the area of operation of the Tubed Coal Mines Project of the Respondent No.4. The Project Proponent in its counter-affidavit has stated that the place of residence of the Appellant is about 200 km from the Project site.

10. Among the various issues raised for assailing the grant of Environmental Clearance to the Respondent No.4 one of the grounds taken by him is that 'Public Consultation' was not conducted as per the EIA Notification, 2006 and that the process of 'public consultation' has not been done in the present case while granting Environmental Clearance to the Project of Respondent No.4.

11. Nowhere in the body of the Appeal has the Appellant claimed that he had sought hearing during public consultation as a matter of right but was not given such opportunity. None of the persons who

live in the vicinity of the villages covered by the Tubed Coal Mines Project of the Respondent No.4 are present before this Tribunal to complain that they were not provided opportunity of public hearing and that public consultation was not held as per the EIA Notification, 2006.

12. In this view of the matter, we hold that the Appellant is not a person aggrieved within the meaning word "any person aggrieved" under Section 16 and Section 18 of the National Green Tribunal Act, 2010.

13. Mr. Sanjay Upadhyay, learned Counsel for the Project Proponent submitted that it is also not disclosed in the body of the Appeal other than what has been reproduced hereinabove and which is based upon the Appellant's own disclosure, to show what are his credentials and *bonafides* in approaching the Tribunal. Reliance has been placed on the judgment of the Hon'ble Supreme Court in *Civil Appeal No.2407-2421 of 2021, State of Uttar Pradesh & Ors. vs. Uday Education and Welfare Trust & Anr.*

14. The Hon'ble Supreme Court in *Civil Appeal No.2407-2412 of 2021, The State of Uttar Pradesh & Ors. Etc. Etc. vs. Uday Education and Welfare Trust & Anr. Etc. Etc.* and connected cases, has held that when issues and objections to the credentials and *bonafides* of litigants approaching the National Green Tribunal are seriously raised, the same cannot be ignored. Before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and *bonafides* of the Applicants must be tested. The Hon'ble Supreme Court, therefore, laid stress

that when credentials and *bonafides* of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to affect the rights of many, the National Green Tribunal should ensure the *bonafides* and credentials of such litigants. The Hon'ble Supreme Court also observed that the Tribunal must examine questions as to what were the aims and objectives of the Applicants and what are their sources of funding etc. Merely filing some Public Interest Litigations in the past would not suffice. Paragraphs-96 to 99 of the said judgment read as under: -

> *"96. Another aspect that needs consideration is that a serious issue was raised before the learned NGT by the appellants herein with regard to the credentials and bonafides of the original applicants.*
>
> *97. When the matter was heard by us, we too made pertinent queries to Shri Mehta and Shri Chahar with regard to the credentials of the applicants before the learned NGT. One applicant is Uday Education and Welfare Trust; the second applicant is Samvit Foundation and the third applicant is U.P. Timber Association. Undisputedly, the U.P. Timber Association was a litigant interested in the litigation. However, insofar as the other original applicants, i.e. Uday Education and Welfare Trust and Samvit Foundation, for whom Shri Dhruv Mehta and Shri Brijender Chahar, learned Senior Counsel are appearing, specific queries with regard to the activities undertaken by the said original applicants were made as to whether they were involved in any activity with regard to the protection of the environment; had they at least been engaged in promoting plantation; what were the aims and objectives of the said original applicants; and what are the sources of funding, etc. Shri Mehta and Shri Chahar, learned Senior counsel, fairly submitted that apart from the fact that they (original applicants) had previously filed some public interest litigations wherein orders were passed in their favour, they had no other information.*

98. Shri Dhruv Mehta, learned Senior Counsel has rightly relied on the judgment of this Court in the case of Ankita Sinha and Others (supra) to submit that the learned NGT is empowered to take suo motu cognizance. This Court has held that, taking into consideration the nature of functions of the learned NGT, it cannot be equated with other Tribunals and in environmental matters, it will also have a power to take suo motu cognizance. However, when the credentials and bonafides of a litigant approaching the learned NGT are seriously raised, the same cannot be ignored.

99. We find that before a litigant is permitted to knock the doors of justice and seek orders which have far reaching effects of affecting the employment of thousands of persons, stopping investment in the State, prejudicing the interests of the farmers; the credentials and bonafides of the applicants must be tested. In the present case, there is scope to infer that the litigation could be at the behest of the existing WBIs who wanted to avoid competition and continue to get raw material at a cheaper rate. There is also scope to infer that it could be at the behest of the WBIs in the adjoining Yamuna Nagar district of Haryana where lakhs of tons of timber is exported from the State of Uttar Pradesh. There is scope to infer that it could be in the interest of middlemen who are engaged in exporting timber from Uttar Pradesh to Haryana. We would, therefore, only request the learned NGT that, when credentials and bonafides of such litigants are seriously raised and when entertaining the grievance of such litigants, which is likely to adversely affect the rights of many, it should ensure the bonafides and credentials of such litigants."

15. In the present case, nothing has been indicated by the Appellant as to why he is **only** concerned by the environmental impact of the mining activities of the 'Respondent No.4' in the State of Jharkhand as stated by him in paragraph-1 of the **"FACTS".** What is his source of funding to maintain the Appeal or to take up such

environmental issues has not been disclosed. Assailing the Environmental Clearance, several scientific and technical facts and documents have been referred to by the Appellant; what is his source of funding and source of obtaining such documents, has not been disclosed. Not a single person who may be said to be a resident of any village affected by the mining operation of the Tubed Coal Mines Project of the Respondent No.4 is before us. Therefore, a serious shadow of doubt is cast upon the credentials and *bonafides* of the Appellant to maintain the present Appeal and in our considered view he cannot be said to be a 'person aggrieved' within the meaning of Section 16 and Section 18 of the National Green Tribunal Act, 2010 and, therefore, this Appeal is not maintainable at the behest of the Appellant.

16. The next preliminary issue raised by the Respondent No.4 is with regard to limitation. The Tribunal even on the first date while entertaining the Appeal had raised the issue of limitation and the same had been kept open for decision.

17. Mr. Sanjay Upadhyay, learned Counsel for the Respondent No.4, Damodar Valley Corporation, submitted that though the Environmental Clearance was granted to the Respondent No.4 on 28.04.2020 for 06 million tonnes per annum of the Tubed Coal Mines Project and uploaded on the Website of DVC (www.dvc.gov.in) under the head 'Business' sub-heading 'mining', the recommendations for grant of Environmental Clearance was made in the 51st Meeting of Expert Appraisal Committee on 05.12.2019, the Minutes of which were uploaded on the portal and, therefore, the decision of the Expert Appraisal Committee was already in public domain and, therefore, in the knowledge of the

Appellant whereas the present Appeal has been filed after a delay of almost one and half years challenging the Environmental Clearance granted to Respondent No.4.

18. The learned Counsel has also referred to the provisions of Paragraph-8 of the MoEF&CC Notification dated 14.09.2006 also known as 'EIA Notification, 2006' and submitted that Paragraph-8 provides that the regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the Applicant within forty-five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environmental Impact Assessment Report, and where Environmental Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents.

19. Reference has also been made to Paragraph-8 (ii) which provides that the regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty-five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement and intimation of this decision shall be simultaneously conveyed to the Applicant.

20. Paragraph-8 (i) & (ii) of the EIA Notification, 2006, read as under: -

"8. Grant or Rejection of Prior Environmental Clearance (EC)-

(i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

(ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty-five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days."

21. According to the Respondent No.4, the recommendations for Environmental Clearance was made in the 51st Meeting of the Expert Appraisal Committee on 05.12.2019, Minutes of which were uploaded on the website/portal on 13.12.2019. Under sub

paragraph-(i) of paragraph-8 of the EIA Notification, 2006, the period of hundred and five days (105) would end on 28.03.2020. The period of limitation has been extended by the Hon'ble Supreme Court in view of the outbreak of COVID-19 pandemic in *Miscellaneous Application No.21 of 2022 in Miscellaneous Application No.665 of 2021 in Suo Motu Writ Petition (C) No.3 of 2020, Re: Cognizance for Extension of Limitation* and connected cases, and on 23.03.2020 the Hon'ble Supreme Court directed extension of the period of limitation in all proceedings pending before the Courts and Tribunals with effect from 15.03.2020 till further orders and which has been further extended till 28.02.2022. The present Appeal was filed on 08.10.2021 i.e. within the extended period of limitation and, therefore, the same cannot be said to be barred by limitation.

22. However, since we have already held the Appeal to be not maintainable considering the *bonafides* and credentials of the Appellant we dismiss this Appeal as not maintainable.

23. In view of the above, the Appeal No.05/2021/EZ is dismissed.

24. Interlocutory Applications, if any stand disposed of accordingly.

25. There shall be no order as to costs.

.....
B. Amit Sthalekar, JM

.....
Dr. Arun Kumar Verma, EM

May 15, 2023
Appeal No.05/2021/EZ
(I.A. No.78/2021/EZ)
MN

Item No.03 Court No.1

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
(THROUGH PHYSICAL HEARING WITH HYBRID MODE)

Original Application No.53/2023/EZ
(I.A. No.28/2023/EZ)

Satyabrata Sanjeev Kumar Mohanta Applicant(s)

Versus

MoEF&CC & Ors. Respondent(s)

Date of hearing: 18.07.2023

CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER

For Applicant(s) : Mr. Md. Akram, Advocate (in Virtual Mode)

For Respondent(s) : Ms. Anamika Pandey, Adv. for R-1 (in Virtual Mode),
Mr. Ashok Kumar Parija, Advocate General a/w
Mr. Tarun Patnaik, ASC for R-2 to 6,
Mr. Dipanjan Ghosh, Advocate for R-7,
Mr. Sanjay Upadhyay, Advocate a/w
Mr. Dhananjaya Mishra, Mr. Biswaranjan Sahoo, and
Ms. Mansi Bachani, Advocates for R-8,

ORDER

1. Mr. Md. Akram, learned Counsel holding brief of Ms. Soumya Mishra, learned Counsel is present (in Virtual Mode) for the Applicant.

2. Affidavit dated 15.07.2023 has been filed by Respondent No.8, Private Respondent; the same is taken on record.

3. Counter-affidavit dated 15.07.2023 has been filed by the Divisional Forest Officer, Keonjhar; the same is taken on record.

4. Mr. Dipanjan Ghosh, learned Counsel files Vakalatnama on behalf of the Respondent No.7, Odisha Power Transmission Corporation Limited (OPTCL); the same is taken on record.

5. We have heard the learned Counsel for the parties and perused the documents on record.

6. Final order of the said case will be uploaded in the website by separate sheets of paper.

.....
B. Amit Sthalekar, JM

.....
Dr. Arun Kumar Verma, EM

July 18, 2023,
Original Application No.53/2023/EZ
(I.A. No.28/2023/EZ)
MN

Item No.03 Court No.1

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
(THROUGH PHYSICAL HEARING WITH HYBRID MODE)

ORIGINAL APPLICATION NO.53/2023/EZ
(I.A. NO.28/2023/EZ)

IN THE MATTER OF:

Satyabrata Sanjeev Kumar Mohanta,
Aged about 35 years,
S/o – DambarudharaMohanta,
At- Karadia, P.O. /P.S.- Karanjia,
Dist. –Mayurbhanj,

.... Applicant(s)

Versus

1. **Ministry of Environment, Forest & Climate Change (MoEF&CC),**
Represented through its Secretary,
At- 2nd Floor, Agni Block,
Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi – 110003

2. **Forest, Environment and Climate Change Department,**
Represented through its Secretary,
Government of Odisha,
Kharavel Bhavan,
Bhubaneswar,
Odisha

3. **Divisional Forest Officer (D.F.O.), Keonjhar,**
At- Kamapala Street,
Keonjhar Town, Keonjhar,
Odisha – 758001

4. **Collector & District Magistrate,**
At- Office of the Collector cum District Magistrate,
Collectorate, Keonjhar,
P.O./Dist. – Keonjhar,
Odisha

5. **Divisional Forest Officer (D.F.O.), Bonai,**
At/P.O. - Bonaigarh,
Dist. – Sundergarh,
Odisha - 770038

6. **Collector & District Magistrate, Sundergarh,**
At- District Collectorate, Sundergarh,
Office of the Collector-cum-District Magistrate,
Collectorate Sundergarh,
At/P.O. – Sundergarh,

Dist. – Sundergarh,
Odisha – 770001

7. Odisha Power Transmission Corporation Limited (OPTCL),
Represented through Managing Director,
At – Janpath Road,Gridco Colony,
Industrial Area, Satya Nagar, Bhubaneswar,
Odisha – 751022

8. M/s. Rungta Mines Ltd.
Represented through its Managing Director,
At- Rungta House,Chaibasa,
Dist. – West Singhbhum,
Jharkhand – 833201
And
At – Rungta Mines Ltd.
Main Road, Barbil HO,
Barbil, Dist. – Keonjhar,
Odisha – 758035

And
At- 8A Express Tower,
42A, Shakespeare Sarani,
Kolkata – 700017
West Bengal

.... Respondent(s)

Date of hearing: 18.07.2023

CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER

For Applicant(s) : Mr. Md. Akram, Advocate (in Virtual Mode)

For Respondent(s) : Ms. Anamika Pandey, Adv. for R-1 (in Virtual Mode),
Mr. Ashok Kumar Parija, Advocate General a/w
Mr. Tarun Patnaik, ASC for R-2 to 6,
Mr. Dipanjan Ghosh, Advocate for R-7,
Mr. Sanjay Upadhyay, Advocate a/w
Mr. Dhananjaya Mishra, Mr. Biswaranjan Sahoo, and
Ms. Mansi Bachani, Advocates for R-8,

ORDER

1. The Applicant in the present Original Application is, *inter-alia*, seeking a direction to the Respondent No.8, M/s Rungta Mines Ltd., to comply with the conditions stipulated in Stage-I and Stage-II of the Forest Clearance granted to it and also to pay Environmental Compensation for causing damage to forest land to the Project of 132 KV Transmission Line.

2. The allegation of the Applicant is that the Respondent No.8, M/s Rungta Mines Ltd. was granted Stage-I Approval letter from the Ministry of Environment, Forests and Climate Change, Eastern Regional Office, Bhubaneswar, on 25.06.2020 for diversion of 35.507 hectares of forest land (31.806 hectares of forest land under Keonjhar Division and 3.701 hectares of forest land under Bonai Division) for construction of 132 KV Transmission Line from 132/33KV OPTCL Grid Station, Barbil, Keonjhar to Kamanda Steel Plant of M/s Rungta Mines Ltd. at Village-Kamanda in Sundergarh, Odisha. It is stated that the route alignment for construction of 132 KV Transmission Line from 132/33 KV OPTCL Grid Station, Barbil, Keonjhar to Kamanda Steel Plant of M/s Rungta Mines Ltd. at Village-Kamanda in Sundergarh, Odisha, has been diverted without prior sanction of the Central Government.

3. It is alleged that the User Agency has also changed the layout plan of the proposal without prior approval of the MoEF&CC at Latitude: 22°5'18"N Longitude 85°22'38"E on 28.06.2021 and thus obstructing the elephant movement in violation of the conditions stipulated in Stage-I and Stage-II Forest Clearance. It is also stated that the Elephant Corridor, namely, Karmpada, is situated 7.5 KM from the proposed forest area but the site falls under Elephant Habitat Zone – 2.

4. It is further alleged that as per Condition No. viii of Stage-I Clearance dated 25.06.2020, the base of electric transmission towers in the forest area must be fenced with barbed wire, in addition to installation of spike on the legs of the towers in order to avoid elephant and other wildlife getting electrocuted but the

Project Proponent has not installed spikes and barbed wire on the electric towers in the forest area.

5. It is also alleged that the Project Proponent, Respondent No.8, has resorted to felling of trees, although they were only permitted felling to a minimum number in the diverted forest land and that too after depositing the cost of felling of the trees with the Forest Department.

6. It is also alleged that Condition No. xviii of the Stage-I Clearance also provides that the layout plan of the proposed forest land shall not be changed by the Project Proponent without the approval of the Central Government but the Respondent No.8 in gross defiance of the said conditions has diverted the sanctioned latitude plan without prior sanction of the Central Government for which the State Forest Department, Keonjhar Division, has also lodged an FIR being FIR No. 10 BL of 21/22 on 28.06.2021. The said FIR records that the incident occurred at Sunderabasti, Barbil near Jagada Sahi near Ward No.15 and one Bijay Kumar Pandey and Avimanyu Das have been arrayed as accused persons who happened to be the contractor of the Respondent No.8 and five felled Sal logs were also seized from their possession and also two quintals of fire wood, which have been kept in the custody of Forest Guard, Mr. Malaya Kumar Jena.

7. It is further alleged that though the Forest Department has not handed over its forest land to the Project Proponent, Respondent No.8, to execute its project work but unauthorisedly 133 KV electricity has been supplied by the OPTCL Grid Station, Barbil, Keonjhar to Kamanda Steel Plant of M/s Rungta Mines Ltd.,

Respondent No.8, at Village-Kamanda in Sundergarh, Odisha, on 01.12.2022.

8. The allegation further is that though Condition No.ii of the Stage-I Clearance provides that Compensatory Afforestation shall be raised over 37.281 hectares of non-forest land identified in Plot Nos. 232 (P), 233(P) and 234(P), Khata No. 67 (AAA), Kisam-Parbat of Village-Lungajhar under Banspal Tahasil of Keonjhar District, (32.261 hectare) and Plot No. 1263(P), Khata No. 77, Kissam-Patita of Village-Badabanga under Lephiapara Tahasil of Sundergarh District (5.02 hectares), but so far the User Agency, Respondent No.8, has only deposited the money for Compensatory Afforestation but the State Forest Department has failed to supply plant saplings to the User Agency.

9. It is also alleged that the User Agency, Respondent No.8, was allowed to fell 1359 trees (795 Sound and 564 unsound), 1230 Poles below 30 cm girth as per the letter of the Divisional Forest Officer, Keonjhar, 16.03.2021 but the Respondent No.8 has failed to execute the work process and before Government orders could be passed, the execution of the work has already been started by the Respondent No.8. It is also stated that despite non-compliances of the conditions of the Stage-I clearance, the MoEF&CC has illegally granted Stage-II Approval to the Respondent No.8 on 31.03.2021.

10. The Applicant has sought the following reliefs in the Original Application:-

> *"a. Admit this original application, Issue Notice; and*
> *b. Direct the Opp. Party No.8 to immediately comply the non-complied conditions stipulated under Stage-I & II of the forest*

clearance granted to the user agency/project proponent i.e., M/s Rungta Mines Ltd.

c. Direct the Opp. Party No.8 to give environmental compensation for damaging the forest land due to the abovementioned project of 132 KV transmission line.

d. Direct the Opp. Party No.8 to give environmental compensation for damaging the forest land due to violation of the conditions stipulated under Stage-I & II of the forest clearance.

e. Direct the Opp. Party No.8 to restore the forest land degraded due to the aforesaid project.

f. Direct the Opp. Party No.1 to 7 to conduct a joint inspection in all respect to ensure the compliance of conditions stipulated under Stage-I & II of the forest clearance to avoid further damage to the environment.

g. To take action against the errant Opp. Party No.1 to 7 and to impose heavy penalty on the errant user agency/O.P. No.8 i.e., M/s Rungta Mines Ltd. for violation of Forest (Conservation) Act, and also for violation of para 1.21 of Chapter-1 of Handbook of Guidelines issued under F.C. Act, 1980 vide Ministry's letter No.5-2/2017-FC dated 28.03.2019."

11. The Applicant has also filed **I.A. No.28/2023/EZ**, *inter-alia*, seeking the following interim reliefs:-

"a) Stay/stoppage of the supply of Electricity from OPTCL Power grid Barbil to Kamanda Steel Plant of Rungta Mines Ltd. as the Forest Land has been handed over fraudulently during the pendency of a case for changing the lay out plan without prior sanction of Central Government."

b) Direct stay operation of Kamanda Steel Plant till environmental compensation is adequately paid by the Applicant would suffer irreparable loss and injury, which cannot be compensated otherwise.

c) And pass such any other order as this Hon'ble Court may deem fit and proper."

12. A preliminary objection has been raised by Mr. Sanjay Upadhyay, learned Counsel appearing for Respondent No.8, Project Proponent,

that the present Original Application is not maintainable in view of the provisions of Section 16(e) of the National Green Tribunal Act, 2010 (hereinafter referred to as 'Act, 2010')under which only an appeal could be filed if the Applicant was aggrieved by any order or decision made by the State Government or other authority under Section 2 of the Forest (Conservation) Act, 1980.

13. Section 16(e) of the Act, 2010, reads as under:-

> ***"16. Tribunal to have appellate jurisdiction.-***
>
> *.....xxx.....xxx.....xxx.....xxx.....*
>
> *(e) an order or decision made, on or after the commencement of the National Green Tribunal Act, 2010, by the State Government or other authority under section 2 of the Forest (Conservation) Act, 1980;"*

14. We find that although the Applicant has not challenged any order as such or decision made by the State Government under Section 2 of the Forest (Conservation) Act, 1980, but the sum and substance of the reliefs claimed is a challenge to Stage-I Clearance granted by the Ministry of Environment, Forests and Climate Change, Regional Office, Bhubaneswar, on 25.06.2020 as would be clear from para 7 of the Original Application and also Stage-II Clearance approved by the Ministry of Environment, Forests and Climate Change on 31.03.2021 as stated in para 17 of the Original Application. Paras 7 and 17 of the Original Application read as under:-

> ***"7.*** *That, as per condition no. viii of the Stage - 1 approval letter of MOEF & CC, Eastern Regional Office, Bhubaneswar vide F.No.5 ORC418/2020-BHU, Dated 25.06.2020, the base of electric transmission towers in the forest area must be fenced with barbed wire in addition to installation of spike on the legs of the towers in order to avoid elephant and other wildlife electrocution. But, no electric tower of the said project of Rungta*

Mines Ltd. has been installed with spikes and barbed wire in the said forest area and such gross irregularity and violation of the aforesaid condition no. viii of the Stage - 1 approval letter can be verified and inspected by appropriate authority."

*"**17**. That, on 31.03.2021, the user agency fraudulently managed to get the stage-2 approval of MOEF & CC even though the industry is non-compliant of stage-1 approval of forest clearance."*

15. Learned Counsel for the Applicant submitted that the Applicant was not challenging any order of the State Government under Section 2 of the Forest (Conservation) Act, 1980, and, therefore, the present Original Application is maintainable.

16. However, from the allegations made in the present Original Application, particularly in para 7 and para 17 thereof, we find that under the garb of the reliefs claimed in the Original Application without challenging the order dated 25.06.2020 granting Stage-I Clearance and the order dated 31.03.2021 granting Stage-II Clearance for the Project in question, the Applicant is, in fact, assailing the grant of Stage-I and Stage-II Clearances granted by the Ministry of Environment, Forests and Climate Change and, therefore, in our view, the present Original Application is not maintainable.

17. There is another aspect of the matter which needs to be examined by this Tribunal, particularly in view of the serious objections raised by Mr. Ashok Kumar Parija, learned Advocate General of Odisha assisted by Mr. Tarun Patnaik, learned Additional Standing Counsel appearing for State Respondents, Government of Odisha.

18. Mr. Parija has drawn attention of this Court to para 4 of the affidavit of the Divisional Forest Officer, Keonjhar, dated 15.07.2023, and submitted that the Applicant has not approached

this Tribunal with clean hands. He submitted that in 2021 a PIL being W.P. (C) No.33158 of 2021 had been filed before the Hon'ble High Court of Orissa at Cuttack with the cause title "*Ashirbad Pattnaik & Ors. Vs. State of Odisha & Ors.*", wherein the State Government and certain other private respondents were impleaded as parties. The allegations raised in the said PIL were similar to those raised in another petition, namely, "*Ranjan Panda & Ors. Vs. State of Odisha & Ors.*". Para 7 of that petition has been quoted in para 4 of the affidavit of the Divisional Forest Officer, Keonjhar, to show that what was alleged in the said Writ Petition, which is also extracted herein below:-

"4. .....XXX.....XXX.....XXX.....XXX.....

> *"**7**. That it is also pertinent to mention here that, as per the news reported by the Indian Express dated 03.07.2021 and Oriya Weekly Newspaper, Bartta corroborating their statements with certain live photographs stated therein, that the Rungta Mining Company has cut down numerous amount of trees of the reserve forest area for its personal gain without obtaining the prior permission from the forest department near Jagadasahi Village under Joda Block of Keonjhar district. The aforesaid firm needs power supply of 132 KB electricity line for its proposed project at Kamanda Village under Bonai tehsil of Sundergarh district by utilizing 31 Hectares of forest land and such deforestation is largely affecting the environment of the said mining areas for which the presence of trees is utmost essential. Further, the forest range officer of Barbil enquired about the said activity of the said mining firm, lodged a case against the said mining firm for blatant violation of the forest laws. The above said violation is against the provision of Sec. 2 of the Forest Conservation Act, 1980 which clearly states that for any non-forest activity within forest land, needs prior approval from the Ministry of Environment and Forest and Climate Change (MOEF & CC). But at the instant case the said erring mining*

firm not felt necessary to obtain the said permission before the illegal deforestation activity."

19. It is further stated that the W.P. (C) No. 33158 of 2021 was duly considered by a Division Bench of the Hon'ble High Court and the same was dismissed by the Hon'ble High Court vide judgment and order dated 02.12.2021 with a cost of Rs. 5,000/- (Rupees Five Thousand only) against each of the petitioners (10 in number) totaling Rs. 50,000/- (Rupees Fifty Thousand only). Paras 9, 10 and 11 of the judgment read as under:-

"9. With the above observations, the present writ petition stands dismissed.

10. We would have ordinarily observed something againast the counsel appearing in the case. However, keeping in view the early stages of his career, we refrain from commenting upon his conduct except to advise him to be careful in future and not be a party to such a litigation initiated by unscrupulous litigants.

The Registry is also directed to stringently comply with the rules as indicated hereinabove while dealing with Public Interest Litigations so as to prevent valuable judicial time from being wasted and prevent certain unscrupulous elements from weaponizing petitions in courts of law.

11. We feel constrained to direct the petitioners (10 in number) to deposit cost of Rs. 5,000/- each (totalling Rs.50,000/-) before the Orissa High Court Bar Association Advocates Welfare positively within four weeks from today, failing which Collector, Keonjhar shall proceed to recover the same as arrears of land revenue and ensure the deposit of the recovered amount as stated hereinabove."

20. Thereafter, I.As. were filed by the petitioners therein (in the High Court) seeking expunging of certain portions of the judgment of the Hon'ble High Court dated 02.12.2021 wherein negative connotation had been made against Mr. Sambit Samal, Counsel who was

appearing on behalf of the petitioners in W.P. (C) No. 33158 of 2021 and the said I.As. were also dismissed by a Division Bench of the Hon'ble High Court vide order dated 10.03.2021. Paras 13, 14, 15 & 16 of the order read as under:-

> *"**13**. The observations made in Paragraph 3 and 10 of the judgment dated 02.12.2021 in no way affects the image of the arguing counsel. It was only a note of caution sounded to the counsel so that he may not get involved with unscrupulous litigants. It was merely a reminder on the duty of the counsel to the court and to his profession. The court has, in fact, restrained itself from passing any adverse order considering the petitioner's lesser length of practice at the Bar.*
>
> ***14.** This court makes it clear that in the absence of any disparaging remark made against the counsel for the petitioners, he should take the observations of this Court in the manner in which it was intended, i.e. as a fillip to mould his legal career in a better way in future.*
>
> ***15**. In view of the above, this Court is not inclined to accept the prayer of the petitioners made in the I.As. to effect any change in the judgment dated 02.12.2021 passed by this Court in W.P.(C) No.33158 of 2021.*
>
> ***16**. Accordingly, both the I.As. are dismissed."*

21. Learned Advocate General also submitted that the judgment of the Hon'ble High Court was challenged by the petitioners before the Hon'ble Supreme Court in Special Leave to Appeal (C) No.8637/2022 and the said SLP was dismissed by the Hon'ble Supreme Court vide its order dated 09.09.2022 and the judgment of the Hon'ble High Court was upheld and the Hon'ble Supreme Court observed that the Special Leave Petitions are an abuse of process of Court and the said Special Leave Petitions were

dismissed with cost of Rs. 25,000/- (Rupees Twenty Five Thousand only). The order of the Hon'ble Supreme Court reads as under:-

> ***"UPON hearing the counsel the court made the following***
>
> ***O R D E R***
>
> *Permission to file the Special Leave Petition granted.*
>
> 2. *Delay in refiling the Special Leave Petition is condoned.*
>
> 3. *Application for permission to implead the High Court of Orissa is dismissed.*
>
> 4. *Having heard senior counsel appearing on behalf of the petitioners, we see no reason to entertain the Special Leave Petitions. The High Court was entirely justified in coming to the conclusion that the petition was filed after suppressing the fact that an earlier petition filed by the same advocate had been dismissed as withdrawn. The subsequent petition contains substantially the same averments. The Special Leave Petitions are an abuse of process. We accordingly dismiss the Special Leave Petitions with costs quantified at Rs.25,000, which shall be paid to the Supreme Court Bar Association within four weeks.*
>
> 5. *Pending application, if any, stands disposed of."*

22. Learned Advocate General further submitted that the address given by the Counsel for the present Applicant Ms. Soumya Mishra, has upon verification been found to be the same as that of Mr. Sambit Samal, the Counsel who had filed the PIL being W.P. (C) No. 33158 of 2021 before the Hon'ble High Court of Orissa, as being 552/t/13, Friends Colony, B.K. Road, P.O.-Buxi Bazar, P.S.-Mangalabag, District-Cuttack, Odisha, Pin – 753001, as stated in the affidavit of the Divisional Forest Officer, Keonjhar, dated 15.07.2023.

23. This fact has not been disputed by Mr. Md. Akram, Counsel holding brief of Ms. Soumya Mishra. Even the photocopy of the

registered post on record, filed with the affidavit of service, mentions the address of Ms. Soumya Mishra as 'Friends Colony.'

24. In this view of the matter, the submission of Ashok Kumar Parija, learned Advocate General as well as Mr. Sanjay Upadhyay, learned Counsel appearing for Respondent No.8, is that the present Original Application has been originated in the same chamber as that of Mr. Sambit Sambal, though under the name of different parties and in the name of a different Counsel which amounts to a fraud upon the Court and also amounts to abuse of process of Court.

25. Ms. Soumya Mishra, learned Counsel who has filed the present Original Application is not present today. Mr. Md. Akram's Vakalatnama is on record and he is present today and has been heard. As we have already noted hereinabove Mr. Akram could not dispute either the legal position as to the non-maintainability of the present Original Application or the fact of dismissal of the PIL WP (C) No.33158 of 2021 and allied cases by the Hon'ble High Court of Orissa as well as dismissal of SLP (C) No. 8637 of 2022 by the Hon'ble Supreme Court.

26. We are, therefore, satisfied that not only is the Original Application not maintainable but the same is an abuse of process of Court in view of the order passed by the Hon'ble High Court of Orissa at Cuttack and the Hon'ble Supreme Court.

27. In view of above, the Original Application No.53/2023/EZ is accordingly dismissed with a cost of Rs. 10,000/- (Rupees Ten Thousand only) against the Applicant, Satyabrata Sanjeeb Kumar. The amount of cost shall be deposited by the Applicant with the Ld. Registrar, National Green Tribunal, Eastern Zone Bench, Kolkata,

within one week from the date of this order. In case the Applicant fails to deposit the amount of cost with the Ld. Registrar, National Green Tribunal, Eastern Zone Bench, Kolkata, the same shall be recovered from him by the Collector & District Magistrate, Keonjhar, in accordance with law and the same shall be deposited with the Ld. Registrar, National Green Tribunal, Eastern Zone Bench, Kolkata.

28. Let a copy of this order be also forwarded to the Collector & District Magistrate, Keonjhar, for due compliance.

29. I.As. if any, stand disposed of accordingly.

.....
B. Amit Sthalekar, JM

.....
Dr. Arun Kumar Verma, EM

July 18, 2023,
Original Application No.53/2023/EZ
(I.A. No.28/2023/EZ)
AK

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2013 SCC OnLine NGT 31

National Green Tribunal New Delhi
(Principal Bench)
(BEFORE V.R. KINGAONKAR, J.M., U.D. SALVI, J.M. AND P.S. RAO, E.M., RANJAN CHATTERJEE, E.M. AND BIKRAM SINGH SAJWAN, E.M.)

Rana Sengupta 52/D/9/4, Babu Bagan, Dhakuria Kolkata-700031 West Bengal ... Appellant;

Versus

1. Union of India Through the Secretary, Ministry of Environment and Forests Paryavaran Bhawan, CGO Complex Lodhi Road New Delhi 110003
2. State of West Bengal Through its Secretary Department of Environment Block G, 2nd Floor, Writers Building Kolkata West Bengal
3. M/s Rashmi Metaliks Limited Having its registered office at Village Gokulpur P.O. Shyamraipur, P.S. Kharagpur District Paschim Mednipur West Bengal
4. West Bengal Pollution Control Board Through its Member Secretary Paribesh Bhawan 10A, Block LA, Sector III, Bidhan Nagar Kolkata-700098 West Bengal ... Respondents.

Appeal No. 54/2012

Decided on March 22, 2013

(Advocates appeared: Mr. M.P. Jha, Advocate for the Appellant. Mr. Vikramjeet, Advocate for Respondent No. 1, Mr. Bikas Kar Gupta, Advocate for Respondent No. 2, Mr. Pawan Upadhyay, Advocate for Respondent No. 3 and Mr. Amit Agrawal, Advocate along with Ms. Asha Nayar Basu, Advocate for Respondent No. 4)

JUDGMENT

1. This Appeal is filed by one Rana Sen Gupta, who claims to be a public spirited citizen-working for welfare of people, particularly for those whose concerns might otherwise would remain un-represented. He challenges the order of Environmental Clearance (EC) granted by the Respondent No. 1 (MoEF) vide communication dated 01.06.2012 in favour of Respondent No. 3 (Rashmi Metaliks Ltd.). The EC is granted for expansion of existing Steel Plant by adding 1.5 million TPA Beneficiation cum Pellet Plant to produce 1.2 MTPA pellets with Producer Gas Plant by the Respondent No. 3 (Rashmi Metaliks Ltd.,) referred to hereinafter as “Project Proponent”.

2. Admittedly, the Project Proponent was granted EC dated 12.06.2008 for its project of Steel Plant of 5 lakh T.P.A. capacity. The Project Proponent desired to manufacture steel billets etc. within the limit of 5 lakh TPA. So, the Project Proponent submitted a proposal to the W.B. Pollution Control Board (Respondent No. 4). The Respondent No. 4 (W.P.C. B) granted consent to establish the project on 02.02.2009. Thereafter, the Project Proponent sought further consent of Respondent No. 4 to establish and operate a manufacturing plant of TMT Rods upto 9600 tons per month. The Respondent No. 4 granted consent to establish the said unit on 18.05.2009 and also granted consent on 15.7.2010 to operate the unit. So also, the Respondent No. 4 granted consent dtd. 23.12.2010 to manufacture of pellets as sought by the Project Proponent, to the extent of 15,500 tons per month.

3. Undisputedly, the Project Proponent again desired to manufacture Ductile Iron

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Pipes to the extent of 2 lakh T.P.A. The Project Proponent accordingly applied for necessary permission. The Respondent No. 4 (WB PCB) granted necessary permission to install Ductile Iron Pipe production unit vide permission letter dated 09.10.2009. The Respondent No. 4 granted consent to establish the project of Ductile Iron Pipe as per the proposal of the Project Proponent vide communication dated 11.11.2009. Subsequently, the Respondent No. 4 granted consent to operate the said production unit on 12.01.2011. Thus, the Project Proponent was manufacturing 1,86,000 Tonnes of pellets, 1,15,200 Tonnes of TMT Rods along with 1,41,996 Tonnes of Ductile Iron Pipes. Comprehensively considered, the total production capacity of all those products comes to 4,43,196 TPA. Obviously, it was below the permissible limit of 5,00,000 T.P.A. which was permissible in accordance with the EC that was originally granted by the Respondent No. 1 (MoEF) on 12.06.2008.

4. The Project Proponent desired to expand the industrial activity by adding 15,00,000 T.P.A. Beneficiation cum Pellet Plant with producer Gas Plant. The expansion could not be done without further EC of the Respondent No. 1. Therefore, the Project Proponent submitted a fresh proposal to the Respondent No. 1 for grant of EC to the proposed expansion. The proposal was considered by the Respondent No. 1. ToR was issued by the Respondent No. 1 on the basis of Environmental Impact Appraisal/Assessment (EIA). It was followed by public hearing held under Chairmanship of Additional District Magistrate, Paschim Medinipur (W.B.) on 11.11.2011. A representative of the Project Proponent narrated the draft proposal and described the project details. The Respondent No. 1 considered the viability of the project after the public hearing, appraisal was done and thereafter the EC was granted to the Project Proponent vide the impugned communication dated 01.06.2012 for expansion of capacity to an additional 1.5 Million T.P.A. Beneficiation cum Pellet Plant. Feeling aggrieved, the Appellant has preferred the Appeal.

5. The Appellant has come out with a case that the Project Proponent concealed information regarding the Ductile Iron Pipe Plant that was being operated prior to the proposed expansion. The Respondent No. 1 (MoEF) failed to consider that the Project Proponent had omitted to include the pre-existing Ductile Iron Pipe Plant in the EIA Report which was presented before granting the impugned EC. The MoEF also failed to consider the fact that the Project Proponent did not submit Environmental Impact Assessment (EIA) report, taking into account the impact of pre-existing Ductile Iron Pipe Plant and therefore, the proposal for the expansion of project in question, was improper. The information furnished by the Project Proponent was misleading and incorrect. The Appellant further alleges that the proposal should have been rejected in view of deliberate concealment by the Project Proponent of the information pertaining to existence of the previous Ductile Iron Pipe Plant. He seeks to rely upon Para 8(vi) of the Notification issued by the MoEF on 14.09.2006. Though, challenge of the EC granted to the earlier Ductile Iron Pipe Plant had failed due to dismissal of Appeal No. 32/2011 filed by the Appellant, yet comprehensive impact on environment ought to have been considered and particularly element of concealment of information by the Project Proponent ought to have been considered as substantial reason to reject the proposal. The enhanced emission of carbon-di-oxide due to the proposed expansion of the industrial activity would cause irreparable damage to the eco-system and the environment of adjoining area and adversely affect the health of public. But these aspects are overlooked by the Respondent No. 1. The previous EC granted by the SEIAA to the Project Proponent also was illegal and improper. The Appellant further states that the Project Proponent has not provided for adequate green belt as per the conditions enumerated in the EC granted in the past and, therefore, the proposed expansion of the project should not have been allowed by the Respondent No. 1.

6. By filing separate counter affidavits, the Respondents resisted the Appeal. They submitted that the grant of EC for manufacturing project of 2 lakh T.P.A. capacity on

09.10.2009 cannot be challenged by the Appellant. They submitted that dismissal of Appeal No. 32/2011 filed by the Appellant has now sealed the issue regarding grant of said EC for the Ductile Iron Pipe Plant. They submitted that now the Appellant is trying to mix-up the issue pertaining to the earlier EC with that of the impugned EC for expansion of the project. They further submitted that there was no concealment of any fact by the Project Proponent. They submitted that the expansion of the industrial activity falls within the project/activity item 3(a) of the Schedule appended to the MoEF Notification dated 14.09.2006 and as such the assessment/appraisal was done as required under the relevant regulations. They further submitted that the expansion of the project is legal and proper. They denied truth into the allegation that the conditions of the previous EC were violated by the Project Proponent. Consequently, they sought dismissal of the Appeal.

7. In addition, the Project Proponent alleges that the Appellant has no *locus-standi* to file the present Appeal. It is alleged that the Appellant cannot be treated as "aggrieved person". It is also submitted that the Appellant is unconcerned with the environmental impact of the project in question. It is pointed out that the Appellant is inhabitant of Dhakuria, Kolkata whereas the project is situated at village Gokulpur (District Paschim Mednipur). According to the Project Proponent, the Appellant is a busybody and has filed the Appeal without there being any element of so called public interest or alleged concern for environmental damage or public welfare. On these premises, the Project Proponent and other respondents sought dismissal of the Appeal.

8. We have heard Learned Counsel for the parties in *extenso*. We have carefully gone through the record.

9. Mr. M.P. Jha, Learned Counsel for the Appellant argued that the impugned grant of Environmental Clearance is bad in law for the reason that the Project Proponent concealed the fact that a Ductile Iron Pipe Plant was already being operated in the same premises. He argued that the Project Proponent obtained EC from the SEIAA of W.B. for expansion of the industrial activity, in the context of the Ductile Iron Pipe Plant (DIPP) which, in fact, could not have been granted because such project falls within category 'A' of Schedule appended to the Notification of MoEF issued on 14.09.2006. According to him, Para 8(vi) of the Said Notification provides for cancellation of the previous EC or rejection of the proposed EC where there is deliberate concealment and/or false submission or misleading information. The Application of the Project Proponent was, therefore, liable for rejection. He argued that the environmental impact ought to be comprehensively considered having regard to pre-existing industrial projects which were already made operational in the same area. He would submit, therefore, that the impugned grant of EC is invalid and is liable to be quashed.

10. Mr. Pawan Upadhyay, Learned Counsel for the Respondent No. 3 (Project Proponent) submitted that there is no concealment of any important information while seeking the EC for the expansion of the industrial activity by adding 1.5 million T.P.A. Beneficiation cum Pellet Plant including production of 1.2 million T.P.A. Pellets with Producer Gas Plant. He contended that there was no additional load, in any manner, on the environment because the expanded project was not likely to produce any obnoxious substance in as much as the quantity of effluent discharge was "NIL". He argued further that the Appellant purposefully attempted to mix-up the issue pertaining to grant of EC for setting up steel plant of 5 lakh TPA and the subsequent permission for expansion of the industrial activity by installation of Ductile Iron Pipe Plant for manufacturing 2 lakh TPA Ductile Iron Pipe Plant. He contended that the installation of Ductile Iron Pipe Plant falls in category 'B' under the project/activity 3 (a) of Schedule of the Environment Clearance Regulations, 2006 and therefore, necessary clearance was sought from the SEIAA of W.B. He pointed out that the said

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EC is not the issue involved in the present appeal. For, it is no more *res-integra* in view of dismissal of previous Appeal No. 32/2011 by this Tribunal. He contended that the grounds shown in the Memorandum of Appeal are carved out only with a view to raise some kind of challenge to the EC granted for expansion of the project notwithstanding the fact that the Appellant failed to raise any such issue during the course of public consultation process. It is argued that the Appellant has absolutely no concern with the environmental issues nor is he affected by the grant of EC in question. It is argued further that the Appellant cannot be termed as "aggrieved person" and as such has no *locus-standi* to prefer appeal under Section 16 of the National Green Tribunal Act, 2010 (for short, NGT Act). It is argued that the appeal is unfounded, filed with ulterior motive and deserves dismissal with exemplary costs.

11. Learned Counsel, Mr. Vikramjeet, Mr. Bikas Kar Gupta and Mr. Amit Agrawal appearing for Respondents No. 1, 3 and 4, respectively, adopted similar stance in keeping with the contentions of Mr. Pawan Upadhyay. They submitted that the Appellant is a busybody and has unnecessarily filed such a baseless litigation. So they too sought dismissal of the Appeal.

12. Having heard Learned Counsel for the parties, in our opinion, the following points arise for the purpose of deciding the appeal. They are:—

(i). Whether the Appellant is "aggrieved person" and has *locus-standi* to prefer the appeal?

(ii). Whether the Project Proponent concealed any material information or furnished false or misleading information deliberately, during the course of screening, scoping or appraisal of the expansion project which ought to have been considered as a reason for rejection of the application for EC to expand the project or cancellation of prior EC already granted for installation of Ductile Iron Pipe Plant?

(III). Whether the impugned grant of EC for expansion of the steel plant by adding 1.5 million TPA Beneficiation cum Pellet Plant and the Gas Plant is otherwise illegal as it would add more pollution burden and tantamounts to unsustainable development?

Re: Point No. (i)

13. So far as *locus-standi* of the Appellant is concerned, it would be appropriate to examine what he has pleaded in the Memorandum of Appeal. He alleged that although he has no personal interest in the matter, yet because he is working for the welfare of the people, particularly for those whose concern might have otherwise remained unrepresented, he is aggrieved. Secondly, he states that he has been raising the issue of non-compliance of environmental norms by the Project Proponent and had filed earlier Appeal No. 32/2011 with a view to stall installation of Ductile Iron Pipe Plant Project. He says that he is a public spirited citizen with working experience in steel and iron industry and has full knowledge of the impact of these industries on ecology, environment and human lives. These are the reasons given by him to demonstrate that he is competent to file the appeal.

Section 16 of the NGT Act, 2010 provides appellate jurisdiction to the Tribunal. The opening words of Section 16 go to show that "any person aggrieved" by order made granting EC can prefer appeal under Section 16(h) of the NGT Act, 2010. The expression "person aggrieved by" imply some or other reason which might have aggravated the person to undertake the legal remedy. Such a person must demonstrate that he is directly or indirectly concerned with the adverse environmental impact which is likely to be caused due to granting of EC by the competent authority. The Appellant, admittedly, resides at Babu Bagan, Dhakuria area of Kolkata. The main project and expansion area of the subsequent project is situated at Shyamraipur (District Paschim Medinipur). It is not the case of the Appellant that he has any

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property in the adjoining area of village Shyamraipur. It is not his case that he is personally adversely affected due to the installation of the expansion project in question. He vaguely states that he is a public spirited citizen with experience of working with steel and iron industries and has full knowledge of the impact of these industries on ecology, environment and human lives. He vaguely proclaims that he is working for the welfare of the people and particularly who have remained unrepresented.

14. We do not find any tangible material which would plausibly show that the Appellant has credentials as expert in the field of steel and iron industries and we are at a loss to know in what manner he is working for the welfare of unrepresented members of the public. It is not his case that he represents any NGO. His self-proclaimed status as "public spirited citizen" is of no much avail. There is absolutely no record to show that he participated in the public consultation process and raised any issue regarding the environment or socio-economic adverse impact on account of establishment of the proposed project. The only reason that he has unsuccessfully preferred Appeal No. 32/2011 against granting of earlier EC for production of Ductile Iron Pipe Plant is of no much significance and is irrelevant. Moreover, that appeal came to be dismissed and there is no finding of this Tribunal that the Appellant is to be treated as "an aggrieved person". Considering forgoing discussion, we have come to the conclusion that the Appellant has no locus-standi to prefer the present appeal. He cannot be treated as an aggrieved person and the appeal filed by him cannot be entertained. This answers the point No. 1.

Re: Point No. (ii)

15. Now, it is to be borne in mind that the Project Proponent (R-3) was, admittedly, granted Environmental Clearance vide communication dated 12.06.2008 for installation and of operation of the steel plant for 5 lakh million TPA, MBF-SMS. The proposal for setting up of such steel plant was approved by the MoEF. The total land to be utilized for setting up of the steel plant is 188 acres. What appears from the record is that the Project Proponent did not fully utilize the production capacity of 5 lakh TPA when the plant was made operational at the initial stage. The Project Proponent expanded the industrial activity after submitting application dated 17.06.2009 to the Department of Environment, Government of W.B., Kolkata. The appraisal was done by the State Level Expert Appraisal Committee (SEAC). Thereafter, recommendation was made to the State Environmental Impact Assessment Authority (SEIAA). The SEIAA accorded Environmental Clearance to the expansion of the project in accordance with the MoEF Notification dated 14.09.2006. Copy of the communication dated 09.10.2009 (Annex-R-1) filed with affidavit of the Respondent No. 2 reveals that the Project Proponent categorically stated that the Environmental Clearance was needed for installation of Ductile Iron Pipe Plant for manufacturing of Ductile Iron Pipes to the extent of 2 lakh TPA at the existing unit (Kharagpur). Obviously, the expansion was within limit of the production capacity (5 lakh TPA) for which Environmental Clearance was accorded by the MoEF in 2008.

16. The contention of the Appellant that such expansion of the project activity ought to have been brought to the notice of the MoEF when the further expansion was sought vide communication dated 19.11.2011 and dated 12.03.2012 is untenable. Such omission cannot be treated as deliberate concealment of any material information which would necessarily entail cancellation of the prior Environmental Clearance granted to the Project Proponent or rejection of the subsequent application for expansion of the project in question. The Appellant seeks to rely on Regulation 8 (vi) of the Environmental Clearance Regulations, 2006. The relevant regulation may be re-produced for ready reference as shown below:—

"8.

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(i). xxxxxxxxxxxxx
(ii). Xxxxxxxxxxxxx
(iii). Xxxxxxxxxxxxx
(iv). Xxxxxxxxxxxxx
(v). xxxxxxxxxxxxx
(vi) "*Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant and following the principles of nature justice*."

Perusal of the above regulation goes to show that such drastic action will be called for only when it is noticed that there is deliberate concealment or submission of false or misleading information to the MoEF in the process of screening, scoping or appraisal or decision of an application. We do not find any such concealment made by the Project Proponent when the expansion of the project in question was sought. The earlier Environmental Clearance for installation of Ductile Iron Pipe Plant, approved by the competent authority of Department of Environment, W.B. was within approved capacity of 5 lakh TPA. That approved project was also to be established in the same campus of 188 acres. The Appellant could not pinpoint as to how it was necessary for the Project Proponent to give details of such earlier Environmental Clearance accorded after the Environmental Clearance dated 12.06.2008. There is no provision under the regulation which makes it incumbent on the Project Proponent to give details of the earlier approved expansions sought within the permitted limit of the project which was initially granted by the MoEF.

17. Another limb of the argument advanced by the Learned Counsel for the Appellant is that the production of the Ductile Iron Pipes vide the second expansion approved by the SEIAA on 09.10.2009 cannot be legal and proper. The Learned Counsel for the Appellant submits that the project for production of Ductile Iron Pipes falls in the category of Item 5(k) of the Schedule 2 appended to the Environmental Clearance Notification, 2006. He argued that such activity of Ductile Iron Pipes production commences with induction of furnace and also involves installation of magnesium convener belt, zinc coating machines, cement curing system so on and so forth. We do not agree. On consideration of schedule appended to the Environmental Clearance Regulation 2006, it is amply clear that the said project falls in category B of item 3(a). It is difficult to say that it falls in the category of any other item shown under the Schedule appended to the Environmental Clearance Regulation, 2006. Needless to say that the Project Proponent did not conceal any material information nor gave any false information while seeking the Environmental Clearance for expansion of the project in question vide the application dated 19.11.2011 and communication dated 12.03.2012 submitted to the MoEF. This answers point No. (ii).

Re: Point No. (iii)

18. Coming to the third point involved in this Appeal, it is worthy to note that main argument of the Learned Counsel for the Appellant, Mr. M.P. Jha is that the Environmental Clearance granted on 01.06.2012 is bad in law in as much as it was granted without application of mind. He argued that the Project Proponent expanded the industrial activities during the period Between the first Environmental Clearance granted in 2008 and the impugned Environmental Clearance granted on 01.06.2012 in piecemeal manner with a view to avoid the necessity of cumulative environmental appraisal. He argued that holistic environmental appraisal could not be done by the

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MoEF due to piecemeal expansion of the project by the Project Proponent. Chief bone of his contention is that comprehensive environmental impact was not considered by the MoEF while granting the Environmental Clearance dated 01.06.2012. He pointed out that the EIA report does not indicate the impact of expansion of the industrial activity due to installation of Ductile Iron Pipe Plant prior to the impugned order dated 01.06.2012. It is on this basis that Mr. M.P. Jha urged to quash the impugned order of granting the Environmental Clearance.

19. As stated earlier, Environmental Clearance granted by the State Environmental Authority vide communication dated 09.10.2009 was challenged by the Appellant vide Appeal No. 32/2011. This Tribunal dismissed the said appeal. The obvious fall out of dismissal of the said appeal (Appeal No. 32/2011) is that the previous order dated 09.10.2009 cannot be now challenged and has become final. The Appeal Memo and rejoinder filed by the Appellant go to show that the Appellant has attempted to resurrect life into bygone litigation in respect of the Environmental Clearance order dated 09.10.2009. The allegation of the Appellant is that the said order dated 09.10.2009 is nullity, is without any merit and hence must be rejected. The Appellant cannot be allowed to challenge that order on the basis of so called newly invented fallacious grounds.

20. We cannot assume that the MoEF did not consider comprehensive environmental impact of the expansion project. The purpose of expansion of the project is amply clear from the application of the Appellant as well as the discussion which took place in the EAC meeting. The Project Proponent sought expansion of steel plant (05. Million TPA MBF-SMS) by adding 1.5 million TPA Beneficiation cum Pellet Plant to produce 1.2 million TPA pellets with producer Gas Plant. The additional industrial activity was to be carried out in the same land consisting of 188 acres. The steel plants unit is listed at serial No. 3(a) under Category 'A' of the Schedule of the MoEF Notification dated 14.09.2006. The impugned EC is granted by the MoEF subject to outcome of Writ Petition No. 1587(W) of 2011 which is pending before the Hon'ble High Court of Kolkata. Needless to say the MoEF considered various aspects including the fact that no additional land was required, as well as Iron ore, coal, bentonite and limestone are the raw materials which would be used. It was also taken into account that such material would be transported by the Railways. The Railway Yard exists inside the complex of the industrial unit. The MoEF also considered the fact that dust generated during operation of the industrial activity will be controlled by installation of ESP and Bag Filters. The comprehensive consideration of the relevant aspects by the MoEF is manifested from the discussion which preceded the impugned EC.

21. We have gone through the reply filed by the Respondent No. 1 (MoEF). The Respondent No. 1 supports the impugned order. According to the MoEF, the Terms of Reference (TOR) includes the cumulative impact on the environment which may occur within the radius of 10 k.m. as well as the additional impact due to operation of the proposed expansion project. It is stated further that the EIA report and the Environment Management Plan (EMP) had been duly considered. It is further stated that the EIA report considers the installation of Ductile Iron Pipe production Plant. It need not be reiterated that the Ductile Iron Pipe production Plant was within the limit of 5 lakh TPA capacity for which the first Environmental Clearance was granted in 2008.

22. It appears from the record that the Appellant initiated the proceedings for the permission of the MoEF for the expansion of its project by addition 15 lakh TPA Beneficiation cum Pellet Plant with producer Gas Plant beyond the earlier Environmental Clearance granted for production capacity to the extent of 5 lakh TPA. It appears that the Public Hearing was convened on 11.11.2011 under the Chairmanship of Additional District Magistrate, Pashchim Medinipur, (W.B.). The meeting was co-chaired by the Dr. Dipaniana Maulik, Environmental Engineer of WB

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Pollution Control Board. The meeting was attended by the villagers. The Appellant was not present in the said meeting, although, notice of the meeting was duly published. The local villagers have not raised any objection to the establishment of the industrial unit, particularly, the impugned expansion of the industrial activity as sought by the Project Proponent.

23. There cannot be two opinions about proposition that Section 20 of the National Green Tribunal Act, 2010 mandates the Tribunal, while passing any order or decision, to apply the principles of sustainable development, the precautionary principle and the polluters pay principle. In the context of the project in question, there is hardly any material to show that it would cause excessive emission from the plant which may cause pollution beyond tolerable degree. The concept of "sustainable development" implies development which would not severally degrade the environment. That does not mean absence of environmental impact but means a minimal impact which can be endured/tolerated by human beings. It also means that environment will not be degraded to such a degree that future generation will be deprived of a clean and healthy environment to a reasonable degree. It is common knowledge that everything is changing in this world. So also the environment. In "*Lafarge Umiam Mining Private Limited* v. *Union of India*" (2011) 7 SCC 338 the Apex Court observed:—

> "*75. Universal human dependence on the use of environmental resources for the most basic needs renders it impossible to refrain from altering the environment. As a result, environmental conflicts are ineradicable and environmental protection is always a matter of degree, inescapable requiring choices as to the appropriate level of environmental protection and the risks which are to be regulated. This aspect is recognized by the concept of "sustainable development". It is equally well settled by the decision of this Court in* Narmada Bachao Andolan *v.* Union of India *that environment has different facets and care of the environment is an ongoing process. These concepts rule out the formulation of an across-the-board principle as it would depend on the facts of each case whether diversion in a given case should be permitted or not, barring "no go" areas (whose identification would again depend on undertaking of a due diligence exercise). In such cases, the margin of appreciation doctrine would apply*.
>
> *76. Making these choices necessitates decision, not only about how risks should be regulated, how much protection is enough and whether ends served by environmental protection could be pursued more effectively by diverting resources to other uses. Since the nature and degree of environmental risk posed by different activities varies, the implementation of environmental rights and duties requires proper decision-making based on informed reasons about the ends which may ultimately be pursued, as much as about the means for attaining them. Setting the standards of environmental protection involves mediating conflicting visions of what is of value in human life*."

24. It is necessary to strike a balance Between development and environment protection to facilitate economic growth as well to secure adequate adherence to the cause of environment. We mean to say, there cannot be any lop sided approach in environment related matters.

25. We have gone through the short affidavit filed by the Appellant on 19.03.2013. The affidavit does not give any new dimension to the issues under consideration. The Appellant, however, referred to certain allegations extracted from the pleadings in Writ Petition No. 1587(W) of 2011. That Writ Petition is filed by Sk. Sajad Ali, son of Oyahed. We are not directly concerned with the pleadings put forth in that Writ Petition filed by some other party. The Kolkata High Court has not granted any interim relief in that matter. We do not think that pleadings in that Writ Petition have any direct bearing on the issues raised in the present appeal.

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26. We have perused copy of the minutes of proceedings of Public Hearing dated 11.11.2011. On perusal of the minutes of the proceedings, it is amply clear that members of the village locality had participated in the course of Public Hearing. It further appears that video recording of the Public Hearing was conducted and the text of the proceeding was made available in public domain. What appears from the record of the Public Hearing is that most of the issues raised by the villagers pertain to construction of metal road, provision for job opportunities and construction of a cement concrete bridge or improvement of road transport. It was also urged that the Project Proponent shall provide a children park. The authorized officer of the Project Proponent, namely, Shri S. Patwari assured that the existing road would be converted into a metal road. He also assured that the local school's improvement work would be undertaken. He also assured that the local skilled job seekers may submit their applications to the Personnel Department of Factory Management for consideration. One cannot be oblivious of the fact that the area is affected by left wing extremists. Availability of employment is likely to partly help proper management of the left wing extremist activities. It appears that one, Shri Pradeep Behra is the only villager who requested to ensure proper emission control measures. The response of Shri S. Patwari was that the emission problem would not increase due to proposed expansion. It is explicit that the villagers were made aware of the nature of the proposed expansion and there was proper public consultation. The proceedings were signed by the seventy seven (77) villagers who attended the meeting. As pointed out before, the Appellant did not attend that meeting. The Appellant has not demonstrated as to how the expansion of the industrial unit is likely to substantially add pollution in the area. There cannot be duality of opinion that the expansion of the project will add some burden on the pollution in the area. Yet there is no tangible material to show that the pollution level will become intolerable on account of the expansion of the project. We mean to say, the Appellant has not placed on record any scientific data in support of the contention that the pollution level will be excessively increased due to the expansion of the industrial activities.

27. Considering totality of the foregoing discussion, we have no hesitation in holding that the Appellant failed to prove that the proposed expansion of the project is detrimental to the cause of environment. We hold that expansion of the industrial activity as approved by the MoEF is within the permissible limits of sustainable development. This answers the point No. (iii).

28. The net result of the findings recorded on the points No. (i) to (iii) is that the Appeal is destitute of merits. Therefore, it fails. We have noticed that the Appellant indulged in the litigation without proper cause, though he is not an aggrieved party as such. It is high time to discourage such practice of fuelling the litigation without any substantial reason. Hence the Appeal is dismissed with direction that the Appellant shall deposit a cost of Rs. 15,000/- into the Legal Aid Fund of National Green Tribunal Bar Association. The Appeal is accordingly disposed of as dismissed. In case the cost is not deposited by the Appellant within a period of four (4) weeks, the Registrar to take proper action for recovery of the said amount as provided under Order XXI R30 of the C.P. Code or any other provision envisaged under Order XXI or the provisions of the National Green Tribunal Act, 2010.

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Site Inspection by the DFO / CF / CCF

Sr. no.	Particular	Inspection Report by DFO (T)
1	Extent in hectares	0.9689 ha.
2	Location (Lat-Long) of the forest land proposed for Diversion	As per Annexure -32
3	Legal Status of the forest land (Protected forest, Reserved forest, Revenue forest land or any other forest land	Un classed Forest
4	Demarcation of the area with temporary cairns etc.	Yes
5	Any signs of encroachment.	No
6	Any activity already taken up within the forest land or adjoining on forest land as part of the proposed project by the user agency. Details of action taken against the user agency in case of violation of the FC Act and guidelines there under.	No
7	Status of vegetation, site, quality, species composition etc.	As per Annexure -16
8	Importance of area from wildlife point of view, status of wildlife (density and abundance of important species, bird life reptiles, butterflies and other scheduled animals any endangered wildlife). Any latest census of wildlife in this area.	No
9	Endemism of flora / fauna of any other unique ecosystem in the area.	No
10	Current land use. Is this area managed as per prescriptions in the working plan and if not, why	Demanded area of Village: Bada, Ta.Mandvi is managed under Coastal Working Circle, Working plan period 2020-21 to 2029-30, Approved by GoI, MoEF & CC, Bhopal No.12-38/97(FOR)/ 528, Dt.-02/07/2020.
11	Importance of the area from historical of religious point of view.	No
12	Any department of persons proposed	No
13	Any displacement of persons proposed	N / A
14	Is there any Rehabilitation and Resettlement plan for the person to be affected? Is there any dissenting.	N / A
15	Compensatory afforestation proposed is on forest land or non – forest land. Location of this area, suitability of the area for CA. If in the degraded forest land then what is the current working plan prescription for the area? Distance of the non-forest land for CA from the nearest forest area. Number of patches in case the area should be more than 10 kms.	Compensatory afforestation proposed is on Degraded Reserved Forest land. Location of the area is as per Annexure -18, suitability of the area for CA. is as per Annexure -21.

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Sr. no.	Particular	Inspection Report by DFO (T)
16	Proposal area should not be part of any Protected area. Also distance from the boundary of the nearest protected area should be more than 10 kms.	As per Annexure -25
17	Dependence of tribal in the area, Whether the rights of the tribal have been recognized in this area.	No
18	Utility of the project, including the people living in closed vicinity of the project.	As per Checklist no.4 submitted by user agency project will manufacture soda ash for meeting country's demand and also user agency will carryout Corporate Social Responsibility (CSR) activities like health, education etc. in nearby villages for benefit of people. Expected direct and indirect employment generation is about 1200 and 3000 people.
19	In case of renewal whether all the conditions stipulated N/A in the earlier sanction order have been complied with.	N / A (this is fresh proposal)
20	Alternatives examined by the user agency in case of non - site specific projects.	No
21	A certificate by the user agency that the forest land requested for diversion for non – forestry purpose is bare minimum.	As per Annexure -10
22	Any scope of saving tree growth while ensuring that the purpose for which the forest land is being diverted is also not adversely affected.	Yes, not adversely affected.
23	Any other issued of significance	No
24	Specific recommendation of the DFO with reason for approval of the project.	**Recommended for diversion of 0.9689 ha. Demanded Forest area.** - The proposed pipelines will be laid through underground tunnel at an approximate depth of 15 mtr. in order to protect sand dunes and Forest. - Other demand is for passage i.e.route for movement for men, material and equipment through treeless riverbed. So, no tree felling or cutting for all this demanded Forest land.

Date:- 29 / 11 / 2021
Place:- Bhuj – Kutch

(Tushar B. Patel)
Dy. Conservator of Forests
Kutch West Division, Bhuj

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PART-II

ANNEXURE R/12
[Colly]

(To be filled by the concerned Deputy Conservator of Forest)

State Serial No. of proposal : GJ-0373/2021

1. **Location of the project/Scheme :** Gujarat

(i) **State / Union Territory :** Gujarat

(ii) **District :** kutch

(iii) **Forest Division :** Kutch-West

(iv) **Area of forest land proposed for diversion (in ha.) :** 0.9689

(v) **Category of the Proposal:** Others

2. **Legal status of forest land proposed for diversion**

S. No.	Division	Forest Land(ha.)	Legal Status
1	Kutch-West	0.9689	Unclassed Forests
Total		**0.9689**	

Division 1. : Kutch-West

3. **District wise area to be diverted in the division**

S. No.	District	Area(ha.)
1	kutch	0.9689
Total		**0.9689**

4. **Details of Vegetation available in the forest land proposed for diversion**

(i) **Density of vegetation**

S. No.	Area(in ha.)	Density	Eco-Class
1	0.9689	7.5	Eco 4
Total.	**0.9689**		

(ii) **Species-wise local/scientific names and girth-wise enumeration of trees at FRL**

S. No.	Scientific Name	Local Name	(0-30)cm.	(31-60)cm.	(61-90)cm.	(91-120)cm.	(121-150)cm.	(>150)cm.
1	Others	Nil	0	0	0	0	0	0
Total			**0**	**0**	**0**	**0**	**0**	**0**
Sub Total (No of Trees.)			**0**					

5. **Working plan prescription for the forest land proposed for diversion :** NIL

6. **Brief note on vulnerability of the forest area to erosion :** Area is less vulnerable to erosion

7. **Approximate distance of the proposed site for diversion from boundary of forest(in km.) :** 00

8. **Significance of the forest land proposed for diversion from wildlife point of view**

(i). **Details of wildlife present in and around the forest land proposed for diversion :** No

(ii). **Whether forms part of national park, wildlife sanctuary, biosphere reserve,tiger reserve, elephant corridor, wildlife migration corridor etc. :** No

(iii). **Whether the forest land proposed for diversion is located within eco-sensitive zone(ESZ) of the Protected Area notified under Wildlife(Protection) Act,1972 (Note: In case, ESZ of a Protected Area is not notified,then,10kms distance from boundary of the Protected Area should be treated as ESZ):** No

(iv). **Whether any national park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, wildlife migration corridor etc., is located within 1 Km. from boundary of the forest land proposed for diversion :** No

(v). **Whether any rare/endangered/unique species of flora and fauna found in the area :** No

9.

Details of any protected archaeological/heritage site/defence establishment or any other important monument located in the area, if any

(i). **Whether any protected archaeological/heritage site/defence establishment or any other important monument is located in the area :** No

10. **Comment as to the reasonability of the extent of the forest land proposed for diversion**

(i). **Whether the requirement of forest land as proposed by the user agency is unavoidable and bare minimum for the project :** Yes

11. **Details of violation(s), if any ,committed**

(i). **Whether any work in violation of the Act or guidelines issued under the Act has been carried out :** No

12. **Whether work in violation is still in progres(Yes/No) :** NIL

13. **Details of compensatory afforestation scheme**

Patch wise details for Degraded Area (To be earmarked by DFO)

(i). **Total Financial Outlay for C.A(lacs):** 9.59293

Patch Wise Details						
S.no	Patch No.	Area(ha.)	Name of PF/RF	Range	Compartment No	Uploaded KML file of patch
1	1	2	RF	Mandvi	Tra.Survey No.229/Pt.	View file

(ii). **Copy of CA scheme details:**

(iii). **Scanned copy of the Geo-referenced map of the forest land proposed for C.A. prepared by using DGPS or Total Station:**

(iv). **Copy of Survey of India Toposheet indicating boundary of forest land proposed for C.A.:**

(V). **Copy of NOC from Competent Authority :**

Additional information Details

S. No.	Documents	Remarks
NIL		

14. **District Profile**

S.no	District Name	Geographical area of the district (in ha.)	Forest area of the district (in ha.)	Total forest area diverted since 1980 (in ha.)	No. of Approved Cases	Forest Land including penal C.A. (in ha.)	Progress of compensatory afforestation as on(date)	A) Forest land (in ha.)	B) Non-forest land (in ha.)
1	kutch	4565200	218602.92	230.877	11	860.48	27/12/2021	702.10	18721.87

15. **Site inspection report of the DFO/CCF/Nodal Officer highlighting important facts pertaining to the forest land**

Division Name	Circle	Site inspected By	Whether site inspected	No. of times site visited	Site inspection report	Date of visit
Kutch-West	Kutch Circle	DFO	Yes	One		29/11/2021

(Specific recommendation of the DFO/CCF/Nodal Officer with(Part II,III & Part IV))

16. **Specific recommendation of the DFO/CCF/Nodal Officer for acceptance or otherwise of the proposal with reason**

Division	Circle	Recommendation By	Recommendation	Reason	Letter	Whether CF agreed

Kutch-West	Kutch Circle	DFO	Recommended	The proposed pipelines will be laid through underground tunnel at an approximate depth of 15 mtr. in irder to protect sand dunes and Forest. Other demand is for passage i.e.route for movement for men, material and equipment through treeless riverbed. So, no tree felling or cutting for all this demanded Forest land.		
	Kutch Circle	CF	Recommended	Recommended		Yes
		Nodal Officer	Recommended	Recommended		

Specific recommendation of the State Government(Part V)

17.

Specific recommendation of the State Government for acceptance or otherwise of the proposal with reason (Part V)

State	Recommendation By	Recommendation	Recommendation Date	Remarks	Signing Authority	Notification	Recommendation Letter
Gujarat	State Secretary	Recommended	18/05/2023	Inprinciple Stage 1 approval will be issued by IRO Gandhinagar	State Govt. Officer	No Data	

Stage-I Clearance Report

17.

Regional Office	Recommendation By	MoEF File No.	Date of Stage-I Clearance	Clearance Letter
Gandhinagar	Regional Office	FC-6/GJB-57/2023-GNR	18/07/2023	

18. **Payment made by User Agency**

Proposal No.	Application No.	Total Amount (Rs.)	Recieved Amount (Rs.)	Transaction Date	Transaction ID	Bank Name	Mode of Payment	Demmand Generated By User Agency	Demmand Verified By Nodal Officer	Uploaded Demand Letter
FP/GJ/Others/147527/2021	OTHERS14752720216752,171,521.00		2,171,521.00	11/10/2023	199700	Union Bank Of India	NEFT/RTGS (Challan)	09/10/2023	11/10/2023	

19. **Uploaded Status of Land to be transferred to Forest Department under FCA (Mutation Details) :** No

20. **Mutation Details Verified By Nodal Officer**

Proposal No.	Verified Date	Mutation Letter	Remarks
FP/GJ/Others/147527/2021	16 Nov 2023	No Data	ok

21. **Compliance Details Submitted by User Agency**

Proposal No.	Compliance Details submitted on(Date)	Uploaded Letter
FP/GJ/Others/147527/2021	20 Nov 2023	

22. **Compliance Details Verified by Nodal Officer**

710

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Proposal No.	Remarks	Verified Date	Uploaded Letter			
FP/GJ/Others/147527/2021		04 Dec 2023		FP/GJ/Others/147527/2021	04 Dec 2023	

23. **Stage-II Clearance Details**

Proposal No.	Date of Stage-II Clearance	Proposal Status	Clearance Letter
FP/GJ/Others/147527/2021	04 Jan 2024	APPROVED	

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PART – II

(To be filled by the concerned Deputy Conservator of Forests)

State Serial No. of Proposal: (FP/GJ/Others/147527/2021)

7.	Location of the Project/Scheme : : Forest land for laying part of Seawater intake and effluent disposal pipelines and passage for related construction equipment movement in Village: Bada, Taluka-Mandvi of Dist.Kutch. (GHCL Ltd.)	
(i)	State/Union Territory	Gujarat State
(ii)	District	Kutch
(iii)	Forest Division	Kutch West Forest Division, Bhuj
(iv)	Area of forest land proposed for diversion (in ha)	0.9689 ha.
(v)	Legal Status of Forest	UF (Unclassed Forest)
(vi)	Density of vegetation	7.5
(vii)	Species-wise (scientific names) and diameter class wise enumeration of trees (to be enclosed. In case of irrigation/hydel projects enumeration at FRI…1, FRI…2 meter also to be enclosed).	Attached herewith as per Annexure -16
(viii)	Brief note on vulnerability of the forest area to erosion	Area is less vulnerable to erosion.
(ix)	Approximate distance of proposed site for diversion from boundary of forest.	Sea water intake and effluent disposal pipelines and passage passing through the forest area.
(x)	Whether forms part of National Park, Wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed).	No
(xi)	Whether any rare/endangered/unique species of flora and fauna found in the area -- if so details thereof.	No
(xii)	Whether any protected archaeological / heritage site / defence establishment or any other important monument is located in the area. If so, the details thereof with NOC from Competent Authority, if required.	No
8.	Whether the requirement of forest land as proposed by the user agency in col.2 of part-I is unavoidable and barest minimum for the project. If no, recommended area item wise with details of alternatives examined.	Yes
9.	Whether any work in violation of the act has been carried out (Yes/No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress?	No
10.	Details of compensatory afforestation scheme	
(i)	Details of non-forest area / degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch.	Attached herewith Map of CA land as per Annexure -18

(ii)	Map showing non-forest / degraded forest area identified for compensatory afforestation and adjoining forest boundaries.	Attached herewith as per Annexure -18
(iii)	Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc.	Attached herewith as per Annexure -19
(iv)	Total financial outlay for compensatory afforestation scheme.	Attached herewith as per Annexure -19
(v)	Certificate from Competent Authority regarding suitability of area identified for compensatory afforestation and from management point of view. (To be signed by the concerned Deputy Conservator of Forests).	Attached herewith as per Annexure -20 & 21
11.	Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col.7 (xi,xii), 8 and 9 above.	Attached herewith as per Annexure -17
12.	Division / District Profile:	Covering an area of 45,652 km², it is the largest district of India. The population of Kutch is 21 Lacs, literacy rate is 59.79%
(i)	Geographical area of the district	45,652 km²
(ii)	Forest area of the division	2186.0292 km²
(iii)	Total forest area diverted since 1980 with number of cases.	230.877 ha. No. of cases - 11
(iv)	Total compensatory afforestation stipulated in the district/division since 1980 on. a) Forest land including penal compensatory afforestation. b) Non – forest land.	 (a) 860.48 ha. (b) 18721.87 ha.
(v)	Progress of compensatory afforestation as on (date) 2020-21 on a) Forest land b) Non-forest land	 (a) 702.10 ha. (b) 18721.87 ha.
13.	Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons	Recommended for diversion of **0.9689 ha.** Demanded Forest land as per below conditions. 1. Study/Assessment of Sea Turtle in 10 km surrounding the project area. 2. Preparation and implementation of a Holistic Conservation plan for mitigation of any negative effects to the Sea Turtle.

(Tushar B. Patel)
Dy. Conservator of Forests
Kutch West Division, Bhuj

Date:- 27 / 12 /2021
Place:- Bhuj – Kutch

Annexure - 24

Diversion of 0.9689 hectare of Forest land for laying part of Seawater intake and effluent disposal pipelines and passage for related construction equipment movement (Proposed Diversion Area: 0.9689 ha)
Certificate of Deputy Conservator of Forest showing distance regarding Historic Place/ Archeological importance.
There is no Historic Place/ Archeological site of nearest demanded area. The nearest Historic Place/ Archeological site Vijay villas palace at- Kathada, Ta.-Mandvi is 16-km away from the demanded Forest land.

Date :- 27/ 12 / 2021.
Place :- Bhuj - Kutch

(Tushar B.Patel)
Dy. Conservator of Forest
Kutch West Division, Bhuj

Annexure - 25

Diversion of 0.9689 hectare of Forest land for laying part of Seawater intake and effluent disposal pipelines and passage for related construction equipment movement (Proposed Diversion Area: 0.9689 ha)
Certificate of Deputy Conservator of forest showing distance between forest area demanded for diversion and nearest Wild Life protected area in km. (National Park/ Sanctuary/ Conservation Reserve/ Community Reserve).
This is to Certify that the Proposed Diversion of 0.9689 ha. Forest Land at-Bada, Ta.-Mandvi, Dist.-Kutch is located 50.60 km. away from nearest Great Indian Bustard Sanctuary area & 28.35 km. away from nearest Eco-Sensitive Zone of Great Indian Bustard Sanctuary in Taluka: Abadasa of Dist.-Kutch.

Date :- 27/ 12/ 2021.
Place :- Bhuj - Kutch

(Mehul B. Patel)
Dy. Conservator of Forest
Kutch West Division, Bhuj

-TRUE COPY-

ANNEXURE R/13

[Colly]

GHCL Limited

Date: 09.11.2022

To,
PCCF & Chief Wildlife Warden
Govt. of Gujarat State,
Aranya Bhavan, Near Central Water Commission,
Near CH-3 Circle, CH Rd, Sector 10A,
Sector 10, Gandhinagar,
Gujarat 382010.

Subject: Request to obtain Approval of Conservation Plan (Flap shell turtle, Green Sea turtle, Indian monitor lizard, Olive Ridley Sea turtle, Black shoulder kite, Eurasian Spoonbill, Indian Peafowl, Marsh Harrier, Oriental Honey Buzzard, Shikra, Short-toed Snake Eagle, Chinkara and Gugal - Schedule –I species and Critically Endangered species) For M/s. GHCL Ltd.

Respected Sir,

It is requested to note that **M/s. GHCL Ltd.** is a proposed Greenfield Chemical Complex (Soda Ash & Sodium Bi-carbonate plants, Captive co-generation power plant, Sea water intake and effluent disposal) located at **Village: Bada, Taluka: Mandvi, Dist: Kutch, Gujarat, India.** For that we hired NABET, QCI Approved FAE in Ecology & Biodiversity, **Dr. Bharat Jethva** to conduct Ecological Study & prepare Wildlife Conservation Plan. According to study conducted by Dr. Bharat Jethva in **July 2019**; **Flap shell turtle, Green Sea turtle, Indian monitor lizard, Olive Ridley Sea turtle, Black shoulder kite, Eurasian Spoonbill, Indian Peafowl, Marsh Harrier, Oriental Honey Buzzard, Shikra, Short-toed Snake Eagle, Chinkara and Gugal - Schedule –I species and Critically Endangered species** were observed in the 10 km radius from the project site. We have attached Ecology biodiversity report and conservation plan prepared by Dr. Bharat Jethva as Annexure-1.

The project has applied for Environmental Clearance (EC) at MoEF&CC, New Delhi. In connection with that; unit has received Terms of Reference (TOR) copy from MoEF&CC, New Delhi with proposal number: **IA/GJ/IND3/222096/2021 dated on 10th August 2021**. In TOR no 5(v), project proponent has to submit approved conservation plan in the ministry before EC appraisal presentation. TOR copy is attached as Annexure-2 for your ready reference.

We request you to give us the Approval of Conservation Plan **(Flap shell turtle, Green Sea turtle, Indian monitor lizard, Olive Ridley Sea turtle, Black shoulder kite, Eurasian Spoonbill, Indian Peafowl, Marsh Harrier, Oriental Honey Buzzard, Shikra, Short-toed Snake Eagle, Chinkara and Gugal - Schedule –I species and Critically Endangered species)** For **M/s. GHCL Ltd.** as soon as possible, so that we can submit the same to concern authority.

Please do the needful.

Thanking you.

GHCL LIMITED

Yours truly,
For M/s. GHCL Ltd.

Enclosed:

1. Annexure 1: Ecology biodiversity report and Conservation plan.
2. Annexure 2: TOR copy.

19-11-22

6. Conservation Plan for Schedule-I Species

Based on our field observations and literature survey we found several species important plant species as well as Schedule-I wildlife species in the study area (Table-6.1). We reported one plant species and 13 animal species. The faunal wildlife species include 4 species of Reptiles, 7 species of birds and 1 species of mammals.

Table-6.1: Schedule-I fauna and Critically Endangered plant species reported from the study area.

No.	Taxa	Name of Species		IWPA Status	IUCN Status
		Common Name	Scientific Name		
1	Reptile	Flap shell Turtle	*Lissemus punctatea*	Sch-I	LC
2	Reptile	Green Seaturtle	*Chelonia mydas*	Sch-I	**EN**
3	Reptile	Indian monitor lizard	*Varanus bengalensis*	Sch-I	LC
4	Reptile	Olive Ridley Seaturtle	*Lepidochelys olivacea*	Sch-I	**VU**
5	Bird	Black shoulder kite	*Elanus caeruleus*	Sch-I	LC
6	Bird	Eurasian Spoonbill	*Platalea leucorodia*	Sch-I	LC
7	Bird	Indian Peafowl	*Pavo cristatus*	Sch-I	LC
8	Bird	Marsh Harrier	*Circus aeruginosus*	Sch-I	LC
9	Bird	Oriental Honey Buzzard	*Pernis ptilorhyncus*	Sch-I	LC
10	Bird	Shikra	*Accipiter badius*	Sch-I	LC
11	Bird	Short-toed Snake Eagle	*Circaetus gallicus*	Sch-I	LC
12	Mammal	Chinkara	*Gazella bennettii*	Sch-I	LC
13	Plant	Gugal	*Commiphora wightii*	--	CR

6.1. Impact – mitigation matrix

Based on our observation, literature review and consultation with local people, and NGO, we formulated following impact vs mitigation matrix. It is advised that company shall follow the suggestions provided in the following Table-6.2.

Table-6.2: General Impacts vs. mitigation matrix & Conservation plan.

Issues		Risk level	Reason/Status in relation to project site	Suggestions
Species	Rare/ Threatened	Med	Threatened species (Green Seaturtle, Olive Ridley Turtle and *Commiphora wightii*) are reported from the study area.	• Ensure no damage or disturbance is caused to these species and their habitats by project activities or people involved in project. • Take up conservation, protection and propagation measures for these species in the study area. • Periodically monitor these areas for their status as part of comprehensive biodiversity monitoring plan.
	Endemic Species	Low	No endemic species of any fauna or flora were recorded during study in the core area and buffer area.	Nil
Important Natural Habitats	Protected Areas	Nil	No protected area present in close vicinity	Nil
	Eco-sensitive zone identified by government	Nil	No protected area or their eco-sensitive zones are present within 10 km periphery of the proposed project site	Nil
	Important Bird Areas	Nil	No Important Bird Area (Birdlife International) is present in core or buffer area.	Nil
	Ramsar site	Nil	No Ramsar sites present in Kutch	Nil
	Wetlands of National Importance	Nil	Great Rann, Little Rann of Kutch and Chharidhandh are located at more than 75 km distances	Nil
	Wetlands of international Importance	Nil	No wetlands of international importance present in 70 km periphery of the project site	Nil
	Wildlife Corridors	Nil	No notified or officially identified wildlife corridor present in and around project site.	Nil
	Forest Area	Med	Patches of open tropical thorn forest or scrub forest are present in the buffer area of the proposed project site.	• Ensure no damage is caused to forest area due to pollution, dust, movement of vehicle, people through forest areas. • Ensure thick green belt on project site periphery to control pollution.

	Mangroves	Nil	No mangroves are present on the coast due to sandy beach. In the study area.	• Nil
	Corals	Nil	No coral reef area present on the coast falling in the study area.	Nil
	Breeding/ nesting areas	Med	Sandy beach stretch between Nana Layja to Bambhdai falling in the buffer area /study area is known for sporadic nesting of two species of Seaturtles.	• Ensure no damage, disturbance is caused due to any of the project activities, pollution, dusting, material flow etc. during construction or operation phase. • Promote conservation, protection and propagation of these species . • Monitor status of this habitat as part of comprehensive biodiversity monitoring plan.

6.2. Conservation Plan for Schedule-I species

6.2.1. Conservation Plan for Critically Endangered Plant Species:

Gugal: (*Commiphora wightii*)

Status: Our field survey in the proposed project area revealed that there is a critically endangered plant species present in the open scrubland as well as forest areas present in the buffer area. This plant was found with low density in the buffer area. This plant has high medicinal values and is facing the threats of extinction by overexploitation for commercial purpose (Silori et al., 2004; Joshi, 2002; GUIDE 2009) from Kutch. However, recently Gujarat Forest Department has accomplished a large scale project on plantation of *Commiphora wightii* in Gujarat. Through this project thousands of plants were raised and planted in entire Kutch region.



This project has improved the number and density of the species in the region.

Impacts: The construction of Soda Ash, Sodium Bicarbonate plant along with Co-generation power plant and related facilities would involve large scale movement of heavy vehicles, excavation, loading unloading, material handling, creation or widening of roads etc. Dusting and pollution due to these activities could potentially affect surrounding habitats where this species thrives. Apart from these the air borne dusting and pollution due to operation phase could also settle in the surrounding area and the forest areas where these plants are present. Therefore, dusting and pollution during construction and operation phases can potentially affect the density and distribution of this species in the buffer area.

Recommendations: GHCL shall put in place all kind of pollution control measures so that the surrounding vegetation is not degraded and this species along other plants survive normally in the study area. GHCL shall carryout comprehensive biodiversity monitoring at regular intervals in order to check impact of their project activities on surrounding area and special emphasis shall be given to this species. It is also recommended that company should take up plantation of *Commiphora wightii* by involving local forest department, which has vast experience of carrying out plantation of this specialized plant species. GHCL and the Kutch West Forest Division shall mutually design the plantation activity.

6.3. Conservation Plan for Schedule-I Fauna

Among the fauna, we reported total 14 animal species. As mentioned above, the faunal wildlife species include a species of Reptiles, 8 species of birds and 5 species of mammals.

6.3.1. Reptile/ Indian Flap Shell Turtle

Status: During our study this species of reptile was recorded form the small village ponds in the study area. The species is resident and breeding in the buffer areas. The Indian Flap shell Turtle (*Lissemys punctata*) is a freshwater species of turtles are widespread and common in the South Asian

provinces. They are listed as Schedule-I species under Wildlife Protection Act 1972 and as Least Concerned as per IUCN threat categories.

Impacts: Since this species is an aquatic, it may be subjected to impacts related to water pollution and hydrological impacts arising due to project activities. These may include dusting, pollution, degradation of water sources, soil characteristics, choking of drainages etc. This species is otherwise not hunted or eaten by the people. Therefore, changes of degradation of overall aquatic habitat qualities in the buffer area are likely to affect these species and their distribution.



Recommendations: GHCL shall put all kind of pollution control measures in place so that surrounding area ecological conditions are not degraded. During construction it shall be seen that no drainage, ponds etc. are damaged or altered. GHCL shall carryout biodiversity monitoring at regular intervals in order to check impact of their project activities on surrounding area and special emphasis shall be given to monitoring of surface (drainage, check dams, ponds) water and wetlands in the buffer area.

6.3.2. Reptile/Seaturtle

A coastal beach admeasuring total 23 km lies in the study area on the coast of Bambhdai-Bada-Pachotiya-Bhada–Nana Layja villages. Most part of the coastal area falling in the study area is sandy and has presence of sand dunes of varying height and width. The southern boundary of proposed project site is located near the sea coast of Bada village which covers a stretch of approximately 2.0 km length. The coastal area near project site has narrow beach width and get inundated regularly during high tides. Our field observations, literature review and consultation with local NGOs suggest presence of sporadic nesting activities of 2 species of Seaturtle on 19.5 km long sandy coastal stretch from Bambhdai to Nana Layja. According to literature survey (*Sunderraj et al 2013*) the coastal stretch between Bambhdai –Bada-

Nana Layja has reported density of 1.4 seaturtle nests per kilometre. This density of nests could be considered sporadic in nature compared to mass seaturtle nesting activities occurring on eastern coast of India. Moreover, as per our field survey, we observed that width of supra tidal areas on the coast near the proposed project boundary is narrow and has dense vegetation and steep slope. These conditions may not be very suitable for nesting activities of seaturtle on the coastal stretch of 2.0 km that is located south of the proposed project boundary. However, the proposed project in absence of mitigation measures could result in following impacts on seaturtle.

Direct loss of habitat: The project facilities would include laying of intake and outfall pipelines from the southern boundary of the project area into the Arabian Sea. The laying of seawater intake and outfall pipelines corridors would required to be carried out through the sand dune area and the intertidal area on the coast. The area required/occupied (approximately 50 mtrs width) for laying of pipelines could result in the direct loss of coastal habitat i.e. sand dunes and intertidal areas. This would occupy a very small coastal habitat and resultant impact in terms of loss of habitat could be considered negligible.

Changes in morphology of coast: The activity of laying of intake and outfall pipeline corridors may damage or change the morphology of the sand dunes and the intertidal areas on the coast. This might affect the nesting activities of seaturtle. Moreover, as per CRZ notification sand dunes are classified as ecologically sensitive areas.

It is therefore recommended that laying of intake and outfall pipeline corridors shall be done underground without disturbing the morphology of sand dune, forest area (mostly dominated with *Prosopis juliflora*) or the intertidal area. The pipeline corridors shall be laid underground on entire length of sand dunes and intertidal area i.e. landward end of sand dune to the low tide line in the seaward side. This would ensure no damage, or alteration of the morphology of coastal habitats. Apart from this, if there is any alteration in the coastal habitat caused by construction activities, movement of heavy vehicles etc. shall be restored.

Direct disturbance to nesting: The construction activities would enhance presence of people, machines, lightings etc. These activities may deter the females approaching for nesting on the beach during breeding season. This may affect nesting activity of two species of seaturtle if appropriate mitigation measures are not considered. It is therefore recommended that laying of intake and outfall pipeline corridors on coast shall not be carried out during peak breeding seasons of the two species of the seaturtle.

Increase in artificial illumination on the coast: The proposed project boundary lies near sea coast. The industrial development on the coast also results in higher illumination near beach areas, this is one of the major impacts of coastal development known to disturb and distract seaturtle nesting and hatchlings. The artificial beachfront lighting problem may be the most manageable of the human-caused sea turtle disturbances. Although some beachfront lighting is necessary for safety and security, light management measures can help prevent interference with sea turtle nesting habitat while still addressing human safety concerns. These measures include following.

- Turning off unnecessary lights during the nesting season.
- using a smaller number or lower wattage of lights; repositioning, shielding, redirecting, lowering, or recessing fixtures so light does not reach the beach;
- Moreover, sea turtles are less affected by red, yellow, and low-pressure sodium-vapor lights, which can be substituted for ordinary lights.

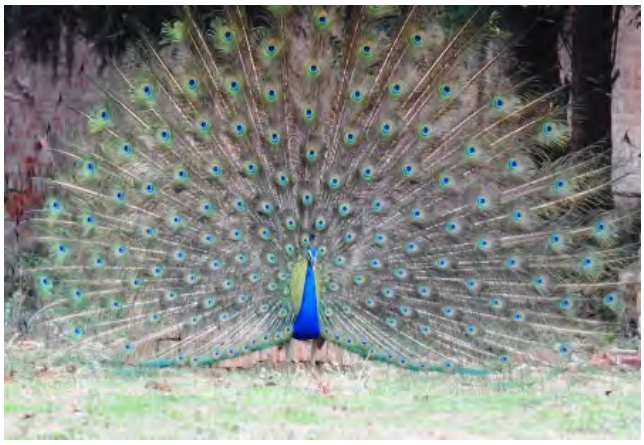
Pollution on Coast: Since the proposed project lies near the coast, the airborne fugitive dusts and other pollutants during construction and operation phases could pollute beach and cause changes in physical and chemical property of natural beach. It is therefore, recommended to control all types of pollution by strictly adhering to pollution control measures. Thick green belt of local hardy species shall be created to control air pollution.

Apart from above mentioned mitigation measures, the project proponent as part of their Corporate Environment Responsibility (CER), shall monitor nearby coast along project area for seaturtle nesting and in case of significant changes, proper mitigation measures shall be taken in consultation with experts and the

forest department. The project proponent though their CER budget shall also financially support research and conservation activities carried out for seaturtle by Gujarat Forest Department.

6.3.3. Birds/ Indian Peafowl

Status: The Indian Peafowl *(Pavo cristatus*) was recorded from the surrounding scrubland, villages, agriculture fields etc. in the buffer area. It is a resident breeder in the Indian subcontinent. The bird was justifiably declared as the national bird of India in year 1963 due to its 'flagship' value founded on its glorious position in mythology and its widespread distribution in the country. The species is found in dry semi-desert, scrub and deciduous forests. It forages and nests on the ground but roosts on top of trees. It eats seeds, insects, fruits, small mammals and reptiles. The Indian Peafowl is a ground nesting bird and it lays a clutch of 4-8 eggs which take 28 days to hatch. The eggs are light brown and are laid every other day usually in the afternoon. The male does not assist with the rearing, and is polygamous. Poaching of peacocks for their feathers and poisoning by feeding on pesticide treated seeds are known threats to wild birds. Under the law, collection of tail feathers is allowed only when the bird sheds them. The Indian peafowl is under various threats that include the demand for feathers and wild meat, conflict with farmers during cropping season, increased use of chemical fertilizers and pesticides and habitat degradation.



Impacts: Our field study reported presence of Indian Peafowl in the buffer areas of project site. The species was observed in the buffer area of 10 km radius particularly near human habitations, villages and agriculture fields. Since our study reported presence of Indian Peafowl in the buffer area, its possibility of nesting in buffer area could not be ruled out. Since Indian Peafowl is a ground nester, several project activitie can have adverse impacts on their nesting

grounds such as pollution, degredation of soil and vegetation from surrounding ara and in the forest areas. Direct disturbance by presence of people, vehicle, their noise, vibrations, lights etc. can potentially disturb most of the bird species.

Recommendations: following actions for the conservation and protection are suggested in wildlife conservation action plan to reduce impacts of project related activities on the species. Based on our field observation on the distribution, behavioral ecology, conservation need, and envisaged impacts of proposed project, we identified several species specific actions that would help reduce the impacts of project activities on Indian Peafowl as under.

i. Since Indian Peafowl is a ground nesting bird, heavy vehicle movement, presence of people, excavation activities could disturb their nesting activities.

ii. Avoid vehicle movement in the area where nesting is found. The movement of vehicles or humans shoul be prohibited in vicinity of the nesting area.

iii. Electric lines shall be designed to minimize the potential for electrocution of indian peafowl and other such large birds.

iv. Lightings within the project area could potentially deter the species presence. Therefore, GHCL shall ensure that minimum illumination comes out from the project area. This can be done by adjusting the angles of the light sources and using low intensity focused bulbs inside the project area.

v. Tree Plantation shall be carried out by GHCL in the surrounding villages and schools etc. in the buffer area. This would help the species and provide them much needed roosting place.

vi. Staff involved in construction activities shall be trained and made aware of Indian Peafowl's status as National Bird of India, and Schedule-I species protected under Indian Wildlife Protection Act 1972. This is important because if there are any casualties with this species occurs

then they should report it to the project authorities and the local forest department to carryout further necessary actions.

vii. Thick green belt of local hardy species shall be created to control air pollution.

6.3.4. Birds/ Schedule-I Raptors

Status: Total 5 bird species i.e. terrestrial Raptors belonging to Schedule-I of Wildlife Protection Act 1972 are reported from the study area. These species are Black shoulder kite, Oriental Honey Buzzard, Marsh Harrier, Shikra and Short-toed Snake Eagle. Of these 5 species of Raptors, none are reported from the core area and all 5 are reported from buffer area. Except Marsh Harriers rest all 4 species of raptors are resident breeders of India, Gujarat and Kutch. Almost all the raptor species are recently added to Schedule-I list through amendment made in year 2013. All the reported species are listed as Least Concerned category by IUCN. Marsh Harrier is migratory raptor species that arrives in this area during winter season.



Impacts: These 5 species of terrestrial raptors are predators and occupies tertiary consumers positions in the food chain and ecological pyramids. Therefore, any change in primary productivity would affect their distribution, density and population in the region. Therefore, project activities resulting in air, water and noise pollution, degradation of vegetation could potentially affect the habitat of these bird species and their population in the study area. Moreover, direct disturbance by presence of people, vehicle, their noise, vibrations, lights etc. can potentially displace most of the raptors species from the project area and its immediate surroundings.

Recommendations: It is recommended that GHCL shall take utmost care in controlling dust, fugitive emissions using state of the art technologies and put in

place all types of pollution control measures during construction and operation phases which would ensure minimum degradation of surrounding vegetation, forest area vegetation and waterbodies. Minimize vehicle movements around the project areas. Adjust lightings within core area and ensure minimum illuminations spreads outside the project area. Keep all the machineries maintained so that minimum noise and vibrations are generated in the surrounding area. Thick green belt of local hardy species shall be created to control air pollution.

6.3.5. CHINKARA (*Gazella bennettii*)

Status: The important herbivore present in the buffer area is Chinkara which is protected as Schedule-I species in Wildlife Protection Act 1972. During our survey, we reported presence of Chinkara through direct sightings in the buffer area in the study area. Indian gazelle is a shy animal and avoids human habitation. It stands at 65 centimetres and weighs about 23 kilograms. It can go without water for long periods and can get sufficient fluids from plants and dew. Although most individuals are seen alone, they can sometimes be spotted in groups of up to four animals. It lives in grasslands and desert areas in India. Its population is on the decline due to it being hunted for game. Narayan Sarovar Wildlife Sanctuary and its surrounding areas in Abdasa Taluka of Kutch are known for Chinkara population. The species is common in landscape of Kutch and North Gujarat. The species is listed as Schedule-I in Wildlife Protection Act 1972 and as 'Least Concerned' by IUCN. The species needs safe, undisturbed arid semi arid plains with open and sparse vegetation.



Impacts: This species is likely to be using open scrubland areas and forest areas for their feeding and breeding. They are also likely to be using waterbodies in the buffer area for their requirement of water. The impacts of project activities on herbivore are likely to be direct as they are primary consumers in the eco-system. Degradation of soil, vegetation and habitat due to

chronic pollution loads, the species would lose its feeding ground and breeding area. Therefore, changes in overall habitat qualities in the buffer area are likely to affect these species. The direct disturbance to these species by vehicle traffic, human intrusion is also issue of some concern.

Recommendations: It is recommended that company shall take up strict pollution control measures (air, water and noise) which would take care of major issue of habitat degradation for the species. Thick green belt of local hardy species shall be created to control air pollution. GHCL shall also support forest department in conducting awareness of local people towards wildlife conservation and law reinforcement and anti poaching activities in the study area. During construction and operation phases, GHCL shall inform their workers and staff not to engage in chasing, teasing or hunting of Chinkara as it is prohibited under wildlife protection act 1972.

6.4. Wildlife & Ecological Mitigation Measures

Based on our field study, information collected and consultation with project proponent, we recommend following mitigation measures as self regulatory, monitoring and compensatory measures for protection, conservation and betterment of wildlife and ecology in the surrounding area of project site.

6.4.1. Regulatory Mitigation Measures & Recommendations

i. Laying of intake and outfall pipeline corridors shall be done underground without disturbing the morphology of sand dune or the intertidal area. This would ensure no damage, or alteration of the morphology of coastal habitats. Even if there is any alteration in the coastal habitats caused by construction activities, movement of heavy vehicles etc. it shall be restored.

ii. Adjust lightings within and outside the project area in such a way so that there is less disturbance and distraction to wildlife. Lighting towards the coastal area boundary shall be adjusted with special care so that seaturtle are not affected.

iii. Strict control on dust pollution using various methods and technologies shall be carried out.
iv. During construction water sprinkling on roads and soil dumps shall be carried out to control dust pollution.
v. During operation phase Air quality standards (emission of pollutants like Particulate Matter) must be maintained as per GPCB/CPCB norms in and around the project site.
vi. Ambient noise pollution and vibrations during construction and operation phases shall be within limits of the standards mentioned.
vii. Plantation of thick green belt on periphery of the project site shall be created using local and hardy species.
viii. Ensure minimum movements of vehicles or people on the coast and no unauthorized movement through the Forest Areas located nearby in the study area.
ix. Ensure safe passage of runoff through drainages located nearby the project area.
x. Ensure no fly ash, sediments, pollutants, or any raw materials are spill out and flow into nearby drainage during construction or operation phase of the project.
xi. GHCL shall ensure that their construction workers and other workers during construction or operational phase shall not be involved in chasing, teasing, poaching and hunting activities of birds, reptiles or mammals around the project site.
xii. All other general measures to keep environmental parameters within permissible standards.

6.4.2. Compensatory Measures & Recommendations

There are few ecologically important habitats and Threatened species of plants and animals are present in the study area. Therefore, GHCL shall take utmost care during construction and operation phases so that these areas and species are not affected by their activities. Following are some of the recommendations that would help in propagation, protection and conservation of such habitats and species in the study area.

xiii. In order to compensate for the potential degradation of *Commiphora wightii* habitats GHCL shall carry out its plantation through Kutch-West Forest Division, Bhuj.

xiv. Sandy coastal stretch of Nanalayja to Bambhdai villages has been identified as an important Seaturtle nesting beach in the study area. Since coast near proposed project area is less likely to support nesting activities of seaturtles, no significant impacts are envisaged. However, GHCL shall ensure that no materials (dust, fly Ash or sediments) form their premises flows through air to the coastal areas and alter the texture of sandy beach. It is recommended that GHCL through their CER budget shall financially support Seaturtle conservation activities being carried out by the forest department.

xv. Since India Peafowl and other Schedule-I bird species are recorded in the study area, GHCL shall carryout tree plantation in the surrounding villages, schools, roads so that these species are provided with more safer roosting places in the study area.

6.4.3. Monitoring Measures & Recommendations

xvi. After commencement of the project GHCL shall carryout ecological & biodiversity monitoring at every 5 years for 10 years and take necessary corrective measures accordingly. GHCL shall bear the cost of third party monitoring. Monitoring of status of biodiversity and wildlife shall be monitored with specific emphasis on status of Seaturtle nesting, sand dunes, *Commiphora wightii*, forest areas, waterbodies in the study area.

6.5. Implementation of Mitigation Plan

Since the project is located outside the protected areas and their eco-sensitive zones in Kutch, most of the wildlife mitigation recommendations are self regulatory for user agency, therefore the implementation of these mitigation measures shall be carried out by the project proponent (GHCL) through their own staff and CER budget. However, there are several recommended activities which would be carried out by Kutch West Forest Division, Bhuj. GHCL shall

provide financial support through their CER budget to Kutch West Forest Division to carry out these recommended ecology/wildlife mitigation activities.

A special emphasis on ecological conservation shall be given by extending special responsibility to senior environment authority within the management of the proposed project authority. A senior ecologist shall be consulted on regular basis to oversee ecological/wildlife conservation activates under CER/CSR. The senior personal responsible for the conservation of ecology shall report directly to the head of the organization.

6.6. Monitoring of Mitigation Plan & Compliances

Though, most of the recommendations are self regulatory for user agency, monitoring of these recommendations and other conditions imposed by various agencies towards wildlife mitigation measures shall be monitored by a third party agency. Third party monitoring would involve ecological/biodiversity study at interval of 5 years for 10 years. These studies shall be carried out to evaluated long term impacts of the proposed project activities on the wildlife, biodiversity, waterbody, ecology and forest areas present in the 10 km periphery of the project site. Therefore, as per guidelines issued by the Principle Chief Conservator of Forests, Wildlife dated 13th August 2018, user agency shall allocate up to 5% of the total cost of mitigation plan as third party monitoring cost. Total Rs. 10.0 Lakh shall be allocated by the GHCL for monitoring of mitigation plan for the period of 10 years.

Since the area falls under the jurisdiction of Kutch West Forest Division, the overall official monitoring of the implementation of mitigation plan would be carried out by the Kutch West Forest Division, Bhuj. Therefore, as per guidelines issued by the Principle Chief Conservator of Forests, Wildlife dated 13th August 2018, user agency shall allocate and pay the monitoring and administrative cost to the forest department. For carrying out overall monitoring activities, user agency shall pay Rs. 10.0 Lakh for monitoring and administrative cost to the Kutch West Forest Division.

6.7. Financial Allocation for Wildlife Conservation Activities

Following is the proposed budget allocation for 10 years after approval from all statutory bodies permitting the construction and commencement of the project (Table-6.3). GHCL shall make financial allocations for taking up wildlife mitigation measures and for contribution to forest department for carrying out activities towards propagation, protection and conservation of wildlife from their CER budget. GHCL shall also carry out several activities through their own budget and staff.

Table-6.3: Proposed financial allocation for mitigation and conservation measures.

S. No	Activity	Implemen-ting Agency	Duration Years	Rate/Year (Lakh)	Total Amount (Lakh)
A	**Implementation Activities**				
1	Carryout Tree plantation in the villages, schools roadsides etc. areas in study area.	GHCL	10 years	5.0	50.0
2	Carryout plantation of *Commiphora wightii* in RF areas and maintenance (to be paid by GHCL)	KWFD	5 yeas	2.0	10.0
3	Contribution to Forest department for Sea Turtle Conservation Activities (to be paid by GHCL)	KWFD	10 years	2.0	20.0
				Subtotal	**80.0**
B	**Monitoring & Compliances Activities**				
6	Ecological & Biodiversity monitoring by third party once every 5 years for 10 years after commencement of project	GHCL	At every 5 year for 10 years	7.5	15.0
7	Monitoring and administrative activity (to be paid by GHCL) by Kutch West Forest Division	KWFD	First year		10.0
8	Documentation and preparation of Annual compliance report. 10 years	GHCL	Annual	2.0	20.0
				Subtotal	**45**
				Total (A=B) Amount in Lakh	**125.0**

7. References

Bird Life International (2001) Threatened birds of Asia: the Bird Life International Red Data Book. Cambridge, UK: Bird Life International.

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No. WLP/32/A/50-54/2023-24

Office of the
Principal Chief Conservator of forests
Block No. B/1, Aranya Bhavan,
Ch-3 Circle, Sector - 10/A,
Gujarat State, Gandhinagar.
Date: 24/04.2023

To,
Sri M.S.Rathore,
Sr. General Manager (Liasion & Admin),
Ahmedabad, Gujarat.

Sub:- Granting of Approval of Conservation Plan of selected scheduled – I species for M/s GHCL.

Ref :- Your letter dated. 10.04.2023

With referece to your letter and subject quoted above, an approval for coscripting and documenting a conservation plan for Flap Shell turtle, Green Sea turtle, Indian Monitor Lizard, Olive Ridley Sea turtle, Black shoulder kite, Eurasian Spoonbill, Indian pea fowl, Marsh Harrier, Oriental Honey buzzrd, Shikra, Short toed Snake Eagle, Chinkara and Gugal-Schedule-I Species prepared by M/s GHCl, Ahmedabad for Industries unit in village – Bada, Taluka- Mandvi, Dist. Kutch, Gujarat. The Conservation Plan of Rs. 136.50 lakhs is duly approved. Kindly note, that this amount will be either deposited in the central fund account (to be opened shortly) or the indicating activities will be executed by GHCL as per the order issued from this office.

(N. Srivastava)
Chief Wildlife Warden
Gujarat State, Gandhinagar

Copy to: The Chief Conservator of Forests, Kutch Circle, Bhuj for information and necessary action.

Copy to: The Deputy Conservator of Forests, Kutch West Division, Kutch for information and necessary action.

Table 8.1: Budget estimate (10 year plan) for Implementation of the Wildlife Conservation Plan for Bada Soda Ash Plant of GHCL

Sl. No.	Conservation Objective	Activities	Location of activities	Implementing Agency	Year of Implementation & Targets										Rate/Cost (In Rupees)	Rs in Lakhs
					1	2	3	4	5	6	7	8	9	10		
1	Habitat Conservation, Protection and Improvement	Plantation & Greenbelt development	Soda Ash Plant area and Periphery of plant (30 ha)	GHCL	LP	10 ha	10 ha	10 ha	GF	GF	GF	GF	GF	GF	Rs. 52000/ha	15.60
			Roadside plantation to minimise pollution& attract birds (20 ha)	GHCL	LP	5 ha	5 ha	10 ha	GF	GF	GF	GF	GF	GF	Rs. 52000/ha	10.40
			Bada, Bambhadai and other RF. (50 ha) (Location will be decided by FD)	FD	LP	20 ha	20 ha	10 ha	GF	GF	GF	GF	GF	GF	Rs. 52000/ha	26.00
		Water hole creation	Reserve forest area (creation of water hole structures)	FD	-	5 St	5 St	5 St	-	-	-	-	-	-	Rs. 100000/ structure	15.00
		Plantation management	**Water tanker* (1) and Tractor* (1) with driver and diesel for 10 years**	FD	-	√	-	-	-	-	-	-	-	-	Rs. 2000000	20.00
			Utility vehicle* (1) with driver and diesel for 10 years	FD	-	√	-	-	-	-	-	-	-	-	Rs. 1200000	12.00
2	Research and Monitoring	Plantation Monitoring	Plantation Area	CCF Kachchh	-	-	√	-	√	-	-	√	-	-	Rs. 100000	1.00
		Wildlife Monitoring	Coastal protection by Paryavaran Mitra	FD	-	-	√	-	√	-	-	√	-	-	Rs. 750000	7.50
			Coastal Hatchery & Research centre	FD	-	-	√	-	√	-	-	√	-	-	Rs. 750000	7.50
3	Education & Awareness	Workshop, NEC, Sign board, etc.	GHCL& Nearby Schools & Colleges	FD	-	√	-	√	-	√	-	√	-	√	Rs. 1000000	10.00
4	Miscellaneous	Contingency	-	2.5 GHCL & 2.5 FD	√	√	√	√	√	√	√	√	√	√	Lump sum	5.00
															Sub-total	**130.00**
	Monitoring of works		Implementation Areas of WCP	FD	-	√	-	√	-	√	-	√	-	√	@5% of total	6.50
															Grand Total	**136.50**

GHCL: Gujarat Heavy Chemical Ltd.; FD: Forest Dept; GUIDE: Gujarat Institute of Desert Ecology; LP: Land preparation; GF: Gap filling; NEC: Nature Education Camp

*Note: Vehicles are required for the efficient management of plantation activities and it will be the asset for the forest department in future.

Chief Wildlife Warden
Gujarat State,
Gandhinagar.

-TRUE COPY-

ANNEXURE R/14

[Colly]

GHCL Limited

Date: 07/11/2023

To,
The Deputy Conservator of Forests,
Kutch West Forest Division,
Kutch, Gujarat.

Sub.: Diversion of 0.9689 hectare of Forest Land for Seawater intake & effluent disposal pipelines and passage for equipment movement for Greenfield Chemical complex at Village : Bada of Taluka Mandavi, District Kutch.
Ref.: In-Principle Approval (Stage-1) vide letter no. FC-6/GIB-57/2023-GNR dated 18/07/2023 from Ministry of Environment, Forest and Climate Change, Regional Office, Gandhinagar.

Dear Sir,

At the outset, we would like to thank you for your kind support and guidance rendered to us till date.

Ministry of Environment, Forest and Climate Change, Regional Office, Gandhinagar has accorded In-Principle approval vide letter no. FC-6/GIB-57/2023-GNR dated 18/07/2023 for diversion of 0.9689 Ha of forest land for Seawater intake & effluent disposal pipelines and passage for equipment movement for Greenfield Chemical complex at Village: Bada of Taluka Mandavi, District Kutch.

Now, as directed by Ministry of Environment, Forest and Climate Change, Regional Office, Gandhinagar, we are submitting the compliance report against all the conditions stipulated in the said In-Principle approval as below:

A: Conditions which need to be complied prior to handing over of forest land by theState Forest Department.		
Sr. No.	**Stipulated Condition**	**Compliance**
i.	The cost of compensatory afforestation at the prevailing wage rates as per compensatory afforestation scheme and the cost of survey, demarcation and erection of permanent pillars if required on the CA land shall be deposited in advance with the Forest Department by the project authority. The CA will be maintained for 10 years. The scheme may include appropriate provision for anticipated cost increase for works scheduled for subsequent years.	Complied. The cost of Compensatory Afforestation of Rs.12,43,528 has been deposited to State CAMPA on 11th October 2023 having UTR No. SBINR12023101177313250.

GHCL Limited

Sr. No.	Stipulated Condition	Compliance
ii.	The State Government shall charge the Net Present Value (NPV) for the 0.9689 ha forest area to be dive ed under this proposal from the User Agency as per the orders of the Hon'ble Supreme Court of India dated 30/10/2002, 01/08/2003, 28/03/2008, 24/04/2008 and 09/05/2008 in IA No. 566 in WP (C) No. 202/1995 and as per the guidelines issued by the Ministry vide letters No. 5-1/1998-FC (P.II) dated 18/09/2003, as well as letter No. 5-2/2006-FC dated 03/10/2006 and 5-3/2007-FC dated 05/02/2009 and revision of NPV vide Ministry letter No. 5-3/2011-FC(Vol-1) dated 06.01.2022 in this regard.	Complied. The NPV amount of Rs 9,27,993 has been deposited to State CAMPA on 11th October 2023 having UTR No. SBINR12023101177313250.
iii.	Additional amount of the NPV of the diverted forest land, if any, becoming due after finalization of the same by the Hon'ble Supreme Court of India on receipt of the report from the Expert Committee, shall be charged by the State Government from the User Agency. The User Agency shall furnish an undertaking to this effect.	Undertaking for Additional NPV (if any) has been attached as Annexure-1
iv.	The complete compliance of the FRA, 2006 shall be ensured by way of prescribed certificate from the concerned District Collector.	FRA Certificate has been obtained and attached for compliance.
v.	The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the direction of concerned Divisional Forest Officer.	Shall be complied. Undertaking for demarcation of forest land has been attached as Annexure-2.

GHCL Limited

Sr. No.	Stipulated Condition	Compliance
vi.	The KML file of the area to be diverted and the CA areas shall be uploaded on the e-Green watch portal with all requisite details, before issuing working permission towards linear projects or submitting compliance report for seeking Final/Stage-II approval, as the case may be.	Complied.
vii.	All the funds received from the user agency under the project shall be transferred/ deposited to CAMPA fund only through e-portal.	All the funds (NPV,CA Scheme) has been transferred to CAMPA fund through e-portal.(Annexure-3)

GHCL Limited

B: Conditions which needs to be strictly complied on field after handing over of forest land to the User Agency by the State Forest Department but the compliance in form of undertaking shall be submitted prior to Final/Stage-II approval:		
Sr. No.	**Stipulated Condition**	**Compliance**
i.	Legal status of the forest land shall remain unchanged.	Undertaking has been attached as Annexure-4.
ii.	Forest land will be handed over to the User Agency only after required non- forest land for the project is handed over to the User Agency.	Double degraded forest land for Compensatory afforestation has been identified by the Forest Department (2.00 ha) in Village- Dhokda, Taluka- Mandvi, District- Kutch of Gujarat.
iii.	Compensatory afforestation shall be taken up by the Forest Department over 2.00 ha degraded forest land, Village- Dhokda, Taluka- Mandvi, District- Kutch of Gujarat at the cost of the user agency. As far as possible, a mixture of local indigenous species shall be planted and mono-culture of any species may be avoided.	Noted and shall be complied.
iv.	No tree felling shall be involved in the implementation of this project.	Undertaking has been attached as Annexure-5
v.	User Agency shall obtain CRZ Clearance and Environmental Clearance as per the provisions of the Environmental (Protection) Act, 1986, if applicable.	Gujarat Coastal Zone Management Authority has recommended the CRZ Clearance on 04/08/2023 and MoM has been attached as Annexure -6.
vi.	The Pipeline shall be laid down 1.5 meter below the ground and after lying down of pipeline the ground will be leveled.	Noted and shall be complied. The Pipeline will be laid down much below 1.5 meter below the ground and after lying down of pipeline the ground will be leveled.
vii.	No damage to the flora and fauna of the adjoining area shall be caused.	Undertaking has been attached as Annexure-7.
viii.	The layout plan of the proposal shall not be changed without prior approval of Central Government.	Undertaking has been attached as Annexure-8
ix.	No labour camp shall be established on the forest land.	No labour camp will be established on the forest land. Undertaking for the same has been attached as Annexure-9.

GHCL Limited

Sr. No.	Stipulated Condition	Compliance
X	Sufficient firewood, preferably the alternate fuel, shall be provided by the User Agency to the labourer after purchasing the same from the State Forest Department or the Forest Development Corporation or any other legal source of alternate fuel.	Shall be complied. Undertaking for the same is attached as Annexure-10
xi.	The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the directions of the concerned Divisional Forest Officer.	Noted and Shall be complied.
xii.	No additional or new path will be constructed inside the forest area for transportation of construction materials for execution of the project work.	Noted and shall be complied.
xiii.	The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favour of the user agency or the project life, whichever is less.	Noted.
xiv.	The forest land shall not be used for any purpose other than that specified in the project proposal.	Noted and shall be complied. Undertaking for the same is attached as Annexure-11
xv.	The forest land proposed to be diverted shall under no circumstances be transferred to any other agencies, department or person without prior approval of Govt. of India.	Noted and shall be complied.
xvi.	The User Agency shall submit the annual self-compliance report in respect of the above stated conditions to the State Government and Integrated Regional Office, Gandhinagar by the end of March every year.	Noted and shall be complied.

GHCL Limited

Sr. No.	Stipulated Condition	Compliance
xvii.	The User Agency shall comply with all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and NGT Order (s) pertaining to this project, if any, for the time being in force, as applicable to the project.	Undertaking has been attached as Annexure-12.
xviii.	Violation of any of these conditions will amount to violation of Forest (Conservation) Act, 1980 and action would be taken as per the MoEF&CC Guideline F. No. 11-42/2017-FC dt 29/01/2018.	Noted.
xix.	Any other condition that the Ministry of Environment, Forests & Climate Change may stipulate from time to time in the interest of conservation, protection and development of forests & wildlife.	Noted and shall be complied.
xx.	The compliance report shall be uploaded on e-portal (https:/parivesh.nic.in/).	Noted and shall be complied.

In view of the above, you are requested to extend your kind support and forward your kind recommendation/compliance report of the Stage 1 clearance to competent authorities for final approval (Stage 2) as per section (II) of the Forest (Conservation) Act, 1980 from Ministry of Environment, Forest and Climate Change, Regional Office, Gandhinagar.

Thanking You

Your Faithfully
N N Radia (Chief Operating Officer)
GHCL LTD

Copy to:
The Nodal Officer (FC Act)
Add. Principal Conservator of Forests (Land)
Block A,3rd Floor,Aranya Bhavan,
Sector 10 A,Gandhinagar,
Gujarat-382010

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

Office of the Principle Chief Conservator of Forests
Land Branch, Gujarat State,
A-Wing, 3rd floor, Aranya Bhavan,
Sector-10-A, Gandhinagar.
Phone no. 079-232-54116 Email dcf.fca.gujarat@gmail.com

To

The Principal Secretary,

Forest & Environment Department,

New Sachivalaya, Gandhinagar.

Sub: Diversion of 0.9689 ha. Reserved forest land for Seawater intake & effluent disposal pipelines and passage for equipment movement for Greenfield Chemical complex at Village-Bada of Taluka Mandavi, District Kachchh.

Ref: Government of India's In-principle approval letter no.

FC-6/GJB-57/2023-GNR, Dt.18/07/2023

Sir,

With reference to the above subject and letter the compliance report of conditions of In-principle approval is as under:

Sr. No.	Condition	Compliance
A: Conditions which needs to be complied prior to handing over of forest land by the State Forest Department:		
1	The cost of compensatory afforestation at the prevailing wage rates as per compensatory afforestation scheme and the cost of survey, demarcation and erection of permanent pillars, if required on the CA land shall be deposited in advance with the Forest Department by the project authority. The CA will be maintained for 10 years. The scheme may include appropriate provision for anticipated cost increase for works scheduled for subsequent years.	The User Agency has deposited an amount of Rs.12,43,528/- towards the cost of Compensatory Afforestation, Survey demarcation & erection of permanent pillars in the CAMPA fund.

File No: PCCFO/per/e-file/129/2023/3641/Land
Approved By: Dr.Jaipal Singh(APCCF,Land,PCCFO)
Open the document in Adobe Acrobat DC to verify the E-sign

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

2	The State Government shall charge the Net Present Value (NPV) for the 0.9689 ha. forest area to be diverted under this proposal from the User Agency as per the orders of the Hon'ble Supreme Court of India dated 30.10.2002, 01.08.2003, 28.03.2008, 24/04/2008 and 09.05.2008 in IA No. 566 in WP (C) No. 202/1995 and as per the guidelines issued by the Ministry vide letters No. 5-1/1998-FC (Pt.11) dated 18.09.2003, as well as letter No. 5-2/2006-FC dated 03/10/2006 and 5-3/2007-FC dated 05/02/2009 and revision of NPV vide Ministry letter No.5-3/2011-FC(Vol-1) dated 06.01.2022 in this regard.	The User Agency has already deposited an amount of Rs.9,27,993/- towards the cost of Net Present Value in the CAMPA fund.
3	Additional amount of the NPV of the diverted forest land, if any, becoming due after finalization of the same by the Hon'ble Supreme Court of India on receipt of the report from the Expert Committee, shall be charged by the State Government from the User Agency. The User Agency shall furnish an undertaking to this effect.	The User Agency has already given the undertaking in this regard.
4	The complete compliance of the FRA, 2006 shall be ensured by way of prescribed certificate from the concerned District Collector.	FRA certificate of Collector, Kachchh is attached herewith.
5	The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the directions of the concerned Divisional Forest Officer.	The User Agency has agreed

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

6	The KML file of the area to be diverted and CA areas shall be uploaded on the e-Green Watch portal with all requisite details, before issuing working permission towards linear project or submitting compliance report for seeking Final/Statge-II approval, as the case may be.	Complied.
7	All the funds received from the user agency under the project shall be transferred/ deposited in CAMPA fund only through e-portal (https://pariveshnic.in).	Funds from the user agency has been transferred online to the CAMPA fund through e-portal.
B: Conditions which needs to be strictly complied on field after handing over of forest land to the user agency by the State Forest Department but the compliance in form of undertaking shall be submitted prior to Stage-II approval:		
1	Legal status of the diverted forest land shall remain unchanged.	The User Agency has Agreed
2	Forest land will be handed over to the User Agency only after required non-forest land for the project is handed over by the User Agency.	The User Agency has Agreed
3	Compensatory afforestation shall be taken up by the Forest Department over 2.00 ha. degraded forest land Village-Dhokda, Taluka-Mandvi Dist-Kachchh at the cost of the user agency. As far as possible, a mixture of local indigenous species shall be planted and monoculture of any species shall be avoided.	The User Agency has deposited an amount of Rs.12,43,528/- towards the cost of Compensatory Afforestation, Survey demarcation & erection of permanent pillars in the CAMPA fund.
4	No tree felling shall be involved in the implementation of this project.	The User Agency has Agreed
5	User Agency shall obtain CRZ Clearance and Environment Clearance as per the provisions of the Environmental (Protection) Act, 1986, if applicable.	Gujarat Coastal Zone Management Authority has recommended the CRZ Clearance on 04/08/2023 and MoM has been attached.

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

6	The pipeline shall be laid down 1.5 meter below the ground and after lying down of pipeline the ground will be leveled.	Noted and shall be complied.
7	No damage to the flora and fauna of the adjoining area shall be caused	The User Agency has Agreed
8	The layout plan of the proposal shall not be changed without the prior approval of the Central Government	The User Agency has Agreed
9	No labour camp shall be establishment on the forest land.	The User Agency has Agreed
10	Sufficient firewood, preferably the alternate fuel, shall be provided by the User Agency to the labourer after purchasing the same from the State Forest Department or the forest Development Corporation or any other legal source of alternate fuel.	The User Agency has Agreed
11	The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the directions of the concerned Divisional Forest Officer.	The User Agency has Agreed
12	No additional or new path will be constructed inside the forest area for transportation of construction materials for executive of the project work.	The User Agency has Agreed
13	The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favour of the user agency or the project life, whichever is less.	The User Agency has Agreed
14	The forest land shall not be used for any purpose other than that specified in the project proposal.	The User Agency has Agreed

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

15	The forest land proposed to be diverted shall under no circumstances be transferred to any other agencies, department or person without prior approval of Govt. of India.	The User Agency has Agreed
16	The user agency shall submit the annual self-compliance report in respect of the above stated conditions to the State Government and integrated Regional Office, Gandhinagar by the end of March every year.	The User Agency has Agreed
17	The user agency shall comply with all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order(s) and NGT Order (S) pertaining of this project, if any, for the time being in force, as applicable to the project.	The User Agency has Agreed
18	Violation of any of these condition will amount to violation of Forest(Conservation) Act, 1980 and action would be taken as per the MoEF&CC Guideline F.No.11-42/2017-FC, dt 29/01/2018.	The User Agency has Agreed
19	Any other condition that the Ministry of Environment, Forest & Climate Change may stipulate from time to time in the interest of conservation, protection and development of forests & wildlife.	The User Agency has Agreed
20	The compliance report shall be uploaded on e-portal(https://pariveshnic.in).	The Compliance report is uploaded on e-portal.

1. The User Agency has already deposited an amount of Registration Fee Rs. 5,000/- and Processing Fee Rs. 9,120/- in the 8782 - Forest Remittance - Deposit Head on date. 22/10/2021 as per the Government of Gujarat's Resolution dated: 12/6/2015.

In view of above and since the conditions of In-principle approval have already been complied with, the matter may now be referred to Integrated Regional Office, Gandhinagar for issuance of formal approval.

Performa

File No: PCCFO/per/e-file/129/2023/3641/Land
Approved By: Dr.Jaipal Singh(APCCF,Land,PCCFO)
Open the document in Adobe Acrobat DC to verify the E-sign

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

1.	**Name of Regional Office**	:	Gandhinagar
2.	**State/District/Forest Division to which the proposal relates**	:	Gujarat / Kachchh / Kachchh (West)
3.	**Name of User Agency, nature of proposal**	:	GHCL Others(Seawater intake & effluent disposal pipelines and passage for equipment movement)
4.	**Extend of forest area involved**	:	0.9689 ha.
5.	**Whether original, or extension**	:	Original
6.	**If extension of lease, pl clarify if proposal involves additional forest area, and if so, specify**	:	–
7.	**Date of 1st stage clearance**	:	Date.18/07/2023
8.	**Extend of CAMPA charges, head wise viz**	:	
	(a) Compensatory Afforestation	:	**Rs. 12,43,528/-**
	(b) Additional CA	:	
	(c) Penal CA	:	–
	(d) Catchment Area Treatment	:	–
		:	–
	(f) Additional charges for diversion of area falling under notified/protected areas	:	–
	(g) Net Present Value	:	**Rs. 9,27,993/-**
	(h) Any other charges/Levies(pl specify)	:	–
9.	**Details of Bank Drafts(Bank, Draft No., Date & Amount), head-wise against items indicated in paragraph 9 above.**	:	–
10.	**Whether deposited by RTGS, if so, the particulars & dated of remittance.**	:	User Agency online transferred in CAMPA fund through e-portal.
11.	**Bank [Corporation Bank, Lodhi complex/union bank of India, Sunder Nagar] in which deposited, with date of deposition.**	:	Union Bank of India, Lodhi Road, New Delhi, Date. 11/10/2023
12.	**Any other remarks.**	:	–

(Dr. Jaipal Singh)
Addl. Pri. Chief Conservator of Forest
Land
Gujarat State, Gandhinagar

File No: PCCFO/per/e-file/129/2023/3641/Land
Approved By: Dr.Jaipal Singh(APCCF,Land,PCCFO)
Open the document in Adobe Acrobat DC to verify the E-sign

Letter No: PCCFO/0559/11/2023 Dt: 02-12-2023

Copy to Chief Conservator of Forests, Forest Circle, Kachchh / Deputy Conservator of Forests, Kachchh Forest Division, Bhuj for necessary information.

File No: PCCFO/per/e-file/129/2023/3641/Land
Approved By: Dr.Jaipal Singh(APCCF,Land,PCCFO)
Open the document in Adobe Acrobat DC to verify the E-sign

-TRUE COPY-

ANNEXURE R/15

D. M. Thaker
Director (Environment) &
Member Secretary (GCZMA)

Government of Gujarat
Forest & Environment Department
Block No-14/8th Floor,
Sachivalaya, Gandhinagar

Phone:079- 23255854
E-mail: direnv@gujarat.gov.in

File no. ENV/10/2021/184/T-cell Date: 26 DEC 2023

To,
Dr. H. Kharkwal
Director (CRZ)
Ministry of Environment, Forest and Climate Change,
Government of India,
Room No. 215, 2nd Floor, Agni Block
Indira Paryavaran Bhavan, Jor Baugh,
Aliganj Road, New Delhi – 110 003.

Subject: CRZ Clearance for Proposed Greenfield Chemical Complex seawater intake and effluent disposal facilities at village Bada, Ta –Mandvi, Dist-Kutchh by M/s.Gujarat Heavy Chemicals Limited(GHCL).

Reference: CRZ application dated.11.10.2021

Dear Sir,

M/s. Gujarat Heavy Chemicals Limited (GHCL)vide application dated. 11-10-2021 submitted an application seeking recommendation from Gujarat Coastal Zone Management Authority (GCZMA) for obtaining CRZ Clearance from the Ministry of Environment, Forests and Climate Change, Government of India for Greenfield Chemical Complex seawater intake and effluent disposal facilities at village Bada, Taluka Mandvi, Dist-Kutchh.

M/s. GHCL has submitted the following documents along with their application and processing fees:

1. Form -1 as per CRZ Notification 2011,

2. CRZ Maps in 1:4000 scale, prepared by Institute of Remote sensing, Anna University, Chennai,
3. EIA report prepared by Council of Scientific & Industrial Research (CSIR) and NEERI.
4. Marine EIA prepared by CSIR- National Institute of Oceanography.
5. Feasibility study report by STUP Consultant Private Limited, Ahmedabad.
6. Consent to Establish from Gujarat Pollution Control Board issued on 09.09.2011.
7. NOC from GMB issued on 10.02.2022.
8. Various Undertaking Submitted by Project Proponent for CRZ Clearance.

M/s. Gujarat Heavy Chemicals Limited (GHCL) submitted EIA report including introduction and project overview (chapter – 1), Project Description (Chapter - 2), Description Environment (chapter – 3), Anticipated impacts & Mitigation Measures (chapter – 4), Analysis of Alternatives (chapter – 5), Environmental Monitoring Program (chapter – 6), Additional Studies (chapter – 7), Project Benefits (chapter – 8), Environmental Cost Benefit Anlysis (chapter – 9), Environmental Management Plan (chapter – 10), Summary and Conclusions (chapter – 11) and Disclosure of Consultant Engaged (chapter – 12). Council of Scientific & Industrial Research (CSIR) and NEERI consultant carried out EIA.

The Proposal of GHCL was discussed in the GCZMA committee during 67th meeting held on 4th August 2023.

The Member Secretary, GCZMA apprised the Authority that M/s. GHCL presented their case in GCZMA meeting held on 17.01.2022. Additional detail sought (ADS) by GCZMA via mail on 01.02.22. PP replied on 29.11.22 & 26.12.22 and requested for conducting site-visit. GCZMA constituted a sub- committee and got visited the site on 27.04.23.

PP submitted details sought by the committee vide its letter dated 29.04.23. PP submitted final EIA report and public hearing details submitted on 29.11.22 to GCZMA. As forestland involved in the proposed project, they got Stage-1 approval on

18.07.23 and submitted Olive Riddly Turtle conservation plan approved on 24.04.23 from Forest Department along with Sand dunes conservation plan on 29.11.22.

The representative of M/s GHCL Ltd made a detailed presentation before the Authority and submitted that GHCL is a diversified company with footprint in Chemicals, Textiles and Consumer product segment. In Chemical sector, the company is mainly in the business of manufacturing Soda Ash (i.e. Anhydrous Sodium Carbonate) and Sodium Bicarbonate. It is one of the leading producers of Soda Ash in the country since 1988.

- The site is in proximity to Sea, which is the only source available for uninterrupted water supply to manufacturing plant. Seawater is required for meeting requirements for RO-DM plant, process cooling, dilution requirements, domestic use etc.

- A huge and increasing focus on renewable energy with government and private sector investment in such sources is strongly driving global demand for soda ash. This project will also support the demand of Soda Ash as it is a key raw material in the processing of lithium, a key component of lithium-ion batteries which is used in electric vehicles. Another key downstream product manufactured from Soda Ash, is emerging as a solution of choice for emission control applications.

- GHCL had signed an M.O.U in Jan-2017 during Vibrant Gujarat Summit, 2017 for establishment of Greenfield Chemical complex in district Kutch, Gujarat. GHCL proposes to set up a Greenfield Chemical complex having
  - ✓ Light Soda Ash (11,00,000 TPA),
  - ✓ Dense Soda Ash (5,00,000 TPA) and
  - ✓ Sodium bicarbonate (2, 00,000 TPA) manufacturing plants
  - ✓ supported by utilities like solid fuel based captive Co-generation power plant (120 MW),
  - ✓ seawater intake (16,00,000 m3/day) and
  - ✓ effluent outfall system (15, 80,000 m3/day),
  - ✓ RO-DM system and associated infrastructure.

- As per the proposal, M/s GHCL will withdraw 16,00,000 m^3/day of water from two intake locations and the disposal of 15,80,000 m^3/day of effluent at two out fall locations and its co-ordination are as follows,

Label	Latitude	
Intake Point 1	22^0 52' 1.070'' N	69^0 7' 28.900'' E
Intake Point 2	22^0 51' 57.440'' N	69^0 7' 32.440'' E
Outfall Point 1	22^0 52' 15.790'' N	69^0 6' 14.350'' E
Outfall Point 2	22^0 52' 6.650'' N	69^0 5' 59.080'' E

- Total length of sea water intake and out fall effluent disposal pipeline falls in various CRZ area are as follows,

Pipeline	CRZ- Classification	Length in m
Intake Pipeline 1	CRZ IA	267.17
	CRZ IB	60.25
	CRZ III (200 m to 500 m from HTL)	105.81
	CRZ IVA	948.76
	Total	**1381.99**
Intake Pipeline 2	CRZ IA	270.37
	CRZ IB	57.44
	CRZ III (200 m to 500 m from HTL)	98.57
	CRZ IVA	962.26
	Total	**1388.64**
Outfall Pipeline 1	CRZ IA	380.92
	CRZ IB	81.78
	CRZ III (No Development Zone)	17.88
	CRZ III (200 m to 500 m from HTL)	66.4
	CRZ IVA	2101.48
	Outside CRZ	121.71
	Total	**2770.17**
Outfall Pipeline 2	CRZ IA	379.67
	CRZ IB	83.36
	CRZ III (No Development Zone)	17.88
	CRZ III (200 m to 500 m from HTL)	67.66
	CRZ IVA	2623.88
	Outside CRZ	110.03
	Total	**3281.88**

As per the CRZ map prepared by the Institute of Remote Sensing, Anna University, Chennai. Proposed project activities are permissible under the clauses no. 3 (I) (a) , 4 (II) (d), 8 I (i)-b, (ii)- b, 8 III A(iii) j, k , 8 (IV) a of CRZ notification, 2011. Activity wise details of CRZ zone are as under:

Activities	Zone
Construction of process plant and utilities etc.	outside CRZ area
Effluent collection	outside CRZ area
Seawater Intake system i.e. sump and pump house	CRZ III
Intake Pipeline	CRZ IA, CRZ IB and CRZ IV
Outfall Pipeline	CRZ IA, CRZ IB and CRZ IV

Following Studies have been conducted by Project Proponent:

- Baseline Marine Environmental assessment, Effluent Dispersion Modeling, Sand dune Morphology by CSIR NIO (Goa, Mumbai). As per the findings, Suitable Corridor for laying seawater intake and outfall identified. Coast near site is Stable based on satellite image analysis and Sand dunes are found to be stable and suitable for tunneling activity.
- Conservation plan of Schedule - 1 Species by Gujarat Institute of Desert Ecology, Gujarat
- Status Survey and Conservation by Zoological Survey of India, Kolkata: Finding of the study stated that during monitoring period any turtle, fresh /old nests or crawl marks were not found. Due to narrow beach width, vegetation cover, slope, presence of pebbles and rubbles and presence of predators at project site which are unfavorable for sea turtle nesting.
- Gujarat Sea Turtle: Status Survey and Conservation by Gujarat Institute of Desert Ecology,
- Seawater Intake & Effluent Disposal Feasibility Consultancy by STUP Consultancy, Ahmedabad.

As the study on Biodiversity and Wild life, No notified protected area within Study area, Presence of critically endangered plant species Commiphora wightii in

buffer area, Conservation plan suggested for Schedule I Flora and Fauna & approved by forest department and No important wetland or bird areas are located within project vicinity.

Design and detailed construction methodology:

- Micro tunneling are done using the pipe jacking method. The pipelines for seawater intake and effluent disposal are required to be laid in a safe manner so that the sand dunes stretch between the plant boundary and respective land fall points (LFP) are protected without any disturbance to their natural appearance and stability.
- In such sensitive and difficult terrains tunneling offers a reliable technological solution. The treated effluent will be discharged at a suitable location off Bada coast through buried pipeline up to shore and submarine pipeline up to disposal location in sea.
- Minor change of alignment of pipeline may be required as per required depth for intake well construction & hydraulics requirement without changing landfall point and CRZ corridor. Reputed agency M/s RHDHV is engaged .
- For sand dune stretch the effluent disposal pipeline will be laid through tunneling. There will be no disturbance to stable sand dunes along the coast, as pipeline will be laid underground through micro tunneling method.
- The predicted max. water temperature in a small area around diffuser 33°Which is lower than threshold of 35°C. Incremental increase of SS in a limited area around diffuser is unlikely to negatively influence the biota even in the vicinity of diffuser. Fine SS particles would remain in suspension for longer duration and impart a milky hue around diffuser, as SS in effluent is non toxic this will not impact the water quality. Estimated benthic loss due to seawater intake is about 141.6 kg. and 331 kg. For outfall. Such loss is unlikely to be reflected on overall bio potential of Bada coast. This loss would be temporary and benthos will recolonize in due course after construction phase gets completed. The new structures will provide additional surface area for sub-tidal benthos to colonies.
- As the study on Biodiversity and Wild life, No notified protected area within Study area, Presence of critically endangered plan species Commiphora wightii

in buffer area, Conservation plan suggested for Schedule I Flora and Fauna & approved by forest department and No important wetland or bird areas are located within project vicinity.

- It was further submitted by the representative of GHCL that there is no existence of mangrove in proposed project areas for lying of intake and outfall pipelines and there would not be any impact on mangroves due to proposed activities.

Diffuser details:

Installation depth of water at the outfall location-OF2_1	: 9.4 m CD
Installation depth of water at the outfall location-OF2_2	: 10.7 m CD
Outfall Pipe Diameter (ID)	: 2.0 m
Number of outfall pipelines	: 2 Nos.
Length of the pipelines(L)	: 2185 & 2686 m
Design outfall flow rate (Q)	: 1580 MLD
HDPE Inner Diameter of Pipe	: 2000 mm
Pipe friction factor	: 0.001
Density of sea water	: 1025 kg/m^3
Effective depth for dilution	: 9.4 to 10.7m
No. of ports provided	: 20 in each diffuser
Diameter of port	: 440 mm
Length of Diffuser Block	: 100m each
Height of vertical riser	: 1.0m
Ports space	:@ 6000 mm c/c
The main diffuser pipe is buried	:2.0 m below the sea bed
Initial dilution estimated as	30 to 40 times.
Diffuser Port Velocity	: 3.01 m/sec

The port configuration consists of a riser pipe of 440 mm diameter at 15 degrees to the main diffuser pipe segment with a height of 1500 mm below the sea bed and 500 mm above the sea bed. From the model results, it is found that the average dilutions of 30 to 40 times would be achieved along with the tidal variation in the case of 1580000 m^3/day discharge. To get this dilution time, the diffuser system should

contain 40 ports having a 0.44 m diameter. The diffusers should be separated at a distance of 6 m. The elevation of ports from the sea bed should be 0.5 m. The velocity of release of effluent should be maintained at 3.01 m/s.

Details of Environment Protection Measures:

- It was submitted that as per the numerical flow model run for seawater intake of 1600 MLD and dispersion model for effluent disposal of 1580 MLD, Model run for post monsoon and pre monsoon for various tidal conditions. No significant changes in flow regime are observed due to continuous withdrawal from recommended seawater intake locations.
- CSIR NIO has recommended effluent disposal points after evaluating 03 alternative options.
- Ambient conditions for temperature, SS, Ammonical nitrogen will be attained within 300 m distance from the diffuser.
- CSIR NIO Goa study suggested that sand dunes along the coast are stable and recommended suitable Landfall points and tunneling method for pipelines.
- From the model results, it is found that the average dilutions of 30 to 40 times would be achieved along with the tidal variation in the case of 1580000 m^3/day discharge. To get this dilution time, the diffuser system should contain 40 ports having a 0.44 m diameter. The diffusers should be separated at a distance of 6 m.
- The elevation of ports from the sea bed should be 0.5 m. The velocity of release of effluent should be maintained at 3.01 m/s.

MS, GCZMA appraised the authority that, GCZMA constituted a sub- committee and got visited the site on 27.04.23. As per the report of the sub-committee, GHCL submitted final EIA, public hearing details, copy of approved conservation plan for significant species, conservation management plan for sand dunes. As included in the report there will no impact on sand dunes due to underground construction of tunnel for the sea water suction and disposal of treated water into sea. As informed by PP, they will use highest technology to underground tunnel construction and due to which no major impacts will be on the sand dunes.

After the detailed discussion and deliberation on the presentation, it was decided by the GCZMA to recommend the project of M/s Gujarat Heavy Chemicals Limited located

at village Bada, ta - Mandvi, District -Kutch for Proposed Greenfield Chemical Complex seawater intake and effluent disposal facilities to the Ministry of Environment, Forest and Climate Change, Government of India for granting CRZ clearance with specific condition.

In view of the above the State Government hereby recommend to the Ministry of Environment, Forests and Climate Change, Government of India grant CRZ clearance for Proposed Greenfield Chemical Complex seawater intake and effluent disposal facilities of M/s. Gujarat Heavy Chemicals Limited with following conditions:

1. The effluent not meeting with the GPCB norms shall not be discharged and shall be stored in the Guard Ponds and recycled back into the Effluent Treatment Plant for further treatment to achieve the GPCB norms. M/s GHCL shall install necessary facilities for this purpose and shall strictly ensure the compliance with the GPCB norms, round the clock.
2. The pipelines for seawater intake and effluent disposal shall be laid in a safe manner so that the sand dunes stretch between the plant boundary and respective land fall points (LFP) are protected without any disturbance to their natural appearance and stability.
3. The pipeline shall be monitored regularly by the company and it shall be ensured that there is no leak from the pipeline. In case of any such eventualities, the company shall immediately stop disposal through the said pipeline and take the corrective measures in consultation with the GPCB and the District Collector.
4. There shall not be any blockage of creek/river etc. due to laying of pipeline and free flow of water shall be maintained.
5. M/s. GHCL shall carry out mangrove plantation in 50 ha area in consultation with Forest Department/Gujarat Ecology Commission (GEC). The amount for the same shall be deposited within 06 months to Forest Department/GEC.
6. All the recommendations and mitigation measures suggested for sea turtle conservation plan shall be complied with by the GHCL.
7. The GHCL shall ensure that there will not disturbance to nearby Ecologically Sensitive area for their proposed project.

8. The pipeline shall be monitored regularly by the company and it shall be ensured that there is no leak from the pipeline. In case of any such eventualities, the company shall take immediate corrective measures.
9. Project proponent (PP) shall have to carry out marine water quality environment monitoring regularly on quarterly basis and submit the report to GCZMA, GPCB, IRO & MOEF & CC, GoI.
10. PP shall contribute through its CER fund for environmental infrastructure up-gradation, awareness programs etc.
11. PP shall obtain all necessary clearances from competent authorities/ departments before construction and commissioning of the activities.
12. No groundwater shall be taped to meet with the water requirements during the construction and/or operation phases.
13. There shall no discharge of any kind of wastewater / sewage / effluent/ wastes into the creek or sea or in CRZ areas except allowed by this permission.
14. PP shall implement all the suggestions / recommendations given by their consultants in their EIA report.
15. PP shall develop 33% greenbelt within premises and shall maintain greenbelt.
16. PP shall prepare and execute Disaster Management Plan and submit to the concerned offices including the District Authorities.
17. PP shall ensure that the labour construction camps are kept outside the CRZ areas and the construction labour are provided with adequate amenities like drinking water, fuel, sanitation, etc. to ensure that the existing environmental condition is not deteriorated by them.
18. PP shall bear the cost of the external agency that may be appointed by this Department for supervision / monitoring of proposed activities.
19. PP shall take up socio-economic upliftment activities in consultation with the District Collector / DDO. A separate budget shall be provided for this purpose.
20. PP shall regularly submit the half-yearly compliance report on the conditions stipulated by this Department/GCZMA/ MoEFCC.
21. The provisions of the CRZ notification, 2011 and as amended from time to time shall be strictly adhered to by the PP.
22. PP shall obtain consents/ authorisation/ permission of the Gujarat Pollution Control Board under applicable Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act'1981 and Rules made

under Environment (Protection) Act' 1986. Discharge of pollutants shall not exceed the limits prescribed under the Environmental Acts/ Rules.

23. PP shall adopt the necessary soil conservation measures to prevent any exposed soil from being eroded or blown over.
24. A Disaster Management Plan to meet with any eventualities that may arise during construction and/or operation phase shall be prepared and implemented.
25. A separate Environmental Cell with qualified personnel shall be created to implement the Environmental Management Plan and a separate budget shall be provided for this purpose.
26. Any additional conditions that may be imposed by MoEF&CC, this Department/GCZMA shall be complied by the PP

Thanking you,

D. M. Thaker 26/12/2013

(D. M. Thaker)

Copy to:
Chief Operating Officer,
M/s. Gujarat Heavy Chemical Limited,
GHCL House, Swastik Society, opp Punjabi Hall, Navarangpura ,
Ahmedabad-380009---------- For Your kind information

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ANNEXURE R/16

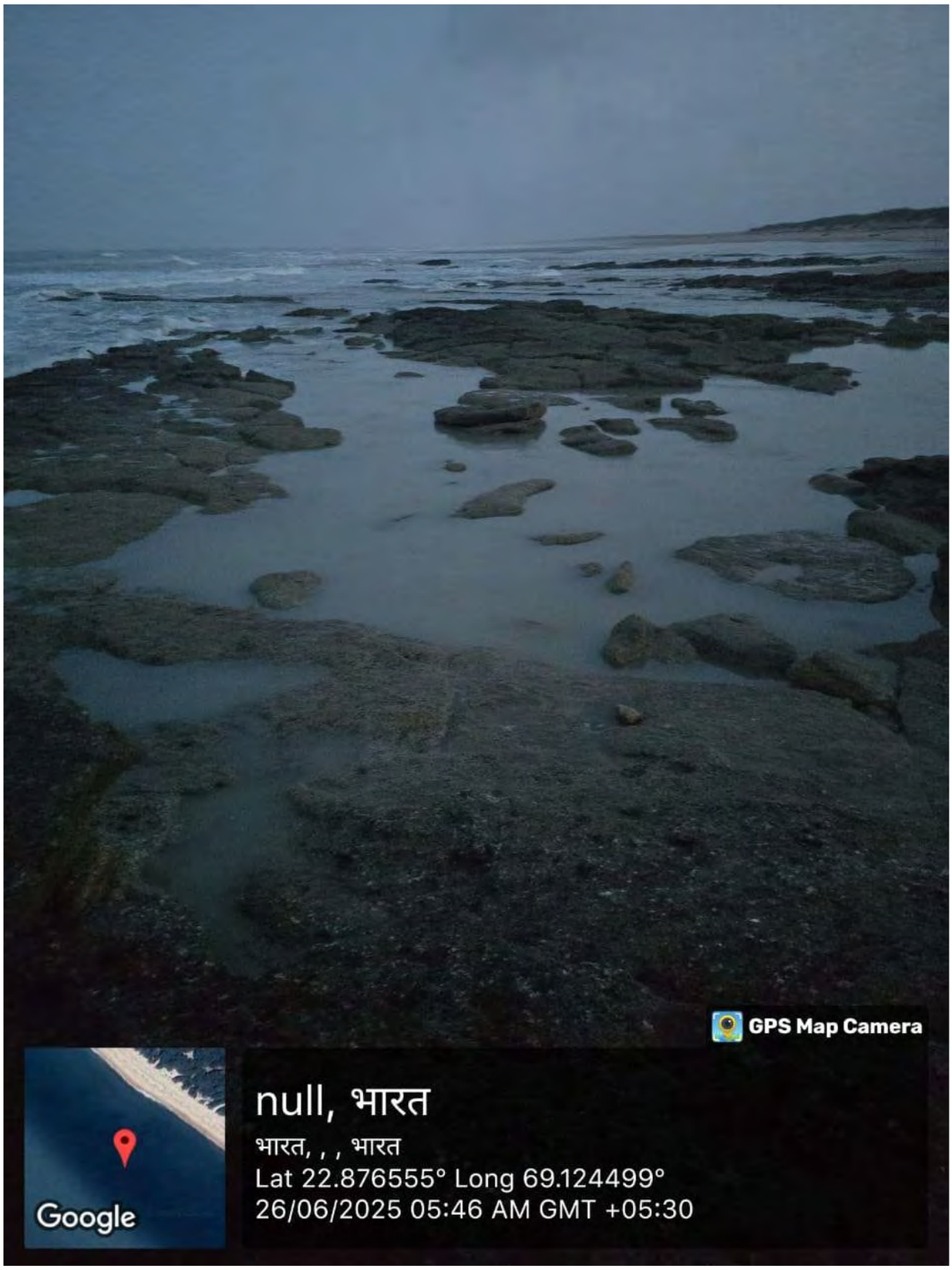


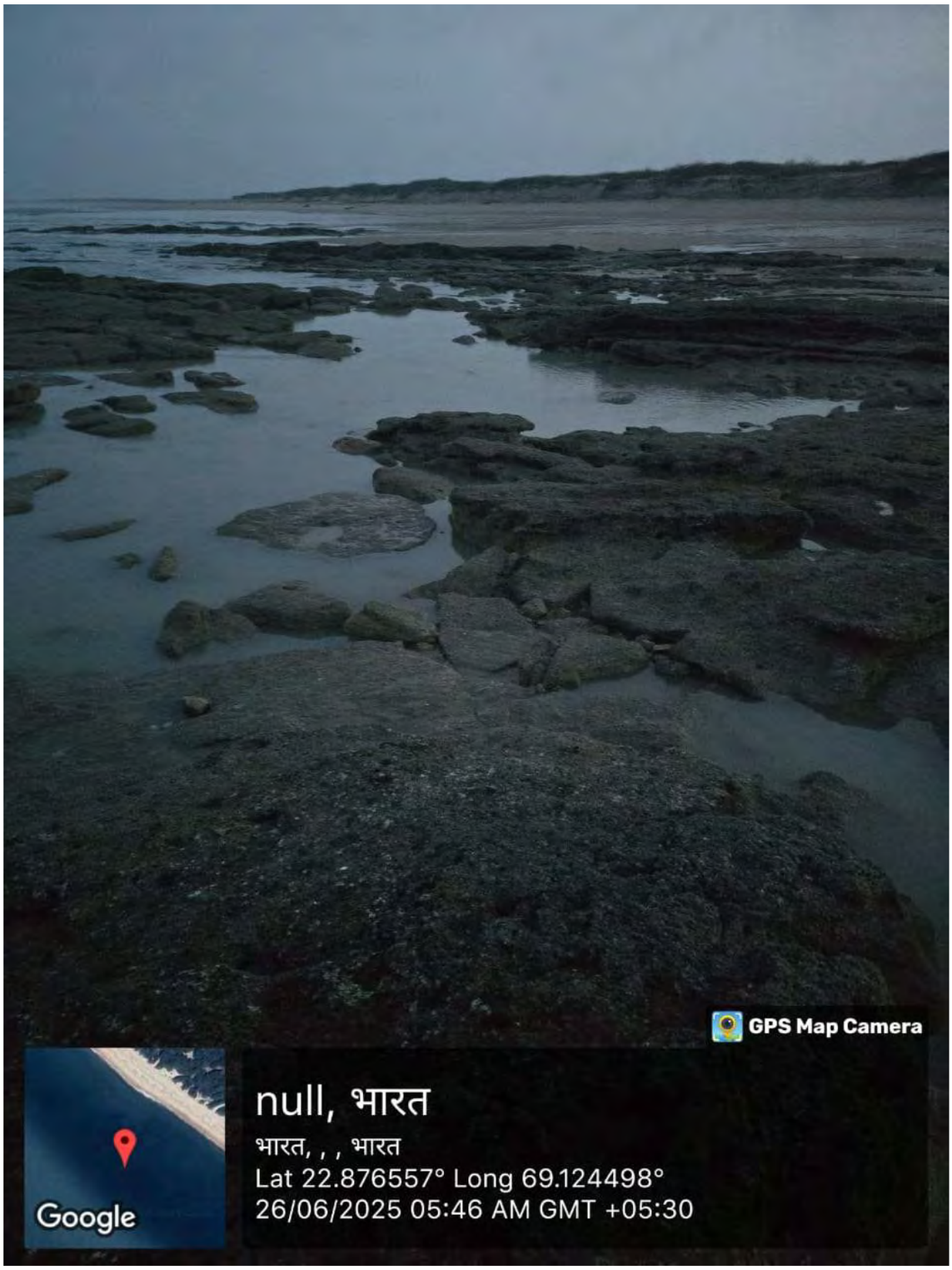




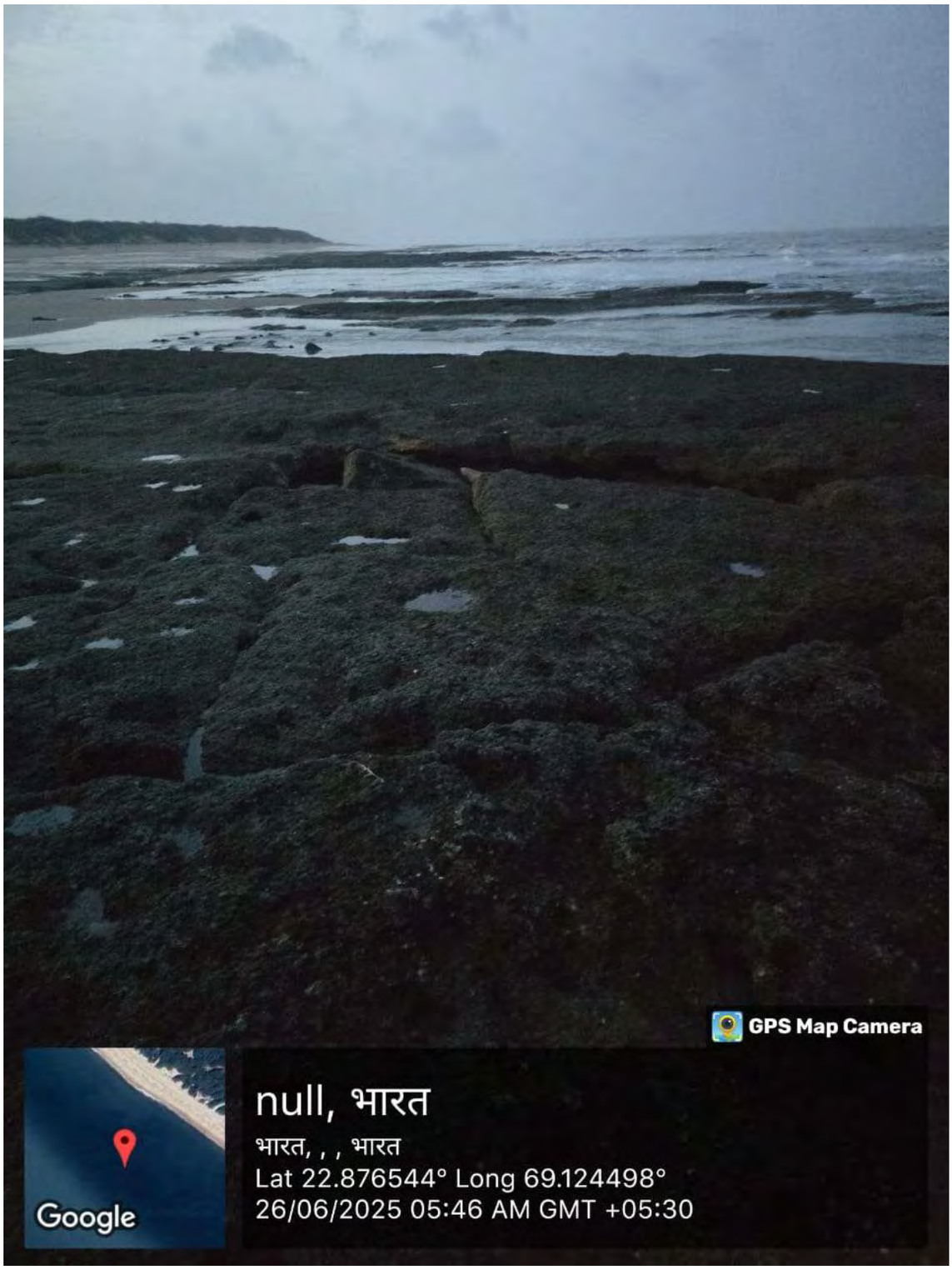


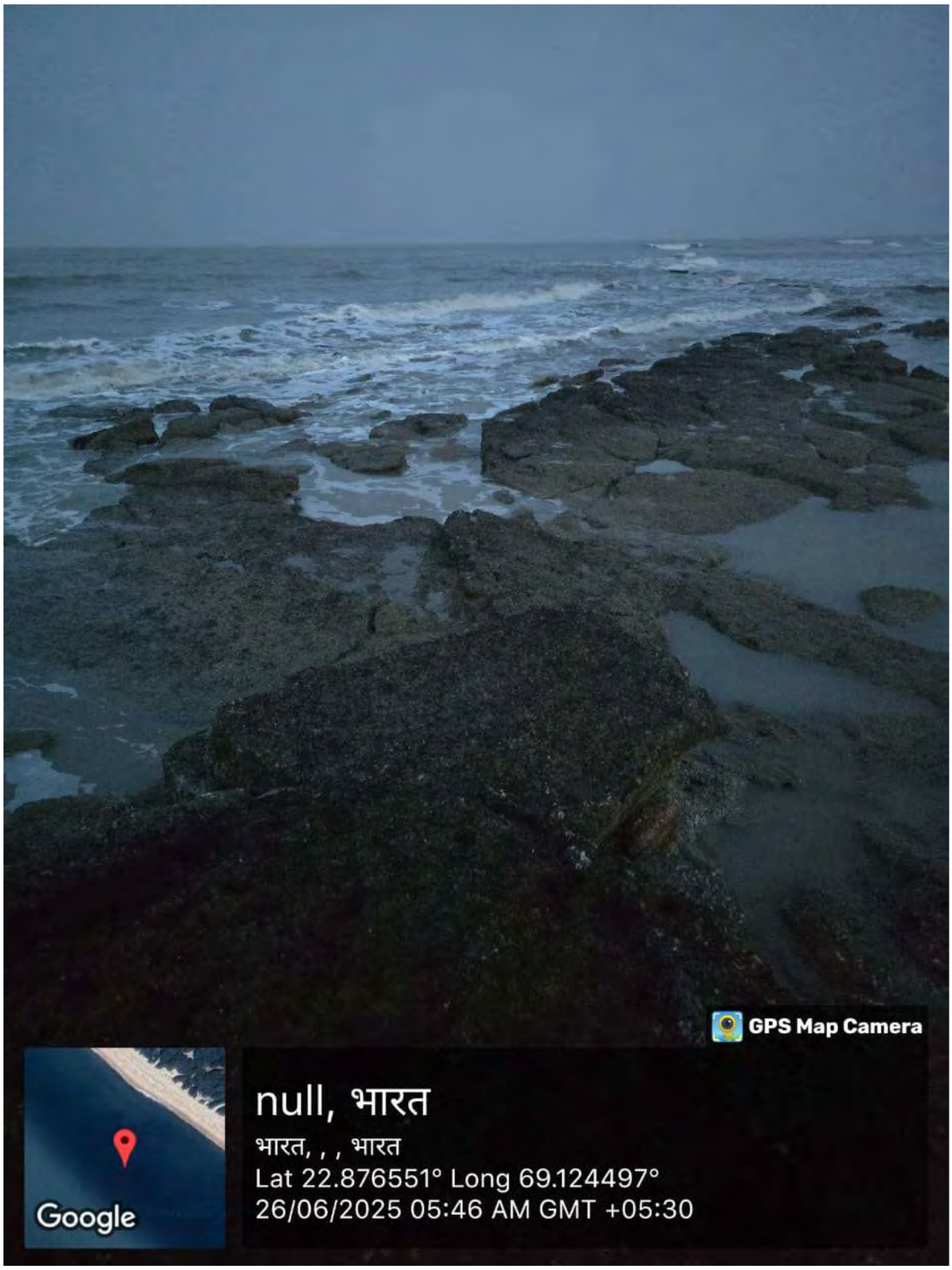



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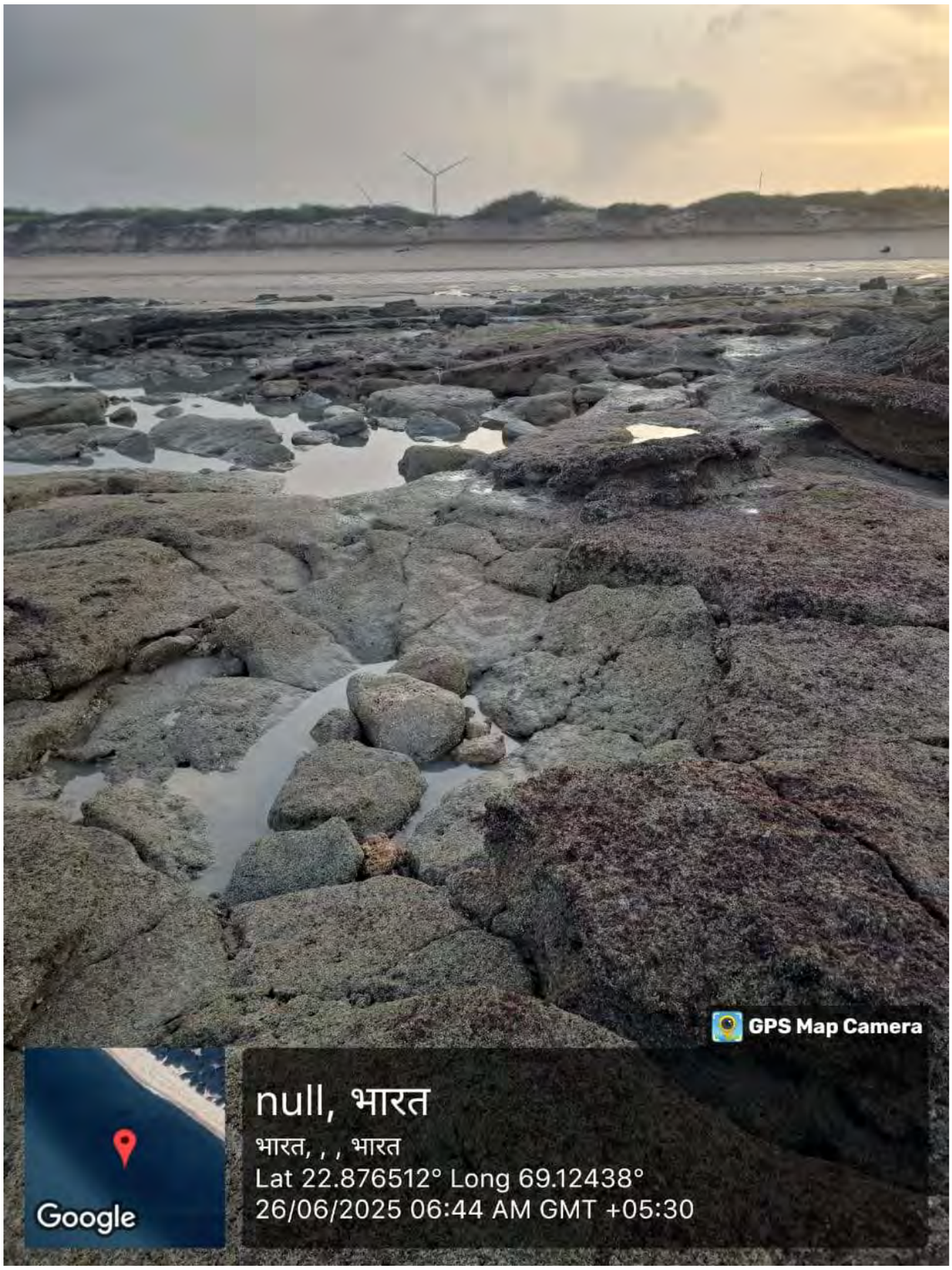

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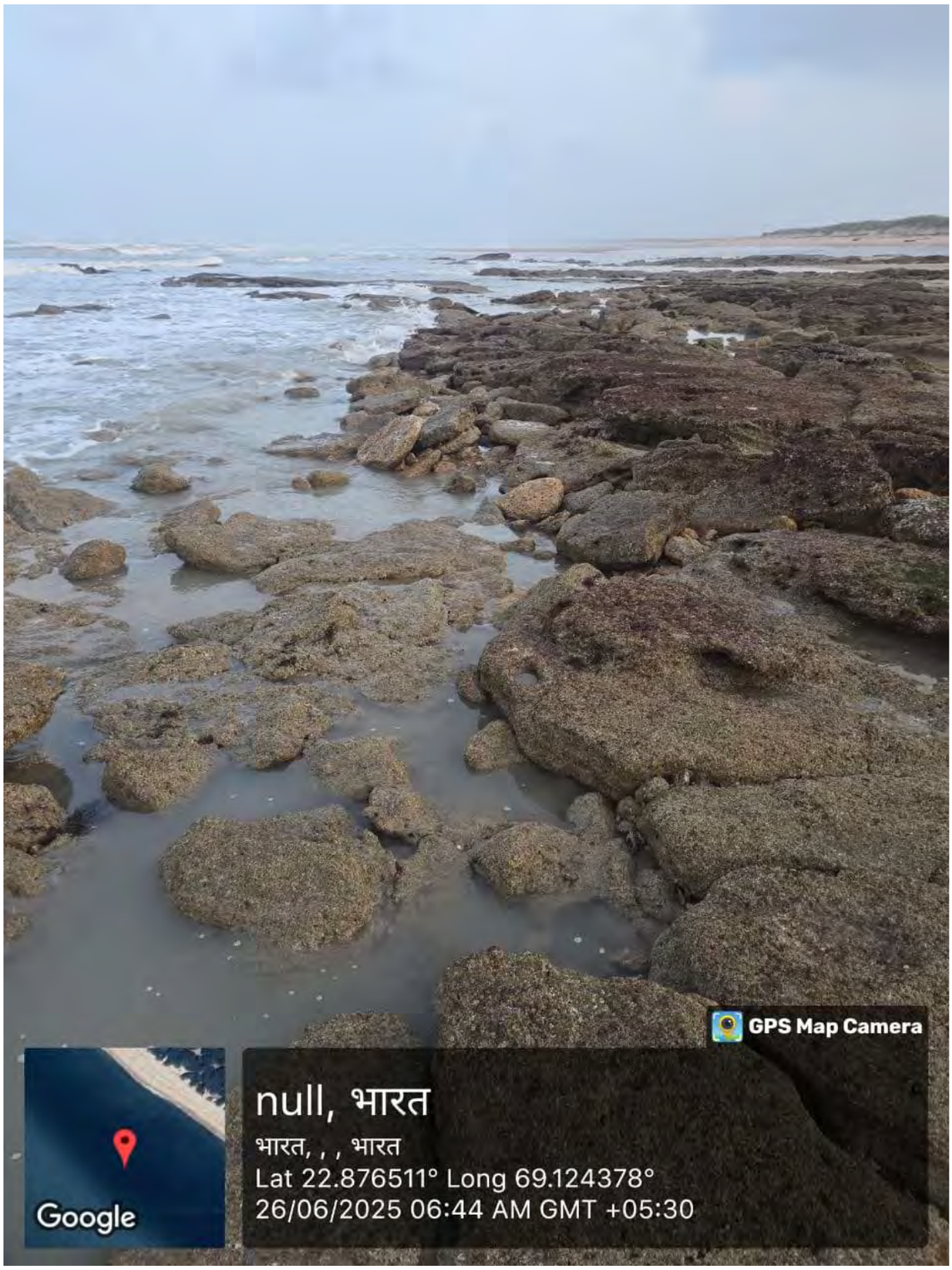

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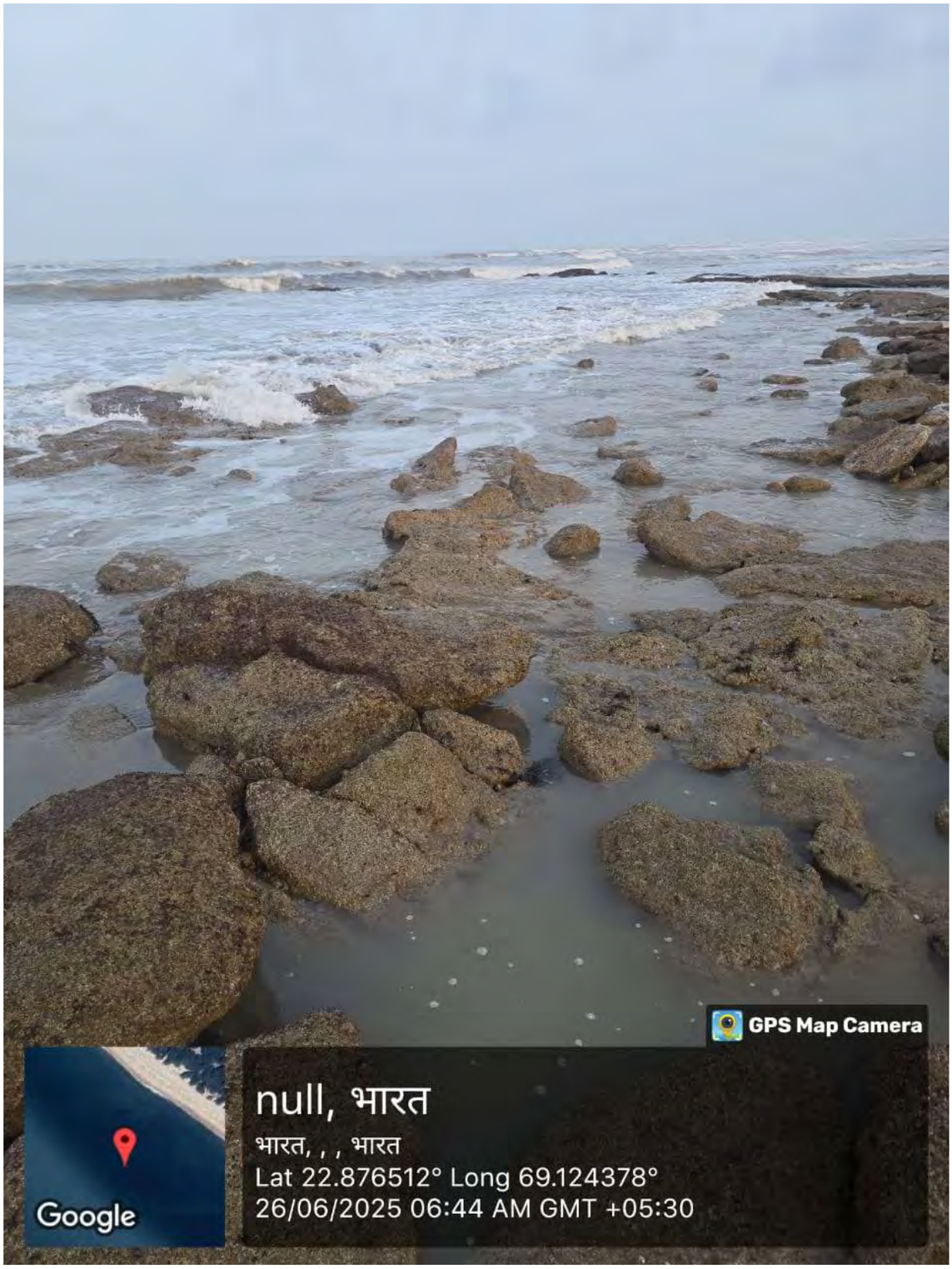

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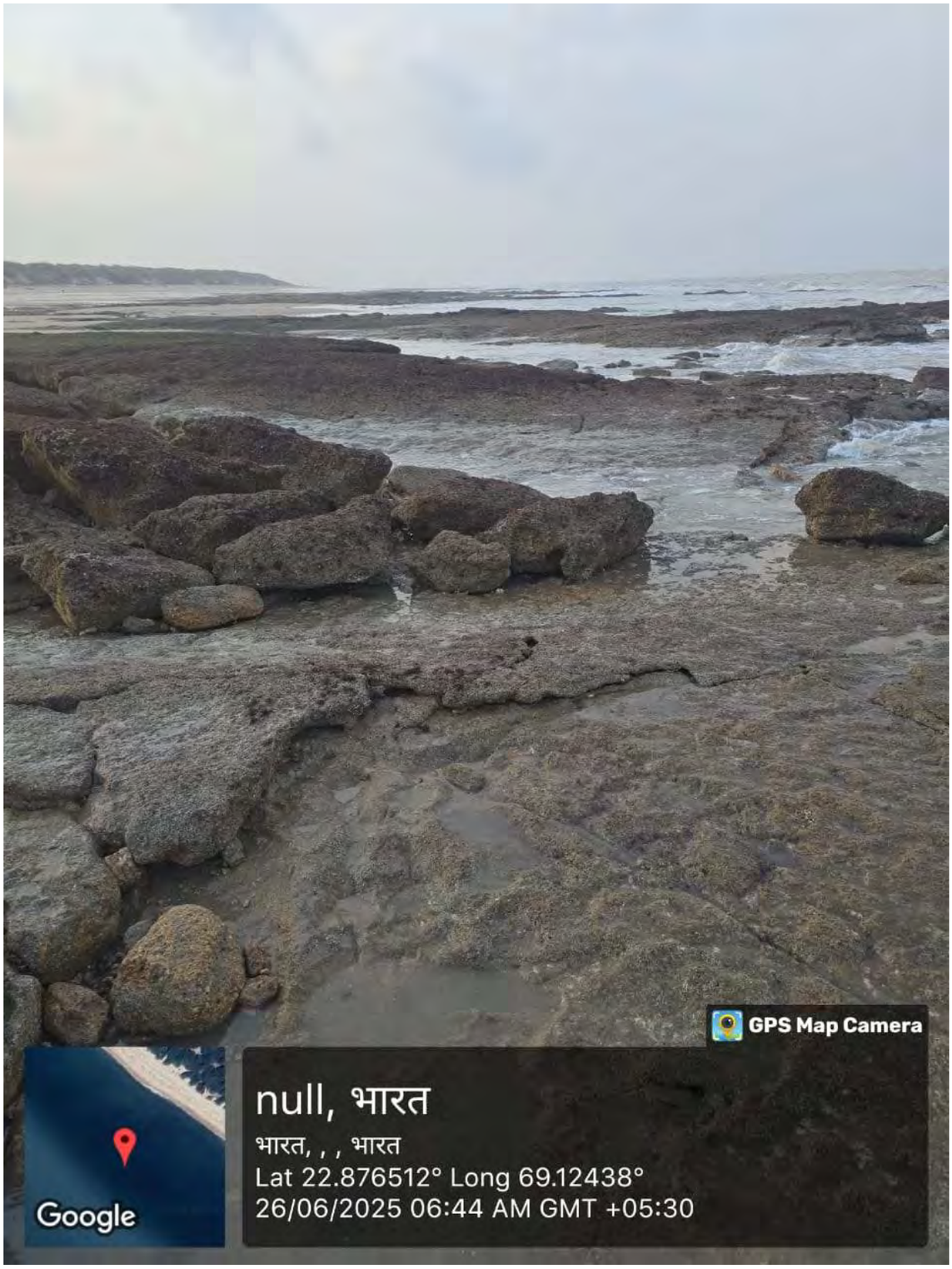

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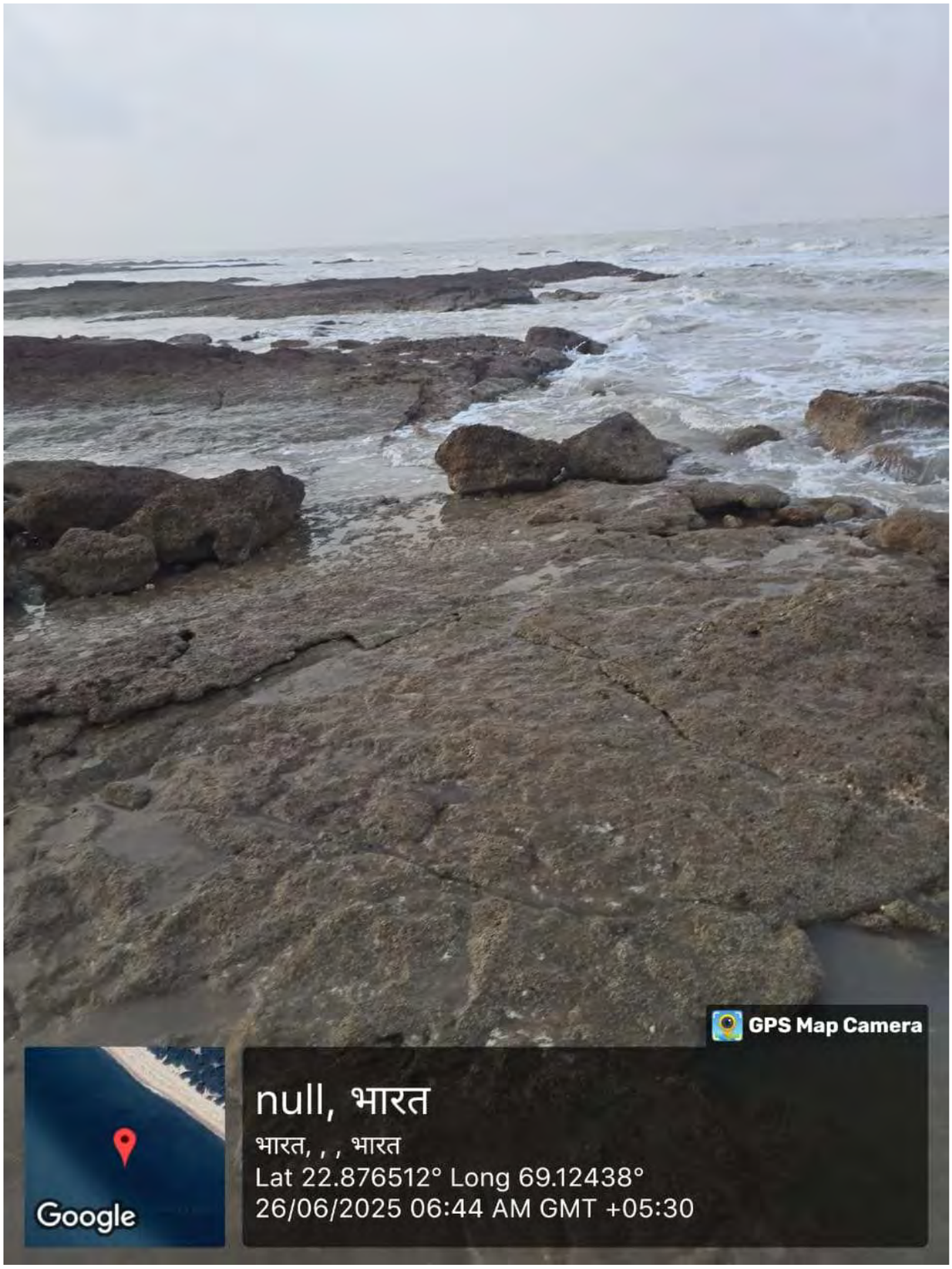

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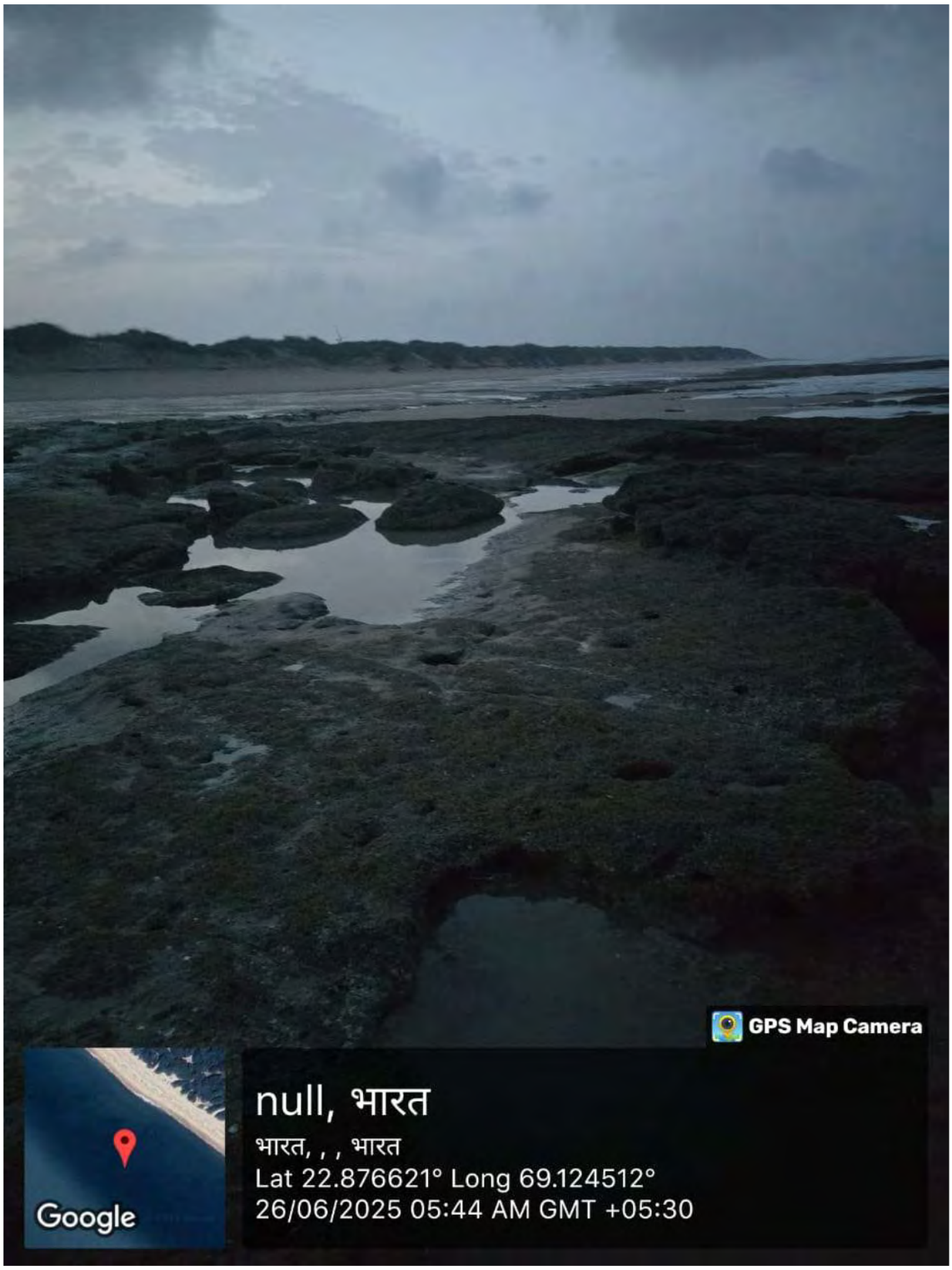

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Annexure III: ***Enclosed as separate report***

Ecological Study & Wildlife Conservation Plan for Proposed Greenfield Chemical Complex by Dr. Bharat Jethva NABET Accredited FAE

Ecological Study & Wildlife Conservation Plan for Proposed Greenfield Chemical complex

(Soda Ash & Sodium Bi-carbonate plants, Captive Co- generation Power Plant, Seawater Intake and effluent disposal)

at Village Bada, Taluka - Mandvi, District - Kutch, Gujarat



SUBMITTED BY
M/S. GHCL LIMITED
JULY-2019

Ecological Study & Wildlife Conservation Plan for Proposed Greenfield Chemical complex

(Soda Ash & Sodium Bi-carbonate plants, Captive Co- generation Power Plant, Seawater Intake and effluent disposal)

at Village Bada, Taluka - Mandvi, District - Kutch, Gujarat

Submitted by

M/s. GHCL Limited

Study by
Dr. Bharat Jethva
NABET Accredited FAE
Cat-I, Ecology & Biodiversity
Bhagwati Enviro Care Pvt. Ltd.

July-2019

CERTIFICATE

This report has been prepared by us based on extensive field visits and data collected, review of published literature, information and maps furnished by M/s GHCL Limited, and data available in public domain. The study was restricted to project area and its 10 km periphery from the project area. The study undertaken is structured around the project information as provided by the project proponent, any change in the proposed activities may result in variation of outcome.

Dr. Bharat Jethva
NABET Accredited FAE
Cat-I, Ecology & Biodiversity
Bhagwati Enviro Care Pvt. Ltd.
Ahmedabad

22nd July 2019
Ahmedabad

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1. INTRODUCTION

1.1. Background

GHCL Limited was incorporated in year 1983 and since then it has established itself as a well-diversified group with a market capitalisation of almost Rs 3000 Crores. It has ascertained its footprints in Chemicals, Textiles and Consumer Products segments.

In the Chemicals sector, the company manufactures Soda Ash (Anhydrous Sodium Carbonate), a major raw material for detergents, glass & ceramics industries and Sodium Bicarbonate (baking soda). The manufacturing facility of Soda As plant is located at Sutrapada of District Gir-Somnath in the state of Gujarat, India. The region is famously known as the Saurashtra coastal belt region and is one of the ideal locations for the manufacturing of Soda Ash.

GHCL Limited at Sutrapada, is one of the leading manufacturers of Soda Ash in India, with annual production capacity of 11,00,000 metric tons. This contributes to almost 25% to 29% of the annual domestic requirements.

GHCL Soda Ash is available in two grades –light and dense grade. Soda Ash and Sodium bicarbonate is marketed in India under the brand name 'LION'. GHCL also has lignite mines at Khadsaliya in the Bhavnagar district of Gujarat to supply the raw material needed for the production of Soda ash. GHCL produces 60 Thousand MTPA of Sodium Bicarbonate which is an important raw material for industries like bakery, pharma, fire extinguisher manufacturing, cleaning agents etc.

The Textile operations at Vapi is an integrated set up commencing from spinning of yarn to weaving, dyeing, printing and processing till the finished products like sheets & duvets take shape and are primarily exported worldwide. It is one of India's leading manufacturers of Home Textiles with an in-house spinning unit at Madurai, Tamil Nadu and a state-of-the-art

home textile facilities at Vapi, Gujarat with a weaving and processing capacity of 45 million meters of fabric up to made ups. A perennial innovator in bed linen category, it has the flexibility to process both cotton and blended fabrics. GHCL's Home Textiles products are predominantly exported worldwide to countries like United Kingdom, United States of America, Australia, Canada, Germany and other European Union countries as well.

Consumer Products operation is another business for GHCL, where it is a leader in manufacturing and selling premium Edible salt, Industrial grade salt and Honey domestically.

Based on the growing demand of Soda Ash and Sodium Bi-carbonate, the GHCL proposed a Greenfield project near coast of Bada village in Mandvi Taluka of Kutch district in Gujarat.

GHCL Ltd. entrusted NABET Accredited Category A Functional Area Expert on Ecology and Biodiversity for assessment of Bio diversity and ecological status within core and buffer zones of the proposed site and also suggest conservation plan and measures to mitigate impacts due to proposed activities, if any.

The Soda Ash process along with captive co generation power plant in totality requires huge quantity of cooling water. To meet overall water requirement for proposed Greenfield chemical complex, sea water intake from Arabian Sea in proximity is the best suitable option. The effluent generated from various process units from entire plant will be dispersed through outfall system at a suitable location in to Arabian Sea. For laying sea water intake and effluent disposal pipelines suitable stretch of nearby forest area will be utilised after taking applicable approvals from statutory authorities.

As a prerequisite (prior environmental clearance) for the proposed development, GHCL shall submit the Form-1, prepared Prefeasibility Report,

to the Environment Appraisal Committee (EAC), Ministry of Environment Forests and Climate Change (MoEF&CC) at New Delhi. As per standard Terms of Reference (ToR) a rapid ecological study for the proposed site is carried out. The study would cover aspects of terrestrial ecological status of the study area such as habitat type and quality, species, diversity, rare, threatened and endemic species, habitat fragmentation, ecological linkage, species of higher conservation significance etc. In case of schedule-I fauna reported in the study area, conservation measures would be proposed. And a detailed study to assess the wildlife habitats, their migration route, etc. and measures to mitigate impacts of the proposed activities.

Therefore, the present study is carried out to fulfil requirement of Standard ToR issued for the sector. The present study is a detailed account of flora, fauna, wildlife habitats present in 10 km radius of the proposed project area.

1.2. Legal Framework

GHCL proposes to set up a green field Chemical complex consisting of Light Soda Ash 11,00,000 TPA capacity and 5,00,000 TPA Dense Soda Ash 2,00,000 TPA Sodium Bi-carbonate along with utilities like, Sea water intake, effluent disposal system, water treatment, RO-DM unit and captive co-generation power plant of 120 MW near Bada village in Mandvi Taluka, in Kutch District of Gujarat.

The proposed Soda Ash project activities fall in 4 (e), Category 'A' as per EIA Notification, 2006 and its subsequent amendments. The seawater intake from Arabian Sea and outfall for effluent disposal at a suitable point in Arabian Sea attracts provision of CRZ, Notification 2019. Recommendations from State Coastal Zone Management Authority (CZMA) will be required for the project. GHCL shall apply for ToR under 'A' category from EAC. The present study is to fulfil the requirements of studies mentioned under the standard ToR conditions.

1.3. Scope of Work

Scope of work for this study is in line with the standard ToR which includes ecological status (terrestrial and aquatic) of the study area such as habitat type and quality, species, diversity, rarity, fragmentation, ecological linkage, age, abundance, etc. in case of schedule fauna, conservation measures should be proposed, And a detailed study to assess the wildlife habitats, their migration route, etc. and measures to mitigate impacts of the proposed activities.

The present study has carried out identification of ecologically sensitive receptors (species, habitats& eco-systems) based on field investigations and literature survey along with their mitigation with conservation action plan. The study was carried out in core area (project site) and in buffer area i.e. 10.0km periphery from the project site. The study was carried out systematically and scientifically using primary and secondary data in order to bring out factual information on the ecological conditions of the project site and its surroundings.

The study involved assessment of general habitat type, vegetation pattern, preparation of inventory flora and fauna of terrestrial ecosystem in 10 km radius from the boundary of proposed plant. Biological assessment of the site was done to identify whether there are any Rare, Endemic or Threatened (RET) species of flora or fauna in the core area as well its buffer zone and to identify whether there are any ecologically sensitive area within buffer zone that is likely to be impacted. The study also designed to suggest suitable mitigation measures if necessary for conservation of important species and their habitats etc.

1.4. Objectives of the Study

The major aim of the present study is to avoid any impact of proposed project activity on important natural habitats or species in the study area. Therefore, the study is carried out with following objectives.

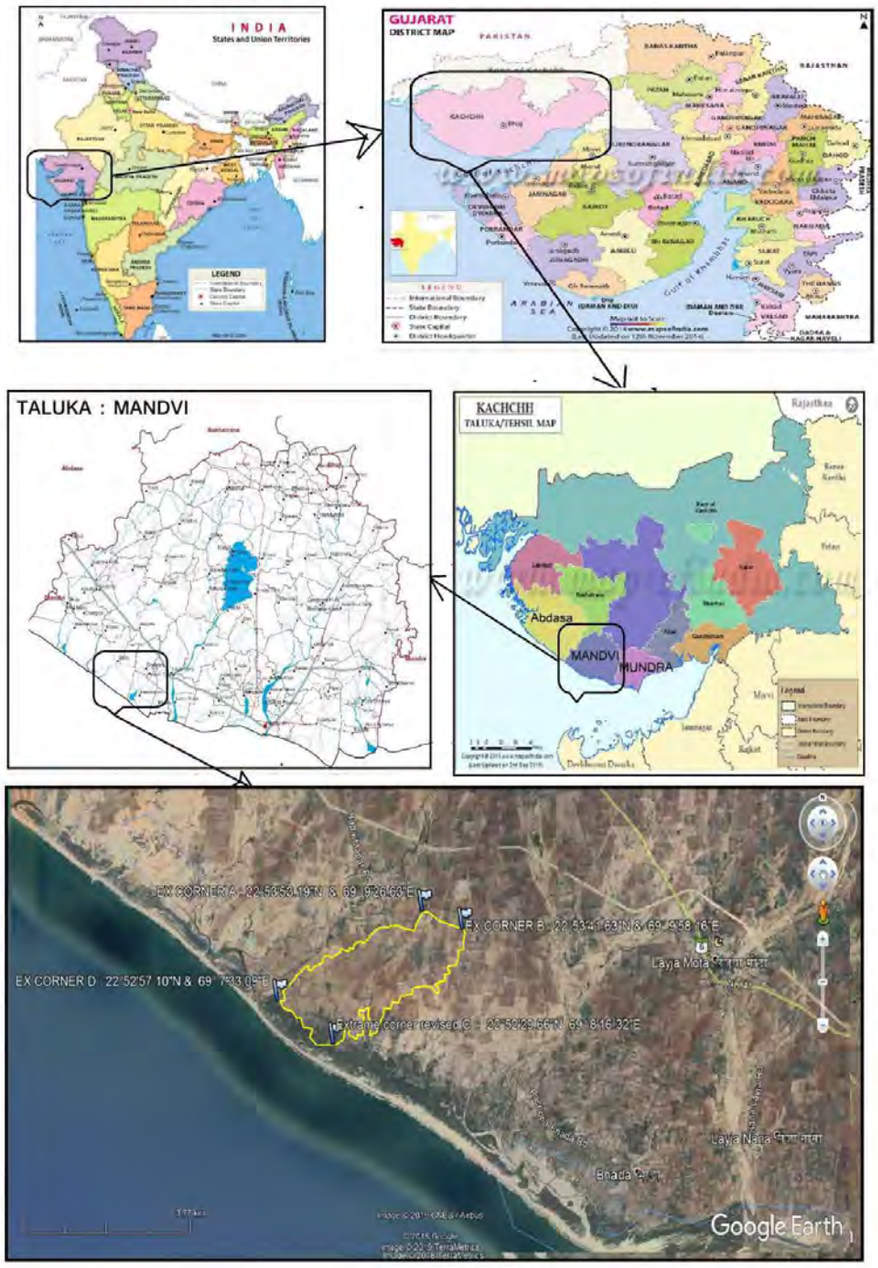
- To evaluate the ecological status of the study area with respect to important flora, fauna and ecologically sensitive habitats etc.
- Assessment of any impacts of the project activities on ecologically sensitive habitats and species.
- Recommend mitigation measures in the form of wildlife conservation plan for Schedule-I species with an in-built monitoring mechanism and schedule of implementation along with financial budget.

2. STUDY AREA

2.1. Project Location

Proposed Project site and the study area are located on the coast of Bada village, in Mandvi Taluka of Kutch district in Gujarat state (Map-2.1).

Map- 2.1: Proposed project location near Bada village of Mandvi Taluka of Kutch district in Gujarat.



2.2. Study Area

For the convenience of the study and the user agencies, the study area was divided in two major parts i.e. 1) Core area/project area and 2) Buffer area i.e. 10.0 km periphery of the project boundary (Map-2.2, Map-2.3).

2.2.1. Core Area

Core area is proposed land area for establishing the project Plant (Map-2.2) that covers about 1350 Acre of private unirrigated agriculture land, Sarkarshree land/Govt. land, near village Bada, of Mandvi Taluka in Kutch District of Gujarat. The proposed project area land does not have dense vegetation, sparse clumps of thorny scrub mostly in the form of invasive species i.e. *Prosopis juliflora* exists. No major rivers, drainage etc. passes through the project area. Nearest habitation is at about 1.0 km north from the proposed project site.

Map-2.2: Core and Buffer area location of proposed plant in Kutch, Gujarat.



Map- 2.3: Project location (core area) with 10.0 Km buffer (study area) in Gujarat.



The Arabian Sea coast is located south of the proposed boundary of the project. The area is located at 6.0 km distance from the National Highway NH-41. No major natural vegetation or any human settlements present within the proposed land, therefore there is no need for rehabilitation of any human settlements from the project site. The project site does not fall in 10.0 km periphery of any National Park or Sanctuary or their eco-sensitive zones.

2.2.2. Buffer Area

The Buffer Area mainly consists of revenue areas 20 villages that fall in 10.0 km periphery of the project site (Map-2.2). The list of villages is given in Table-2.1.

Table-2.1: List of villages falling in 10 km buffer area. (To be finalized after project boundary finalized).

No	Village	No	Village	No	Village
1	Bada	8	Panchatiya	15	Dedhiya
2	Bambhdai	9	Bhada	16	Bayath
3	Mod Kuba	10	Layja Nana	17	Bhojay
4	Kokaliya	11	Kathada	18	Undoth
5	Changdi	12	Merau	19	Godhra
6	Mapar	13	Janakpar	20	Layja Mota
7	Bhisara	14	Vindh Timbo		

Majority of the land of the buffer area is occupied by the private unirrigated agriculture fields, forest area, open scrub vegetation, sandy beach, pond/ reservoir, roads & Canal network, village habitations, wind turbines etc. Most importantly there are no Wildlife Sanctuaries or National Parks located in the 10.0 Km periphery of the proposed project area. Due to close proximity of Arabian Sea coastal stretch the activities are regulated as per Coastal Regulation Zone.

3. METHODOLOGY

3.1. Basic frame work of data collection

The prediction of impacts of industries on flora and fauna depends on understanding of the proposed activities, its magnitude/extent, scale and ecological conditions in the surrounding area. Collection of comprehensive baseline information on flora and fauna is therefore a prerequisite for assessment of impacts of industrial development activities. It would also help in advance planning and mitigate the impacts and ultimately managing the natural habitats and resources. The approach to achieve the stated objectives within defined scope of work, include field surveys, interviews, and reviews of literature. Following was the basic fame work of the data collection and analysis for the present study.

3.2. Field Surveys

Several field visits were carried out between month of October-2018 to January 2019 to understand and assess the impacts of proposed project activities on flora and fauna and natural habitats. We evaluated the distribution and abundance of flora and fauna in project area and in buffer area separately.

3.3. Identification of Important Ecological Habitats

The important ecological habitats and features were identified based on our field visits and also mapping of landuse types in the study area. We identified ecologically important habitats through primary survey, literature survey and consulting local naturalists etc. These important ecological habitats and features were then identified on landuse map that is prepared for the study area. Land use map of 10 km radius of the proposed project site is prepared using open source QGIS platform and Google earth. Prominent landuse features such as, roads, rivers/waterbody/drainages, agriculture, sea, sandy beach, village habitation and built up areas, forest area, scrubland etc. were digitized using open source software such as QGIS and their areas were calculated. There may be acceptable margin of

errors in the final map however, locations and important features are identified and shown on map.

3.4. Study of Flora

Assessment of flora was carried out in core project and buffer area during the study period. Study of flora involved simple, systematic and standard techniques. Due to lack of rain in the monsoon, plants such as annual grasses, herbs and few shrub species were located very sparsely. Except some of the common species of trees, shrubs identification of the species was difficult during quadrate sampling. It is therefore, the data of quadrate sampling was not useful in quantifying the species such as grasses and herbs. Therefore, we carried out qualitative assessment of flora in the study areas through ad libitum sampling. During surveys, our team continuously searched for plant species and identified them to prepare a checklist of plants in the respective study area. Various habitats of the study area i.e. drainage, ponds, check dams, agriculture fields, coastal area, sand dunes, dense scrubland, reserve forests etc. were surveyed on foot and qualitative checklists of plants were made. Information on occurrence of plants, their species names, floral phenotypes, life forms etc. were collected continuously during the field trips in the study area from morning to evening hours. The collected data was then systematically used to synthesize a comprehensive checklist of flora that provides baseline information of the representative vegetation community of the study area.

3.5. Study of Fauna

We mainly studied the fauna of higher trophic levels which acts as indicator of the type and health of the eco-systems.

Reptiles: Majority of the reptile species are fossorial in habit therefore the assessment of reptiles and their diversity etc. holds special significance for any development projects. It is difficult to conduct quantitative study on reptiles within a short period of time. Therefore, we relied on qualitative observations only. We carried out study based on interview survey, secondary literature as well as direct observation on road killed reptiles. We

randomly looked for various reptiles and their presence i.e. lizards, snakes etc. in the study areas. Therefore, only a check list of reptiles observed during the study period was prepared.

Birds: Birds, occupying higher trophic levels in the ecosystems, respond quickly to the changes in the habitats and therefore serve as one of the best indicators for evaluating the status of the area. Therefore, we created baseline data on birds by systematically and collected data on their occurrence i.e. presence absence in the buffer and core areas in the study area.

For creating baseline data on birds we randomly walked in the study area during early morning i.e. 6:00 AM to 9AM and 5:00PM to 7:00 PM. These time periods of the day are when maximum bird movements are expected. We walked randomly in the study area carried out sightings of birds ad libitum and recorded species based on their identification. Special reference books for bird species identification were used. Apart from walking randomly, we also relied on specific habitat search for different species i.e. dense bushes, creeks, wetlands, ponds, big trees, open fallow agriculture areas etc. in order to accomplish the inventorization of the bird species found in the study area. All the bird species are classified based on their conservation status, their schedule under Wildlife Protection Act 1972, their migratory status, habitats and their feeding guilds. This was further used for finding out important bird species in the study area i.e. rare, endangered or species of high conservation significance.

Mammals: Like birds, mammals are also occupying higher trophic levels in many ecosystems and respond quickly to the changes in their habitats therefore, serves as best indicators of the ecosystem health. We therefore, chose to create qualitative baseline information on presence and absence of mammals in the study area. Since the presence of mammalian species is low affecting probability of their sightings, in the study area, it was difficult to estimate their population using line transect method. More importantly, it was difficult to accommodate the sightings of nocturnal and diurnal animals in the

study. Therefore, we prepared a qualitative check list of mammals based on their presences and absence using direct and indirect evidences and signs such as footprints, dens, droppings, diggings, scrap marks, etc. in the project area.

Apart from these, search efforts were also made for various signs of important wildlife species in the study area which includes looking for wildlife signs such as dens, diggings, scrap marks, droppings etc. The sites where likelihood of animals is higher such as shady trees, waterholes, dense and undisturbed bushes etc. were surveyed intensively during the survey in the study area. This survey has helped us in identifying various species of mammals in the study area. For mammal inventory, both direct sightings and indirect evidences (like dung, scats, pellets, foot prints, nests, dens etc.) were accounted.

3.6. Important Wildlife Habitats and Protected Areas

We assessed the presence and distances of important wildlife habitats and hotspots such as protected areas, breeding and nesting habitats, coastal habitats, important wetlands, and grassland area from core area. These important areas such as Protected areas (National Park, Wildlife Sanctuaries, Conservation Reserves etc.), Wetlands of national importance, Ramsar sites, Important Bird Areas (IBAs) classified by the Birdlife International etc.

3.7. Rare, Threatened & Endemic Wildlife Species and Their Corridors

We also assessed the presence of rare, endangered, endemic wildlife species in the project area/core area and buffer area. Special search efforts were made during the field visits to identify any such sensitive species or their corridors etc. in the project area and buffer area. Apart from field visits we relied on interview surveys of local people, consultation with local biologists and naturalists etc.

3.8. Literature Review

Considering the limitation to undertake statistically rigorous data gathering system, study also relied on existing knowledge about the ecology and biodiversity of the region. Importantly, there are few studies undertaken in the past dealing with the impacts of Soda Ash Plants on flora and fauna and other concerns of biodiversity conservation. Literature on Soda Ash projects and associated environmental issues were downloaded and collated through internet. Various relevant literatures were surveyed during the study for collection of baseline information. Maps, reports and documents collected from the project proponent were also reviewed and used in the present study. Books on flora, fauna and wildlife were also studied in order to understand the biology of several species.

3.9. Consultations

During the study, series of consultations were made with both technical and non technical stakeholders to get better picture on the project area/core area and buffer zone habitats. In order to know more about the seasonal presence of several faunal species and their movement, study team informally consulted and discussed with local naturalists and local people, from the villages, herders and farmers who inhabit close to the proposed project area.

3.10. Supplementary Information

Other than the above, for the purpose of this study, relevant information was also collected from following sources:

Research papers and reports on flora and fauna of Kutch, Mandvi coast

Google imageries/Google Maps

Project related Maps provided by GHCL Limited

Communications with subject experts

3.11. Analysis to Evaluate the Potential Impacts

The information collected on status of flora and fauna and, their spatio-temporal distributions, hotspots, and potential impacts of proposed project development were logically analyzed and conclusions were extracted for preparation of conservation plan for the project proponent to implement.

3.12. Preparation of Wildlife Conservation Action Plan:

After identification of key impacts of the project, on flora, fauna or any key habitats of any important species or their corridors, a comprehensive wildlife conservation action plan was prepared for 10 years with monitoring mechanism and financial projections.

3.13. Limitations of the Study

The study undertaken is structured around the project information as provided by the project proponent, any change in the proposed activities may result in variation of outcome. The study is based on field visits, literature survey, consultation with local people etc. Professional judgment and subjective interpretation of facts have been applied for this study. All information's and inferences presented herein are based on the specifics currently available within the limits of the scope of work, information provided by the client or its representative, existing secondary data and schedule.

4. Ecological Assessment

The observations and assessment of overall ecological scenario presented in this chapter include details of flora, fauna, natural habitats, protected areas, wildlife species and their migration corridors etc. Such baseline information provides better understanding of the situation and overall ecological importance of the area. This baseline information viewed against proposed project activities help in predicting their impacts on the wildlife and their habitats in the region. Data collected and information gathered from secondary literature on flora, fauna, protected area, natural habitats, wildlife species etc., were analyzed and results are presented as follow.

4.1. Biogeographic Zone

The region falls in Indo-Malay Realam (IM 1303) and Deserts and Xeric Shrublands Biome as defined by WWF. The North-western Thorn Scrub Forests [IM1303] ecoregion represents a large expanse of degraded dry forest surrounding the Thar Desert. Neither exceptionally species-rich nor high in endemism, the ecoregion nevertheless harbours viable populations of antelopes.

As per classification of Indian Biogeographic zones by Rodgers et al. (2000), Kutch district falls under Biogeographic Zone 3 - the Indian Desert and the Biogeographic Province Kutch Desert- 3B. The project site also falls on coast which is Biogeographic Zone-8 Coasts.

4.2. Protected Areas

As per our information and survey there is no Sanctuary, National Park, or notified wildlife corridors within the core area and buffer area (10 km) of the project site. Marine National Park and Sanctuary areas are located at 40 Km distance in south directions, where as Narayan Sarovar Sanctuary is located at more than 75 km in North-West direction, Kutch Desert Wildlife Sanctuary is situated in the Great Rann of Kutch at more than 85km in North East direction. The Wild Ass Sanctuary is located in the Little Rann of Kutch at

more than 150 km distance, Kutch Bustard Sanctuary at more than 50 km in North-West direction and Chari-Dhand Wetland Conservation Reserve is located at beyond 75 Km north. Majority of the protected areas and their eco-sensitive zones are located beyond 50 km distance from the project site (Table-4.1, Map-4.1).

Table-4.1: Protected area and their distances from proposed project site.

No	Protected Areas	Distance	Direction
1	Marine National Park	40 Km	South
2	Marine Sanctuary	40 Km	South
3	Narayan Sarovar Sanctuary	75 Km	North-West
4	Kutch Bustard Sanctuary	50 Km	North-West
5	Wild Ass Sanctuary	150 Km	East
6	Kutch Desert Sanctuary	85 Km	North-East
7	Chhari Dhandh Conservation Reserve	75 Km	North

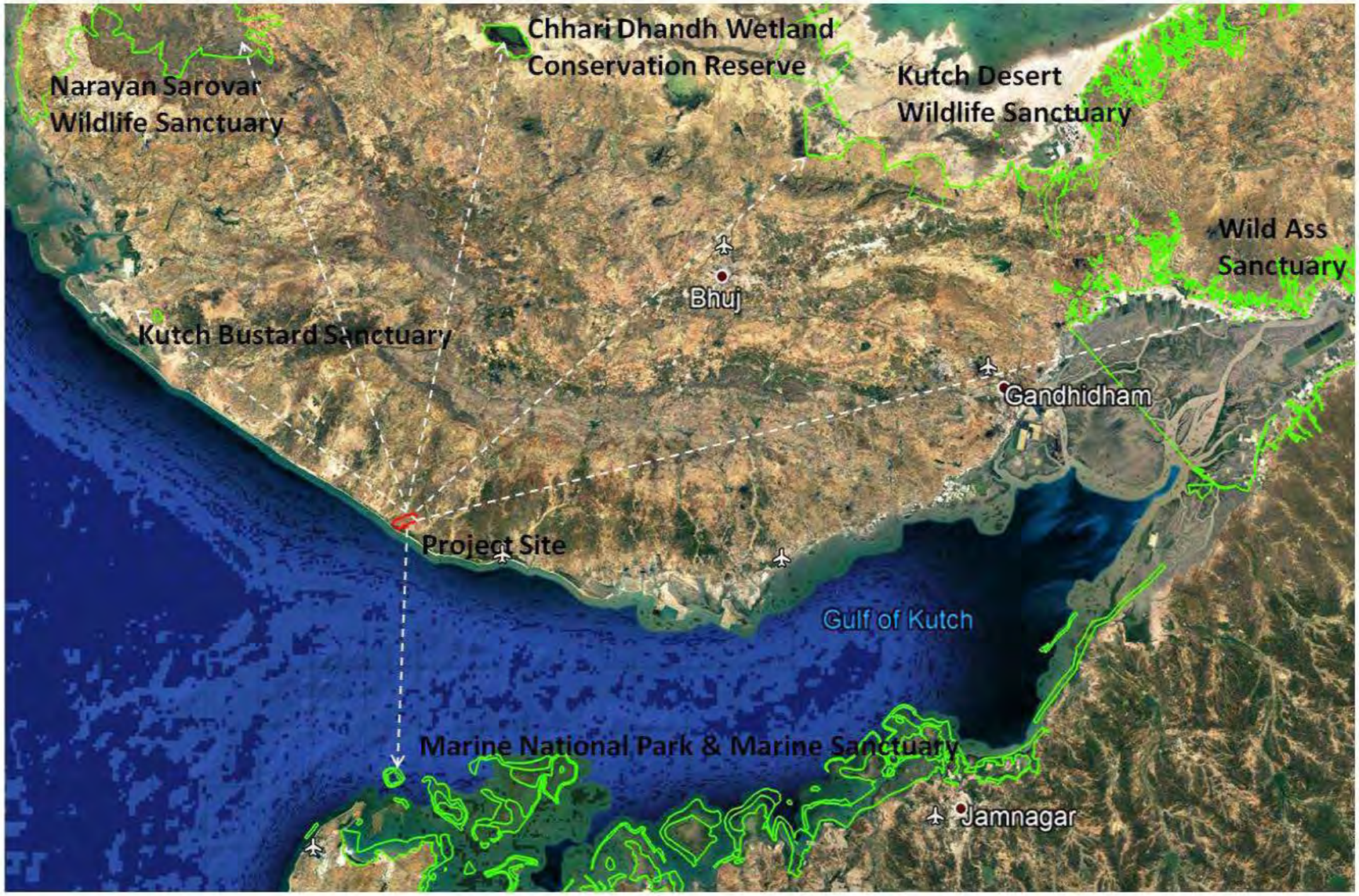
4.3. Landuse Types in the Study Area

We mapped various landuse types of the study area using field surveys and various references available online. The major landuse features are agriculture, sea, beach, waterbodies, built up areas, wasteland (consisting of scrubland & plantation) etc. (Table-4.2 & Figure-4.1).

Table-4.2: Area & percentages of various landuse types in the study area.

No	Land use	Area in Ha.	Percentage
1	Forest	1779.0	4.15
2	Sea	17830.0	41.64
3	Agriculture	16185.0	37.80
4	Builtup	196.0	0.46
5	Wasteland	5465.0	12.76
6	Low-lying Areas	54.0	0.13
7	Waterbody	740.0	1.73
8	Scrub & Plantation	369.0	0.86
9	Beach	205.0	0.48

Map-4.1: Project site location vs. protected areas in Kutch district.



Map-4.2: Landuse in the study area (10 km from project site) in Kutch district.

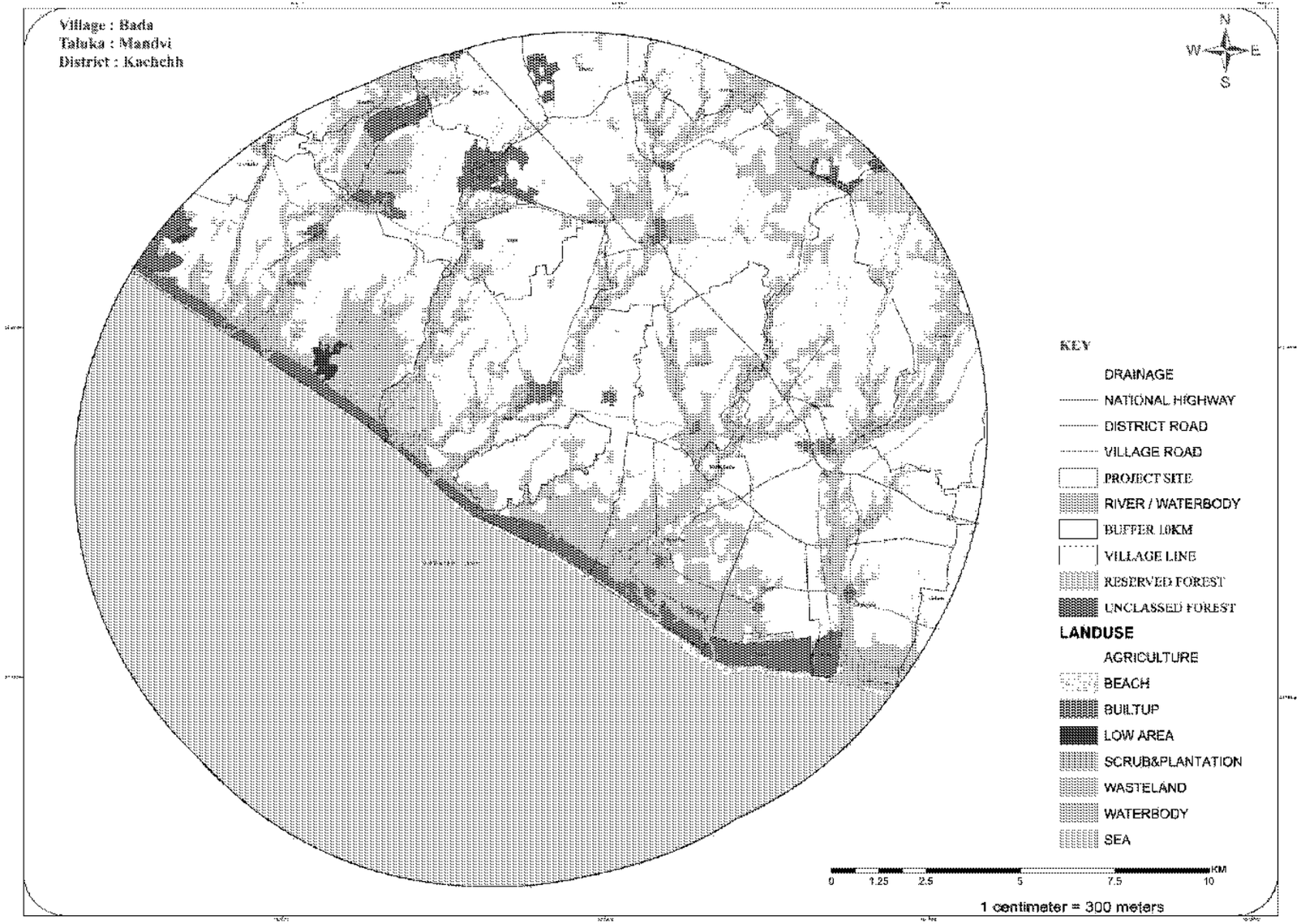
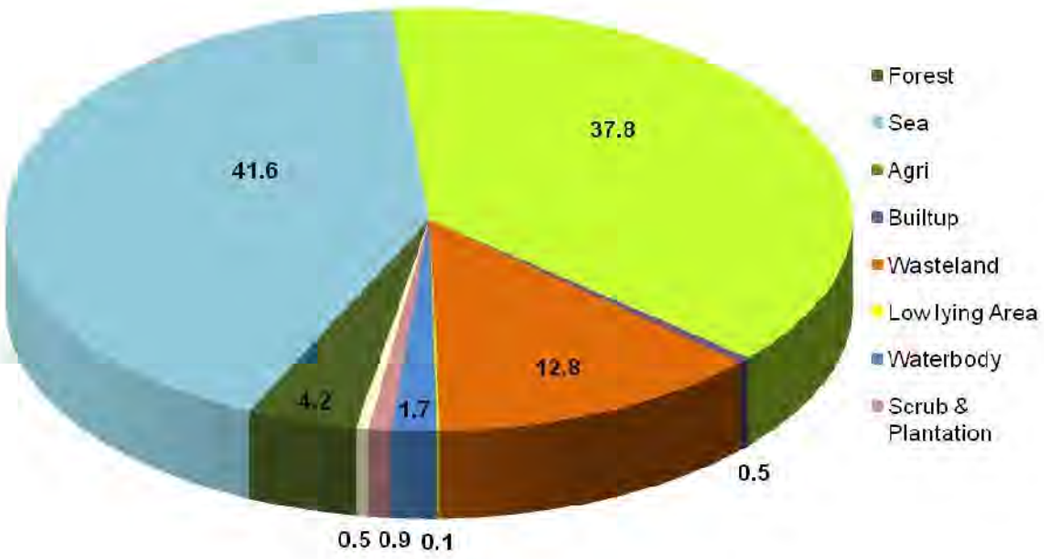


Figure-4.: Percentage of various landuse classless in the study area.



4.4. Important Ecological Habitats

Based on our field visits and literature survey we identified three important and ecologically sensitive habitats that are located within 10.0 km buffer zone. These habitats are listed below

i. Forest Areas
ii. Seaturtle nesting site
iii. Sand dunes

4.4.1. Forest Area & Forest Type

As per the forest classification of Champion and Seth (1968), forest of Kutch district classified under the "Northern Tropical Thorn Forest". Our field observation suggests that total 4.7% of the study area has presence of forest area in the form of unclassed and reserve forests (Map-4.2, Map-4.4, Figure-4.1). Our field observation suggests that there is no classified forest as such falling within the boundary of proposed project core area. However some part of the unclassed forest area located south of the project boundary would be required for laying sea water intake and effluent disposal outfall pipelines.

Prior to commencing any construction work in forest stretch for intake and outfall pipelines, due approval from forest authorities will be obtained by the project proponent. During field visits we noticed presence reserve forest areas in the buffer zone which are under the jurisdiction of Kutch West Forest Division of Gujarat Forest Department (Table-4.3). These forest areas are well marked with a boundary wall indicating its possession by the forest department. These forest areas are of two types Unclassed (Section 4, transferred land or unsurveyed land) and Reserve forests declared under section 20 of Indian Forest Act 1980.

The thorn forests are dominated with dense patches of *Prosopis juliflora* along with scattered plants of *Acacia nilotica*, *Prosopis cineraria*, *Zizyphus numularia, Salvadora persica, Salvadora oliodes, Capparis decidua, Calotropis procera, Acacia leucophloea, Casia auriculata etc.* The vegetation type of these forest areas are representative of Semi arid, desert eco-system. The details of the forest areas are given in Table-4.3.

Table-4.3: Details of Forest area and forest types in study area.

No	Village	Survey No.	Area (ha.)	Forest Type
1	Bada	633	182.61	Unclassed
2	Bada	639	181.59	Reserved Forest
3	Bada	683	30.62	Unclassed
4	Bambhdai	482/12	235.84	Unclassed
5	Bambhdai	482/12	100.64	Unclassed
6	Bayat	607/p	113.43	Unclassed
7	Bhada	Unsurveyed	196.50	Unclassed
8	Bhojay	391/p	49.28	Unclassed
9	Changdai	215/1	99.63	Unclassed
10	Changdai	215/2	58.33	Unclassed
11	Changdai	215/3	58.71	Unclassed
12	Godhra	694	132.91	Reserved Forest
13	Nana Layja	192/p	75.70	Unclassed
14	Panchatiya	264	214.74	Unclassed
15	Undoth	427	48.47	Unclassed

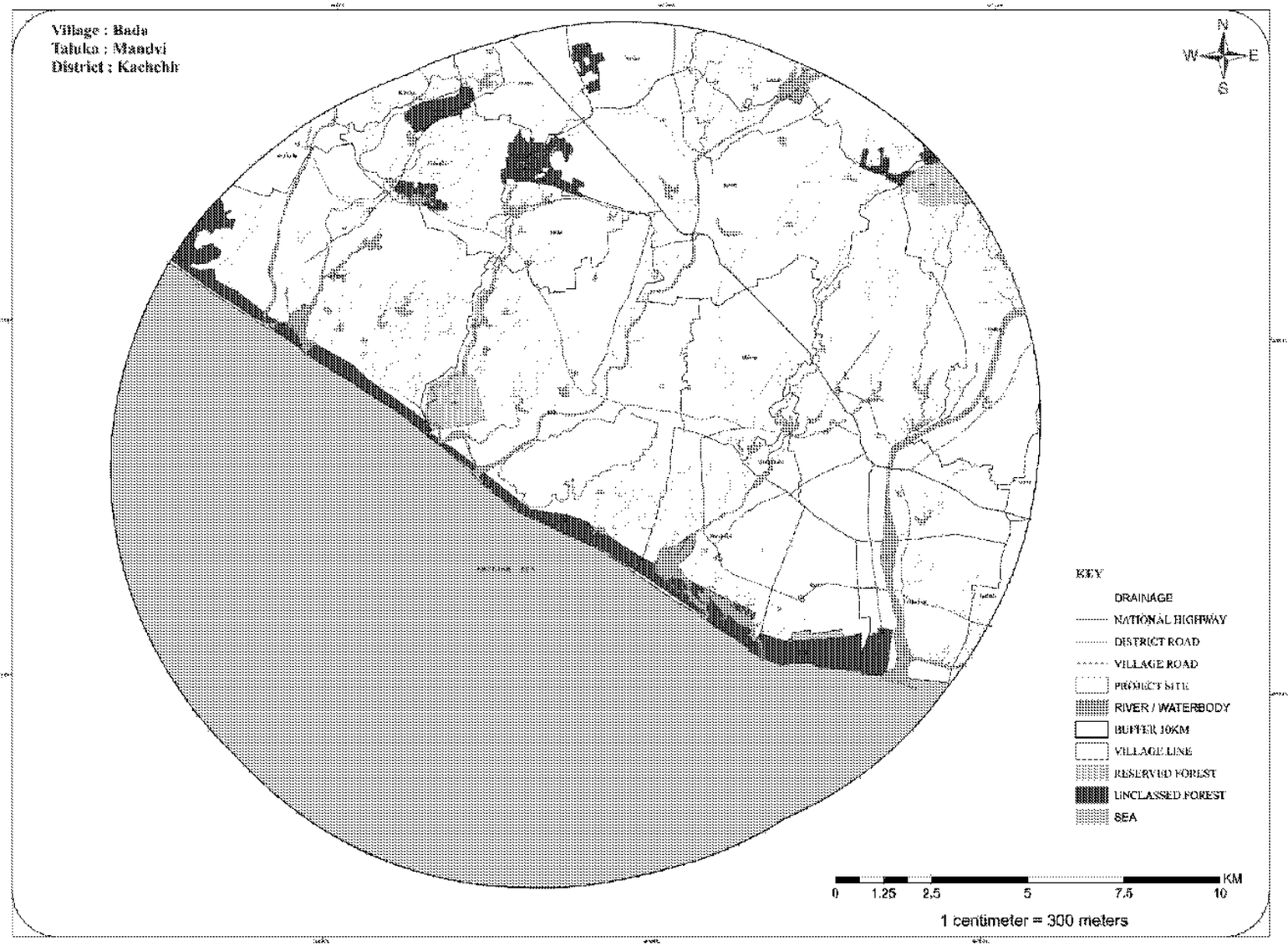
4.4.2. Waterbodies

Our observation and literature review suggests that there are no major wetlands present within the study area i.e. 10.0 km buffer area of the project site. However, there are total 6 seasonal drainages that run north to south in the study area. These drainages have small check dams built on them which are known to accumulate overflowing runoff water for a short period. Apart from being important hydrological features in the semi-arid area, these check dams provide important habitat for many bird species and water source for wildlife in the region. One such seasonal drain is known as Vengdi River which flows from North to South adjacent to project site in western side of proposed project site (Map-4.3). There is one check dam on this river adjacent to project site boundary of the proposed project site. However, all such drainages are seasonal in nature and flows only during rainy days. These drainages flows water from main land to Arabian sea on Kutch coast. Apart from drainages and check-dams, there are number of ponds located in the study area. These ponds mostly have smaller catchment areas and are located near villages, wastelands, forests, or in the agriculture areas to hold rainwater for domestic use such as drinking for human as well as cattle, washing clothes, irrigation etc. One of the closest small minor seasonal ponds is located at 250 mtrs. in south-east direction from the proposed project boundary. A village pond is located at Bada village in north-east direction. These ponds may not be important hydrological features but they provide crucial source of drinking water for wildlife in the region.

4.4.3. Seaturtle Nesting Beach

The sandy stretches of Kutch district are known for sporadic nesting of two species of sea turtles i.e. Olive ridley (*Lepidochelys olivacea*) and Green Seaturtle (*Chelonia mydas*). Gujarat Ecology Commission a Government of Gujarat Organization has carried out a study as part of World Bank aided Integrated Coastal Zone Management (ICZM) Project titled "*Evaluation of Sea Turtle Nesting Population and Threats to Nesting Beaches: Suggest*

Map-4.3: Locations of River, Waterbodies, ponds etc. in the study area.



Conservation and Management Strategies" (also referred as Sunderraj et al 2013). The study based on secondary data (from Gujarat Forest Department and Sunderraj et al 2002) identified total 10 stretches of Seaturtle nesting beaches on Kutch coast.

The study based on available data sources for 10 stretches(Table-4.4) concluded that Bada-Layja Nana, Layja Nana-Mandvi Palace and Mandvi Palace-Mandvi beach were found to be the potential beaches on Kutch coast (Sunderraj et al 2013). According to Sunderraj et al 2013, sandy beach between Bada to Layja nana having length of 11.5 km is first rank beach for seaturtle nesting whereas beach between Bambhdai to Bada of 8 km length ranks 3rd most important nesting beach of Kutch coast.

Table-4.4: Potential Seaturtle nesting beaches identified on Kutch coast (*source Sunderraj et al 2013*).

S. No	Coastal Stretch	Distance (Km)	No of Nests- 1	D/km (RO)	No of nests - 2	D/km (RO)	MRO	FR
1	Pingleshwer – Kamond	4.0	4	1.0 (3)	1	0.25 (8)	5.5	4
2	Kamond – Suthri	5.6	0		2	0.36 (6)	6.0	5
3	Suthri – Chhachhi	10.5	0		3	0.29 (7)	7.0	6
4	Chhachhi – Bambhdai	10.5	0		1	0.09 (9)	9.0	7
5	Bambhdai – Bada	8.0	0		7	0.87 (5)	5.0	3
6	Bada –Layja Nana	11.5	27	2.35 (2)	21	1.82 (2)	2.0	1
7	Layja Nana – Mandvi Palace	6.0	6	1.0 (3)	11	1.83 (1)	2.0	1
8	Mandvi Palace –Mandvi	6.5	29	4.46 (1)	11	1.69 (3)	2.0	1
9	MandviE– Gundiali	6.0	0		0	0	0	
10	Gundilai – Tragadi	4.0	2	0.50(4)	4	1.0(4)	4.0	2
	Total	**72.6 km**	**68**		**61**	**100**		

Data Sources: 1-GSFD-Kachchh Circle, 2- Sunderraj et al 2002,
Rank Order, MRO-Mean Rank Order, FR-Final Rank

According to above mentioned study, density of seaturtle nests is higher (1.8 to 2.3 nest/km) on the coastal stretch between Bada and Nana Layja villages, however, nest density is relatively lower on the coast of Bada and

Bambhdai villages (0 to 0.8/km) (Table-4.4). This difference in nesting could be due to difference in the beach morphology i.e. available beach width, beach slope, vegetation type, disturbance level, predators etc.

The length of the coast in the study area is 23.0 km east to west. Only 2.0 km area falls near the proposed project site. During our field visits we did not observe direct or indirect signs of nesting of seaturtle on the coast near project site. However, sandy beach on the coast of Bambhdai, Pachotiya, Bhada and Nana Layja are likely to have sea turtle nesting activity due to its suitable morphology and past records.

In general, all sea turtle species tend to nest above the high water mark to reduce the risk of tidal inundation or egg wash out (Fowler 1979; Mortimer 1982). During our field visits we observed that the open sandy beach width decreases as we travel on the coast from Nana Layja village (east) to Bada village coast (west). Even bare perusal of 'Google Earth' image reveals that the open beach width is higher on the coast of Bhada and Panchotiya villages which decrease on Bada village coast. Moreover, the width of sandy beach in the supra tidal region near proposed project site is very narrow due to presence of dense *Prosopis juliflora* vegetation on stabilized sand dunes. Also, during our visits we observed that there is a steep slope and dense vegetation in the supra tidal region on the beach near proposed project site. Presence vegetation such as *Prosopis juliflora* is seen to hold sand and stabilized sand dunes (Plate-4.1). We also observed higher presence of predators such as jackals and dogs on the beach.

Therefore, our primary observations suggests that the coast near the proposed project site may not be suitable for seaturtle nesting due to narrow supra tidal region, steep slope, dense vegetation and presence of predators such as dogs and jackals. Though, our observations suggests that there may be no or negligible probability of seaturtle nesting, a proper systematic study shall be carried out to find out the exact status of seaturtle nesting in the study area through an expert.

Map- 4.4: Coastal habitats around project area in the study area.



4.4.4. Sand dunes

During our field survey, we observed presence of sand dunes along the Arabian Sea coast. Presence of sand dunes in the study area suggests high energy wave dominated sea coast. The sand dunes are also present south of the proposed project site boundary. These sand dunes are formed due to deposition of fine to medium, well sorted sand particles. Sediments of the dunes consist of windblown deposits of fine to very fine sand and silt. Majority of the part of the sand dunes are having dense vegetation in the form of *Prosopis juliflora, Acacia nilotica, Acacia leucophloea, Salvadora persica, Caparis decidua, Ipomoea pes-caprae, Suaeda nudiflora etc. with* salt tolerant grasses such as *Cenchrus biflora, Cenchrus Ciliaris, Urochondra setulosus, Dactylocteniums indicum, Cynodon dactylon, Aleurops lagopoides* etc.

Presence of dense vegetation suggests stabilized status of sand dunes. The North-South width of the sand dunes varies from 500 mtrs to 200 mtrs The North-South sand dune height profile studied suggest that the height of the dunes varies from 4 mtrs on fore shore area and landward side to 13 mtrs in the central area. The East-West sand dune height profiling suggests that it varies from 5-13 mtrs with undulating deposits. We also observed directs and indirect signs of variety of animals starting from reptiles, birds and mammal species.

4.5. Floral Diversity and Vegetation Type in Core & Buffer Area

We evaluated biodiversity and abundance parameters of vegetation/plant species in the core area and in the buffer area of the project site.

4.5.1. Vegetation Type & Community in Core Area & Buffer Area:

Core area: The proposed project site falls in the arid-semi arid climatic condition. Our field survey and literature review suggest that the vegetation types and community in the project area is that of semi arid-arid regions. It is represented by sparse thorny scrub vegetation. The major part of the project

area is devoid of large trees and mainly consists of highly scattered and sparse shrubs i.e. *Prosopis juliflora, date palm, Prosopis cineraria, Acacia nilotica, Casia auriculata* and *Zizyphus numularia, Caparis deciduas etc.* the major grasses include several species of *Cyperus* and herbs *Indigofera.* Details of vegetation survey results are discussed in forth coming sections.

Buffer area: The buffer area (10.0 km periphery) comprises mainly of agriculture fields, wastelands, forest plantation patches by forest department, scattered bushes of *Prosopis juliflora, Prosopis cineraria, Acacia nilotica, Azadirachta indica. Prosopis juliflora* and *Zizyphus numularia* among the wild plants and cotton among the cultivated crops are the most dominant plants in the buffer area. Except for highly scattered and small plants of *Commiphora wightii*, there were no rare, endangered or conservation concern species present in the close vicinity of the project area in the buffer zone.

Major part of the buffer area is agriculture fields particularly on the Eastern side of the project area. Since ground water is saline up to 15 km from the coast and highly saline up to 4 km from the coast. Thus, dry land farming is practiced near the coast and irrigated farming is practiced in the farms that are 5-6 km away from the coast. Cotton, Jowar, Bajra, Isabgol, Groundnut, Green gram etc are the main crops grown here. Some villages, especially in the central corridor are endowed with good surface water facilities, and irrigated agriculture is possible in these villages. Being semi-arid, arid zone, this region support low plant growth and therefore, not many large trees with sizable canopies are present in the buffer zone. However, at every village local people have managed to grow trees for shade, aesthetic and religious values.

4.5.2. Dominant Plant Species

Our qualitative survey suggests that the study area is dominated by few species such as *Prosopis juliflora* & *Zizyphus numularia* in shrubs and *Sporolobus maderaspatensiss* & *Cymbopogon martinii* in grasses and *Casia*

auriculata & Aerva javanica in herbs are the most dominant species in the region (Table-4.5).

4.5.3. Invasive or Exotic Species

Prosopis juliflora is an evergreen tree native to South America, Central America and the Caribbean. In the United States, it is well known as mesquite. It is fast growing, nitrogen-fixing and tolerant to arid conditions and saline soils. *Prosopis juliflo*ra is an exotic and invasive widespread, multi-branched shrub/tree species in the India. It has been invading grasslands, native scrubland and forests of Gujarat and India.

Our study showed that the *Prosopis juliflora* is one of the most dominant and wide spread in the core and buffer areas of the project site. Our biodiversity, abundance, density measures suggests *Prosopis juliflora* is fast growing in the area.

4.5.4. Endangered/Threatened/Protected Species

Our field survey in the project area suggest that there are no endangered, endemic, rare plant species present within the project boundary i.e. core area. However we found two important species i.e. *Commiphora wightii*, and *Tribulus terrestris* in the buffer area with low abundance and frequency of occurrences (Table-4.5). These plants have high medicinal values and are facing the threats of extinction by overexploitation for commercial purpose (GUIDE, 2009, Joshi et al. 2005) from Kutch.

4.5.5. Species with Ethno-Botanical Values

There are number of grass, herbs, shrubs and trees species which have various usages in the day to day life of people and their livestock. These plants are used for food, fodder, medicinal usages, fuel wood, timber, culture and religion, aesthetic purposes. Various ethno-botanical usages of plants present in core and buffer areas are given in Table-4.5.

Table-4.5: Floral species recorded during the field survey from core and buffer area and socio-economical usages of the study area.

No	Type / Class	Species	Recorded		Economic Use						
			Core	Buffer	Food	Fodder	Medicinal	Timber	Fuel wood	Cultural & religious	Aesthetic
1	Grass	*Aeluropus lagopoides*	+	+							
2	Grass	*Apluda mutica*	+	+		+					
3	Grass	*Aristida adscensionis*	+	+							
4	Grass	*Aristida funiculata*	+	+							
5	Grass	*Aristida histricula*	+	+							
6	Grass	*Cenchrus biflora*	+	+		+					
7	Grass	*Cenchrus ciliaris*	+	+		+					
8	Grass	*Chloris barbata*	+	+		+					
9	Grass	*Chloris quinquesetica*	+	+		+					
10	Grass	*Chrysopogon fulvus*	+	+		+					
11	Grass	*Cymbopogon martinii*	+	+			+				
12	Grass	*Cyperus arenarius*	+	+		+					
13	Grass	*Cyperus difformis*	+	+		+					
14	Grass	*Cyperus flavidus*	+	+							
15	Grass	*Dactyloctenium aegypticum*	+	+		+	+				
16	Grass	*Dactyloctenium sindicum*	+	+		+					
17	Grass	*Desmostachya bipinnata*	+	+		+					
18	Grass	*Dichanthium annulatum*	+	+		+					
19	Grass	*Eragrostis cilianensis*	+	+		+					
20	Grass	*Heteropogon contortus*	+	+			+				
21	Grass	*Ischaemum indicum*	+	+							
22	Grass	*Sporolobus maderaspatenus*	+	+							
23	Grass	*Urochondra setulosus*	+	+						+	
24	Herb	*Achyranthus aspera*	+	+			+				+
25	Herb	*Aerva javanica*	+	+			+				
26	Herb	*Ageratum conezoides*	+	+			+				
27	Herb	*Aloe barbandensis*	+	+			+				
28	Herb	*Argemone mexicana*	+	+			+				
29	Herb	*Casia auriculata*	+	+							
30	Herb	*Censia coromandelica*	+	+			+				
31	Herb	*Citrulus colocynthis*	+	+			+				
32	Herb	*Coculus hirsutus*	+	+		+					
33	Herb	*Cressa cretica*	+	+							
34	Herb	*Crotolaria lutescens*	+	+		+					
35	Herb	*Cynodon dactylon*	+	+			+				
36	Herb	*Fagonia indica*	+	+		+					
37	Herb	*Indigofera cordifolia*	+	+		+	+				
38	Herb	*Indoneesiella echioides*	+	+			+				

No	Type / Class	Species	Recorded		Economic Use						
			Core	Buffer	Food	Fodder	Medicinal	Timber	Fuel wood	Cultural & religious	Aesthetic
39	Herb	*Justicia procumbens*	+	+							
40	Herb	*Lepidagathis trimerus*		+							
41	Herb	*Leptochloa fusca*		+							
42	Herb	*Metanus emarginatus*	+	+							
43	Herb	*peristrophe bicalyculata*		+							
44	Herb	*Plantago ovata*		+			+				
45	Herb	*Salicarnia brachiata*		+							
46	Herb	*Scirpus tuberosus*		+			+				
47	Herb	*Solanum xanthocarpum*	+	+		+	+				
48	Herb	*Suaeda nudiflora*		+			+				
49	Herb	*Tephrosia purpurea*		+		+	+				
50	Herb	*Tribulus terrestris*		+			+				
51	Shrub	*Balanites aegyptica*		+			+		+		
52	Shrub	*Calotropis procera*	+	+			+			+	
53	Shrub	*Capparis decidua*	+	+	+	+	+				
54	Shrub	*Commiphora wightii*		+			+				
55	Shrub	*Prosopis juliflora*	+	+		+		+	+		
56	Shrub	*Salvadora oliodes*	+	+		+	+	+			
57	Shrub	*Salvadora persica*	+	+		+	+	+			
58	Shrub	*Zizyphus numularia*	+	+	+						
59	Tree	*Acacia leucophloea*	+	+					+		
60	Tree	*Acacia nilotica*	+	+		+	+	+	+		
61	Tree	*Acacia senegal*	+	+		+			+		
62	Tree	*Acacia tortilis*		+				+	+		
63	Tree	*Phoenix sp.*		+	+				+		+
64	Tree	*Propis cineraria*	+	+		+		+	+	+	
65	Tree	*Azadirachta indica*		+		+	+	+	+	+	+
66	Tree	*Cocos nucifera*		+	+		+				+
67	Tree	*Tamarindus indica*		+	+		+	+		+	
68	Tree	*Ficus benghalensis*		+				+	+	+	
69	Tree	*Grewia tenax*		+			+			+	
70	Tree	*Tamarix' spp.*		+					+		
71	Tree	*Mimosa hamata*	+	+					+		
72	Tree	*Ficus religiosa*		+			+	+	+	+	+
73	Tree	*Ficus racemosa*		+			+	+	+	+	

4.6. Faunal Diversity and Species Inventory

The present study has made assessment of 3 major higher vertebrate classes such as Reptiles, Birds and Mammals. The assessment of fauna representing higher trophic levels in the ecosystem was carried out since their diversity acts as indicators of the health of the ecosystem in which they live. The details of the results/observations are given as following.

4.6.1. Reptiles Species Recorded During the Survey

Majority of the reptile species are fossorial in habit, therefore the assessment of reptiles and their diversity etc. holds special significance for any development project. In the present study we identified a total of 8 species of reptiles within the core area and 15 species in the buffer area (Table-4.6).

Of the reported reptiles species in the buffer area, 2 species of Seaturtles (Green Seaturtle and Olive Ridley Seaturtle) belong to Schedule-I of the Wildlife Protection Act 1972 and are classified as 'Endangered' and 'Vulnerable' respectively by the IUCN. The Indian Flap shell turtle and Indian monitor lizard were also reported from the buffer. These two species are common throughout country and listed as Schedule-I in WPA 1972 and least concerned by IUCN. However, two species, Spiny tailed Lizard and Indian Chameleon belong to Schedule-II where as reset of the species belong to Schedule-IV. Majority of the reptile species (except Seaturtles) reported from the buffer area fall in 'Least Concerned' category of IUCN. No endangered, rare, threatened or endemic species of reptiles was reported from the project core area (Table-4.6).

4.6.2. Birds Species Recorded During the Survey

During the study we observed a total of 105 bird species in the study area. Majority of the species (73) are resident specie where as only 32 species were found to be migratory (Table-4.7). Of these 105 recorded bird species, 98 belong to 'Least Concerned' category rated by IUCN where as total 6 species are i.e. Painted Stork, Oriental White Ibis, Eurasian Curlew, Lesser Flamingo, Beach Stone curlew, Curlew sandpiper, Oriental Darter and Black

tailed Godwit belong to Near Threatened Species (Table-4.7) and one species i.e. Dalmatian Pelican as Vulnerable. Of the recorded species, there are total 7 species which belong to Schedule-I, 97 species belong to Schedule-IV and one species belong to Schedule-V.

Table-4.6: Checklist of reptiles reported form the core and buffer area.

No.	Name of Species		Status as per IWPA-1972	Status as per IUCN	Observed/ Reported	
	Common Name	Scientific Name			Core Area	Buffer Area
1	Cheakered Keelback	*Natrix piscator*	IV	LC		+
2	Common Skink	*Mubuya carinata*	IV	LC	+	+
3	Fan Throated Lizard	*Sitana ponticeriana*	IV	LC	+	+
4	**Flap shell Turtle**	***Lissemus punctatea***	**I**	**LC**		+
5	Garden Lizard	*Calotes versicolor*	IV	LC	+	+
6	**Green Seaturtle**	***Chelonia mydas***	**I**	**EN**		+
7	Indian Fringe Toed Lizard	*Acanthodactylus cantoris*	IV	LC	+	+
8	Indian monitor lizard	*Varanus bengalensis*	I	LC	+	+
9	John Sand Boa	*Eryx johni*	IV	LC	+	+
10	**Olive Ridley Seaturtle**	***Lepidochelys olivacea***	**I**	**VU**		+
11	Rat Snake	*Ptyas mucosus*	IV	NT		+
12	Saw scaled Viper	*Echis carinatus*	IV	NT		+
13	Short tailed Agama	*Agama minor*	IV	LC	+	+
14	Spiny-tailed Lizard	*Uromastix hardwickii*	II	LC	+	+
15	Glossy- bellied racer snake	*Platyceps ventromaculatus*	IV	LC		+
En=Endangered, VU=Vulnerable, NT=Near Threatened, LC=Least Concerned					8	15

The birds were recorded mainly from non-forested, degraded scrubland areas and in the surrounding agriculture landscape interspersed with scattered trees and seasonal drainages. The bird species groups observed in the study area were represented by species of open scrubland such as Passerines, Shrikes, Francolin etc. and waterbodies birds such as Waders/shorebirds, Waterbirds, Egrets, Herons sandpipers, plovers, flamingos, pelicans etc. Majority of the birds observed in the study area

Table-4.7: Inventory of birds reported from the study area with their conservation status.

S. No.	Name of Species		Status as per IWPA-1972	Status as per IUCN	Observation		Migratory
	Common Name	Scientific Name			Core	Buffer	
1	Asian Koel	*Eudynamys scolopacea*	Schedule-IV	LC		+	R
2	Bank Myna	*Acridotheres ginginianus*	Schedule-IV	LC	+	+	R
3	Barn swallow	*Hirundo rustica*	Schedule-IV	LC		+	M
4	Baya Weaver	*Ploceus philippinus*	Schedule-IV	LC		+	R
5	Black drongo	*Dicrurus macrocercus*	Schedule-IV	LC	+	+	R
6	Black Francolin	*Francolinus francolinus*	Schedule-IV	LC	+	+	R
7	Black Redstart	*Phoenicurus ochruros*	Schedule-IV	LC	+	+	M
8	Black shoulder kite	*Elanus caeruleus*	Schedule-I	LC		+	R
9	Black winged stilt	*Himantopus himantopus*	Schedule-IV	LC		+	R
10	Black-tailed Godwit	*Limosa limosa*	Schedule-IV	NT		+	M
11	Blue rock pigeon	*Columba livia*	Schedule-IV	LC	+	+	R
12	Bluethroat	*Luscinia svecica*	Schedule-IV	LC	+	+	M
13	Brown headed Gull	*Larus brunnicephalus*	Schedule-IV	LC		+	M
14	Cattle egret	*Bulbulcus ibis*	Schedule-IV	LC	+	+	R
15	Chestnut-bellied Sandgrouse	*Pterocles exustus*	Schedule-IV	LC	+	+	R
16	Chestnut-shouldered petronia	*Gymnoris xanthocollis*	Schedule-IV	LC		+	R
17	Common babbler	*Turdoides caudatus*	Schedule-IV	LC	+	+	R
18	Common Chiffchaff	*Phylloscopus collybita tristis*	Schedule-IV	LC	+	+	M
19	Common Coot	*Fulica atra*	Schedule-IV	LC		+	R
20	Common Crane	*Grus grus*	Schedule-IV	LC		+	M
21	Common Crested Lark	*Galerida cristata*	Schedule-IV	LC	+	+	R
22	Common Greenshank	*Tringa nebularia*	Schedule-IV	LC		+	M
23	Common Iora	*Aegithina tiphia*	Schedule-IV	LC		+	R
24	Common Kestrel	*Falco tinnunculus*	Schedule-IV	LC	+	+	M
25	Common Kingfisher	*Alcedo atthis*	Schedule-IV	LC		+	R

26	Common Moorhen	*Gallinula chloropus*	Schedule-IV	LC		+	R
27	Common myna	*Acridotheres tristis*	Schedule-IV	LC	+	+	R
28	Common Redshank	*Tringa totanus*	Schedule-IV	LC	+	+	M
29	Common Sandpiper	*Actitis hypoleucos*	Schedule-IV	LC	+	+	M
30	Common Stonechat	*Saxicola torquata*	Schedule-IV	LC	+	+	M
31	Common tailor bird	*Orthotomus sutorius*	Schedule-IV	LC	+	+	R
32	Common Woodshrike	*Tephrodornis pondicerianus*	Schedule-IV	LC	+	+	R
33	Coppersmith Barbet	*Megalaima haemacephala*	Schedule-IV	LC		+	R
34	Dalmatian Pelican	*Pelecanus crispus*	Schedule-IV	NT		+	M
35	Demoiselle crane	*Grus virgo*	Schedule-IV	LC		+	M
36	Desert Wheatear	*Oenanthe deserti*	Schedule-IV	LC	+	+	M
37	Dunlin	*Calidris alpine*	Schedule-IV	LC		+	M
38	Eurasian collared dove	*Streptopelia decaocto*	Schedule-IV	LC	+	+	R
39	Eurasian Curlew	*Numenius arquata*	Schedule-IV	NT		+	M
40	Eurasian Spoonbill	*Platalea leucorodia*	Schedule-I	LC		+	R
41	Franklin's Prinia	*Prinia hodgsonii*	Schedule-IV	LC	+	+	R
42	Graceful Prinia	*Prinia gracillis*	Schedule-IV	LC	+	+	R
43	Great White Pelican	*Pelecanus onocrotalus*	Schedule-IV	LC		+	M
44	Greater couckal	*Centropus sinensis*	Schedule-IV	LC	+	+	R
45	Greater Flamingo	*Phoenicopterus roseus*	Schedule-IV	LC		+	R
46	Green bee eater	*Merops orientalis*	Schedule-IV	LC	+	+	R
47	Green Sandpiper	*Tringa ochropus*	Schedule-IV	LC		+	M
48	Grey francolin	*Francolinus pondicerianus*	Schedule-IV	LC	+	+	R
49	Grey heron	*Ardea cinerea*	Schedule-IV	LC		+	R
50	Hoopoe	*Upupa epops*	Schedule-IV	LC	+	+	M
51	House crow	*Corvus splendens*	Schedule-V	LC	+	+	R
52	House sparrow	*Passer domesticus*	Schedule-IV	LC		+	R
53	Indian Peafowl	*Pavo cristatus*	Schedule-I	LC		+	R
54	Indian pond heron	*Ardeola grayii*	Schedule-IV	LC		+	R

55	Indian robin	*Saxicoloides fulicata*	Schedule-IV	LC	+	+	R
56	Indian Roller	*Coracias benghalensis*	Schedule-IV	LC	+	+	R
57	Indian silverbill	*Lonchura malabarica*	Schedule-IV	LC	+	+	R
58	Isabelne wheatear	*Oenanthe isabellina*	Schedule-IV	LC	+	+	M
59	Jungle babbler	*Turdoides striatus*	Schedule-IV	LC	+	+	R
60	Kentish Plover	*Charadrius alexandrinus*	Schedule-IV	LC		+	M
61	Large Egret	*Casmerodius albus*	Schedule-IV	LC		+	R
62	Laughing dove	*Streptopelia senegalensis*	Schedule-IV	LC	+	+	R
63	Lesser Flamingo	*Phoenicopterus minor*	Schedule-IV	NT		+	R
64	Lesser Whitethroat	*Sylvia curruca halimodendri*	Schedule-IV	LC		+	M
65	Little cormorant	*Phalacrocorax niger*	Schedule-IV	LC		+	R
66	Little egret	*Egretta garzetta*	Schedule-IV	LC		+	R
67	Little grebe	*Tachybaptus ruficollis*	Schedule-IV	LC		+	R
68	Little Ringed Plover	*Charadrius dubius*	Schedule-IV	LC		+	M
69	Long tailed shrike	*Lanius schach*	Schedule-IV	LC	+	+	R
70	Marsh Harrier	*Circus aeruginosus*	Schedule-I	LC		+	M
71	Marsh Sandpiper	*Tringa stagnatilis*	Schedule-IV	LC		+	M
72	Median Egret	*Mesophoyx intermedia*	Schedule-IV	LC		+	R
73	Oriental Darter	*Anhinga melanogaster*	Schedule-IV	NT		+	R
74	Oriental Honey Buzzard	*Pernis ptilorhyncus*	Schedule-I	LC		+	R
75	Oriental magpie robin	*Copsychus saularis*	Schedule-IV	LC	+	+	R
76	Oriental White Ibis	*Threskiornis melanocephalus*	Schedule-IV	NT		+	R
77	Oriental White-eye	*Zoosterops palpebrosus*	Schedule-IV	LC		+	R
78	Orphean Warbler	*Sylvia hortensis*	Schedule-IV	LC	+	+	M
79	Paddyfield Pipit	*Anthus rufulus*	Schedule-IV	LC	+	+	R
80	Painted Stork	*Mycteria leucocephala*	Schedule-IV	NT		+	R
81	Pied Avocet	*Recurvirostra avosetta*	Schedule-IV	LC		+	M
82	Pied Bushchat	*Saxicola caprata*	Schedule-IV	LC	+	+	R
83	Pied Kingfisher	*Ceryle rudis*	Schedule-IV	LC		+	R

84	Purple sunbird	*Nectarinia asiatica*	Schedule-IV	LC	+	+	R
85	Red vented bulbul	*Pycnonotus cafer*	Schedule-IV	LC	+	+	R
86	Red wattled lapwing	*Vanellus indicus*	Schedule-IV	LC	+	+	R
87	River Tern	*Sterna aurantia*	Schedule-IV	LC		+	R
88	Rose ringed parakeet	*Psittacula krameri*	Schedule-IV	LC	+	+	R
89	Rosy Starling	*Sturnus roseus*	Schedule-IV	LC	+	+	M
90	Ruff	*Philomachus pugnax*	Schedule-IV	LC		+	M
91	Rufus tailed lark	*Ammomanes phoenicurus*	Schedule-IV	LC	+	+	R
92	Shikra	*Accipiter badius*	Schedule-I	LC		+	R
93	Short-toed Snake Eagle	*Circaetus gallicus*	Schedule-I	LC		+	R
94	Singing Bush-Lark	*Mirafra cantillans*	Schedule-IV	LC	+	+	R
95	Southern Grey Shrike	*Lanius meridionalis*	Schedule-IV	LC	+	+	R
96	Stone-Curlew	*Burhinus oedicenemus*	Schedule-IV	LC	+	+	R
97	Sykes's Crested Lark	*Galerida deva*	Schedule-IV	LC	+	+	R
98	Variable Wheatear	*Oenanthe picata*	Schedule-IV	LC	+	+	M
99	Western Reef Egret	*Egretta gularis*	Schedule-IV	LC		+	R
100	White throated kingfisher	*Halcyon smyrnensis*	Schedule-IV	LC		+	R
101	White Wagtail	*Motacilla alba*	Schedule-IV	LC	+	+	R
102	White-eared Bulbul	*Pycnonotus leucotis*	Schedule-IV	LC	+	+	R
103	Wire-tailed Swallow	*Hirundo smithii*	Schedule-IV	LC		+	R
104	Wood Sandpiper	*Tringa glareola*	Schedule-IV	LC	+	+	M
105	Yellow wattled lapwing	*Vanellus malarbaricus*	Schedule-IV	LC	+	+	R

VU=Vulnerable, NT=Near Threatened, LC=Least Concerned; R=Resident, M=Migratory

represent birds of terrestrial eco-system, semi arid non-forested landscapes, mudflats, wetland etc. Majority of the waterbird species reported here are found at creek, ponds, beach located south-west side in the study area. These areas provide suitable mix of wetland habitat which attracts few migratory and resident waterbird species. Majority of the resident species reported in the study area are known to breed in this region as well as in entire Gujarat. No rare, endangered, endemic bird species were found to breed in the core project area.

4.6.3. Mammal Species Recorded During the Survey

We observed a total of 16 mammal species in the study area. Total 16 species are recorded from buffer area and 7 from core area of the project site (Table-4.8). The common mammalian species that were directly observed in the core area include Wild Pig, Grey Mongoose, Indian Hare, Nilgai, Pale Hedgehog and Five Striped Squirrel etc. No Threatened or Schedule-I species reported from the core area of the project site (Table-4.8).

Table-4.8: Inventory and conservation status of mammals reported from study area.

No.	Name of Species		IWPA Status	IUCN Status	Observed	
	Common Name	Scientific Name			Core Area	Buffer Area
1	Chinkara	*Gazella bennettii*	**Sch-I**	LC		+
2	Common mongoose	*Herpestes edwardsi*	Sch-II	LC	+	+
3	Hyena	*Hyaena hyaena*	Sch-III	**NT**		+
4	Indian Desert Gerbil	*Meriones hurrianae*	Sch-IV	LC		+
5	Indian Flying Fox	*Pteropus giganteus*	Sch-IV	LC		+
6	Indian Fox	*Vulpes bengalensis*	Sch-II	LC		+
7	Indian Gerbil	*Tatera indica*	Sch-IV	LC	+	+
8	Indian Hare	*Lepus nigricollis*	Sch-IV	LC	+	+
9	Indian Jackal	*Canis aureus*	Sch-II	LC		+
10	Indian pipistrelle	*Pipistrellus coromandra*	Sch-IV	LC		+
11	Indian porcupine	*Hystrix indica*	Sch-IV	LC		+
12	Jungle cat	*Felis chaus*	Sch-II	LC		+
13	Long-eared hedgehog	*Hemiechinus collaris*	Sch-IV	LC	+	+
14	Nilgai	*Boselaphus tragocamelus*	Sch-III	LC	+	+
15	Palm squirrel	*Funambulus pennanti*	Sch-IV	LC	+	+
16	Wild Pig	*Sus scrofa*	Sch-III	LC	+	+
	Unk= Unknown, NT=Near Threatened, LC=Least Concerned				**7**	**16**

Chinkara is the only Schedule-I species reported from buffer area. Jackal, Jungle cat, Indian Fox, Common Mongoose belongs to Schedule-II of IWPA 1972. Whereas Nilgai, Wildpig belong to Schedule-III. Rest of the species belong to Schedule-IV of IWPA. Majority of the common mammalian species recorded during the survey in the core and buffer area are present throughout semiarid, non-forested and non-protected landscapes especially in Kutch region.

4.6.4. Dominant Faunal Species in the Core & Buffer Area

Based on our observations, interview survey of local people and NGOs working in nature conservation activities in Kutch region, we found that Nilgai, Wild Pig are most common and dominant mammal species present in the landscape. Whereas there were several birds species belong to Passerine were most common and dominant group of birds present in the core and buffer area of the project site. Among reptiles, Spiny tailed Lizard, common garden lizard, monitor lizard etc. were most common species present in the buffer areas of the project site. There were no exotic or invasive species of mammals, reptiles or birds present in core or buffer areas of the project site.

4.6.5. Wildlife Corridors

Our observations suggested that there is no rare, endangered, conservation concern species of fauna present within the proposed project core area. The proposed project area for production of Soda Ash and Sodium bicarbonate is not a part of any special habitat (breeding, feeding, roosting etc.) for any of the important fauna and does not provide any contiguity of habitats between two important habitats or any other protected areas. Therefore, the proposed project area it does not make part of any important wildlife habitats. Apart from this, there are no protected areas located within 40.0km radius of the proposed project site therefore; the proposed area does not make part of any wildlife corridors.

4.6.6. Identification of Species of High Conservation Significance

Based on our extensive field visits, literature survey, and consultation with experts & local people, we found following 13 species that are of high conservation significance (Table-4.9). One species of plant and 12 species of fauna are identified as species of higher conservation significance in the study area. Of these total 2 species belong to Threatened categories (Vulnerable and Endangered) by IUCN which are Olive Ridley Seaturtle and Green Seaturtle. Total 12 species belong to Schedule-I of under Wildlife Protection Act 1972.

Of these 4 species of reptiles, 7 species of birds and one species of mammals (Chinkara) belong to Schedule-I of IWPA 1972 (Table-4.9).

Table-4.9: Species of high conservation significance (Threatened or Schedule-I) present in the study area.

No.	Taxa	Name of Species		IWPA Status	IUCN Status
		Common Name	Scientific Name		
1	Reptile	Flap shell Turtle	*Lissemus punctatea*	Schedule-I	LC
2	Reptile	Green Seaturtle	*Chelonia mydas*	Schedule-I	**EN**
3	Reptile	Indian monitor lizard	*Varanus bengalensis*	Schedule-I	LC
4	Reptile	Olive Ridley Seaturtle	*Lepidochelys olivacea*	Schedule-I	**VU**
5	Bird	Black shoulder kite	*Elanus caeruleus*	Schedule-I	LC
6	Bird	Eurasian Spoonbill	*Platalea leucorodia*	Schedule-I	LC
7	Bird	Indian Peafowl	*Pavo cristatus*	Schedule-I	LC
8	Bird	Marsh Harrier	*Circus aeruginosus*	Schedule-I	LC
9	Bird	Oriental Honey Buzzard	*Pernis ptilorhyncus*	Schedule-I	LC
10	Bird	Shikra	*Accipiter badius*	Schedule-I	LC
11	Bird	Short-toed Snake Eagle	*Circaetus gallicus*	Schedule-I	LC
12	Mammal	Chinkara	*Gazella bennettii*	Schedule-I	LC
13	Plant	Gugal	*Commiphora wightii*	--	CR

5. Potential impacts & Mitigations

Impacts of proposed Soda Ash and Sodium Bicarbonate Plant on flora and fauna of surrounding area were identified mainly by using information presented in previous Chapter-4. The baseline information was collected through field visits and was also substantiated through secondary information. Finally, the baseline ecological information was juxtaposed with the project activities and impacts arising due to its construction and operation phases. Specific impacts were visualized in terms of seasonal issues related with the ecology of important species, their habitats and issues related with their breeding.

Following the above mentioned approach, impacts on various components of biodiversity were assessed. The component wise identification of potential impacts is deliberated below.

5.1. Anticipated Ecological Impacts of Proposed Project Activity

The general ecological impacts during the erection stage will be short term, temporary in nature and will be confined to the close boundary of the project site. Following are the general ecological impacts anticipated from the construction and operation phases of the proposed Soda ash and Sodium bicarbonate Plant.

- Change in landuse worth the project area and removal of vegetation from the project site.
- The major impact on terrestrial ecology is due to emission of dust which will settle on surrounding area soil and vegetation and it would gradually decrease biomass productivity of the surrounding eco-systems.
- During the construction work, the excavation of the soil take place and construction wastes such as oil, grease and debris may pollute the soil and decrease its productivity.
- The impact on the terrestrial ecology could be due to the emission of pollutants due to dusting like Particulate Matter.

- Chronic fugitive emissions and the material flow through drainage could potentially choke hydrology and degrade aquatic eco-systems.

- Chronic spillage and flow of raw materials, fly ash or sediments from the project site through runoff could alter the texture of soil in surrounding areas. This in long term potentially affects the vegetation and biotic components of the surrounding area.

5.2. Impacts on Terrestrial Flora

Baseline status of terrestrial vegetation clearly suggests that the project sites falls in semi-arid biogeographic zone with low floral density and diversity. The proposed Soda ash and Sodium bicarbonate Plant construction activities may involve removal of vegetation from the project site. Since the project site does not have important plant species, the unavoidable removal of vegetation during construction activity could be considered negligible impact on flora. However, it is recommended that minimum vegetation shall be removed from the project site and the important plant and tree species on the periphery of the project site be left as part of green belt development.

There are patches of forest plantations located in buffer area, company should take utmost precautions not to degrade these areas by constructing temporary roads, dumping materials, solid wastes, garbage or any other form of materials within these forest areas. The fugitive emission from the construction and operation activities shall be strictly controlled so that it does not affect the growth of vegetation in these forest areas. In order to control dust and fugitive emission, it is strongly recommended that company shall grow thick green belt on the periphery of the project site.

The study area supports only a few plant species of higher conservation significance (e.g. *Commiphora wightii*). *Commiphora wightii* is medicinally and economically important plant which has very slow growth rate in semi-arid zones. However, their population is quite small and isolated in the buffer area. Also they are found in quite stunted stage.

5.3. Impacts on Fauna

Though, the impacts of proposed plant and related construction activities may be on several faunal taxa, but for the present study we focused mainly on vertebrate classes i.e. reptiles, birds and mammals for identification of impacts and future monitoring purpose. Therefore, in the present study we identified impacts on the reptiles, birds and mammals particularly important and threatened species of the landscape.

5.3.1. Impacts on Reptiles

The baseline study has reported total 15 species of reptiles reported from the study area and 6 species from core area. No rare, endangered or Schedule-I species are reported from the core area i.e project site. However, Flap shell Turtle, Indian Monitor Lizard, Green Seaturtle and Olive Ridley Seaturtle are reported from the buffer area which belongs to Schedule-I of Wildlife Protection Act or listed as Threatened as per IUCN Red list categories. Since no rare or high conservation significance species of reptiles is present in the core and immediate buffer area of the proposed project site, the impact on the reptiles could be low. Impact and mitigation on Seaturtles are given in separate section.

However, a species i.e. *Uromastix hardwickii* belong to Schedule-II which is reported form buffer area. This is a resident and most vulnerable species as it is localized and sedentary unlike other reptiles such as snakes and lizards. This species is often hunted or poached for their oil and meat. Therefore, it is recommended that during construction phase no construction workers shall be involved in poaching of such species.

5.3.2. Impacts on Birds

We observed total 105 species of birds in the study area. There is no Important Bird Area (IBA) present in the study ara. During our study we reported total 7 species of birds that belong to Schedule-I in Buffer area of the proejct site. We also observed 7 near thereatened species of birds the study area. During our study we did not report any Schedule-I species or Threatned species from the project core project site area.

Occurrences of birds in the study area are mainly due to the overall ecological condition which provides them habitats where they obtain their food and safety for their breeding or wintering in the region. Intertidal sandy beach, wetlands in the form of tidal creek, checkdams, ponds, reserve forest areas etc. provide habitats to number of resident and migratory birds. Any changes or degradation of air, soil and water quality could lead to degradation of vegetation and habitats of birds. If by any activities of the project, such areas are lost, damaged or degraded then it can have negative impacts on the present distribution and density of birds in the study ara. Increased noise levels and disturbance levels could also result in their displacement form the core area and its immediate surroundings. Direct disturbance by presence of people, vehicle, their noise, vibrations, lights etc. can potentially displace most of the birds' species.

It is therefore, recommended that project proponent shall all possible measures to control pollution during construction and operation phases. It is also often noticed, that construction workers engage in poaching of wild animals particularly the birds which are easy to trap using various methods. It is therefore, recommended that construction workers shall be strictly instructed so that they don't engage in such acts. It is also recommended that project proponent shall monitor the ecological status including the density and diversity of birds in the study area at a periodic intervals.

5.3.3. Impacts on Mammals

We observed a total of 16 mammal species in the buffer area and 7 in the core area of the project site. No Threatened or Schedule-I species reported from the core area of the project site. There is only one Schedule-I species of mammals (Chinkara) in the buffer area i.e. Chinkara was directly sighted in the study area during our field visit.

Occurrences of mammals in the study area are mainly due to the overall ecological condition which provides them suitable habitats where they feed, rest and breed in the region. Moreover, unlike birds most of the mammals except bats are terrestrial in habits therefore, terrestrial land environment i.e. their habitats is of utmost importance to them. Therefore, degradation of air, soil and

water quality would lead to degradation of vegetation and the overall quality of their habitats. Increased noise levels and disturbance levels would also result in their displacement form the core area and its immediate surroundings. Direct disturbance by presence of people, vehicle, their noise, vibrations, lights etc. can potentially displace most of the mammalian species. It is noticed, that construction workers also sometime engage in poaching of wild animals particularly the chinkara, Nilgai, hare, pigs etc. using various methods.

The impact of proposed project on mammals also involves displacement of the mammalian species occurring in the core area. We recorded presence of Nilgai, Common Mongoose, Wild Pig and Long eared Hedgehog within the core area of the proposed project site. These species would be displaced from the project core area during the project operation. These species are most common mammalian species which are found throughout semiarid, non-forested, open scrubland, non protected areas and even in the periphery of most of the villages in Kutch region.

There is one Schedule-I mammalian species reported in the study area landscape i.e. Chinkara. According to local people and local cattle herders, this species has scattered presence in the most part of the Kutch region. Since Chinkara is a Schedule-I mammal species which exist in the entire study area, it requires attention of the project authority to ensure minimum impacts are caused to the species. Project proponent shall ensure that all types of impacts due to project construction and operation on the surrounding vegetation and the forest areas are minimized through strict pollution control measures. Details of the conservation actions for the species are mentioned in the forth coming chapter.

5.3.4. Impacts on Seaturtles

A coastal beach admeasuring total 23 km lies in the study area on the coast of Bambhdai-Bada-Pachotiya-Bhada–Nana Layja villages. Most part of the coastal area falling in the study area is sandy and has presence of sand dunes of varying height and width. The southern boundary of proposed project site is located near the sea coast of Bada village which covers a stretch of

approximately 2.0 km length. The proposed project boundary is near and along the nearby coast.. Our field observations, literature review and consultation with local NGOs suggest presence of sporadic nesting activities of 2 species of Seaturtle on 19.5 km long sandy coastal stretch from Bambhdai to Nana Layja. According to literature survey (*Sunderraj et al 2013*) the coastal stretch between Bambhdai –Bada-Nana Layja has reported density of 1.4 seaturtle nests per kilometre. This density of nests could be considered sporadic in nature compared to mass seaturtle nesting activities occurring on eastern coast of India. Moreover, as per our field survey, we observed that width of supra tidal areas on the coast near the proposed project boundary is narrow and has dense vegetation and steep slope. These conditions may not be very suitable for nesting activities of seaturtle on the coastal stretch of 2.0 km that is located south of the proposed project boundary. However, the proposed project in absence of mitigation measures could result in following impacts on seaturtle.

Direct loss of habitat: The project facilities would include laying of intake and outfall pipelines from the southern boundary of the project area into the Arabian Sea. The laying of seawater intake and outfall pipelines corridors would require to be carried out through the coastal forest (mainly *Prosopis juliflora*) patch, sand dune area and the intertidal area on the coast. The area required/occupied (approximately 50 mtrs width) for laying of pipelines each for intake and effluent disposal corridor could result in the direct loss of coastal habitat i.e. sand dunes and intertidal areas if not planned properly.

Changes in morphology of coast: The activity of laying of intake and outfall pipeline corridors may involve use of heavy machines that may damage or change the morphology of the sand dunes and the intertidal areas on the coast. This might affect the nesting activities of seaturtle.

Direct disturbance to nesting: The construction activities would enhance presence of people, machines, lightings etc. These activities may deter the females approaching for nesting on the beach during breeding season. This may affect nesting activity of two species of seaturtle if appropriate mitigation measures are not considered.

Increase in artificial illumination on the coast: The proposed project boundary lies north off the Bada village coast. The industrial development on the coast also results in higher illumination near beach areas, this is one of the major impacts of coastal development known to disturb and distract seaturtle nesting and hatchlings.

Pollution on coast: Since the proposed project lies at near the coast, the airborne fugitive dusts and other pollutants during construction and operation phases could pollute coast and cause changes in physical and chemical property of coast.

6. Conservation Plan for Schedule-I Species

Based on our field observations and literature survey we found several species important plant species as well as Schedule-I wildlife species in the study area (Table-6.1). We reported one plant species and 13 animal species. The faunal wildlife species include 4 species of Reptiles, 7 species of birds and 1 species of mammals.

Table-6.1: Schedule-I fauna and Critically Endangered plant species reported from the study area.

No.	Taxa	Name of Species		IWPA Status	IUCN Status
		Common Name	Scientific Name		
1	Reptile	Flap shell Turtle	*Lissemus punctatea*	Sch-I	LC
2	Reptile	Green Seaturtle	*Chelonia mydas*	Sch-I	**EN**
3	Reptile	Indian monitor lizard	*Varanus bengalensis*	Sch-I	LC
4	Reptile	Olive Ridley Seaturtle	*Lepidochelys olivacea*	Sch-I	**VU**
5	Bird	Black shoulder kite	*Elanus caeruleus*	Sch-I	LC
6	Bird	Eurasian Spoonbill	*Platalea leucorodia*	Sch-I	LC
7	Bird	Indian Peafowl	*Pavo cristatus*	Sch-I	LC
8	Bird	Marsh Harrier	*Circus aeruginosus*	Sch-I	LC
9	Bird	Oriental Honey Buzzard	*Pernis ptilorhyncus*	Sch-I	LC
10	Bird	Shikra	*Accipiter badius*	Sch-I	LC
11	Bird	Short-toed Snake Eagle	*Circaetus gallicus*	Sch-I	LC
12	Mammal	Chinkara	*Gazella bennettii*	Sch-I	LC
13	Plant	Gugal	*Commiphora wightii*	--	CR

6.1. Impact – mitigation matrix

Based on our observation, literature review and consultation with local people, and NGO, we formulated following impact vs mitigation matrix. It is advised that company shall follow the suggestions provided in the following Table-6.2.

Table-6.2: General Impacts vs. mitigation matrix & Conservation plan.

	Issues	Risk level	Reason/Status in relation to project site	Suggestions
Species	Rare/ Threatened	Med	Threatened species (Green Seaturtle, Olive Ridley Turtle and *Commiphora wightii*) are reported from the study area.	• Ensure no damage or disturbance is caused to these species and their habitats by project activities or people involved in project. • Take up conservation, protection and propagation measures for these species in the study area. • Periodically monitor these areas for their status as part of comprehensive biodiversity monitoring plan.
	Endemic Species	Low	No endemic species of any fauna or flora were recorded during study in the core area and buffer area.	Nil
Important Natural Habitats	Protected Areas	Nil	No protected area present in close vicinity	Nil
	Eco-sensitive zone identified by government	Nil	No protected area or their eco-sensitive zones are present within 10 km periphery of the proposed project site	Nil
	Important Bird Areas	Nil	No Important Bird Area (Birdlife International) is present in core or buffer area.	Nil
	Ramsar site	Nil	No Ramsar sites present in Kutch	Nil
	Wetlands of National Importance	Nil	Great Rann, Little Rann of Kutch and Chharidhandh are located at more than 75 km distances	Nil
	Wetlands of international Importance	Nil	No wetlands of international importance present in 70 km periphery of the project site	Nil
	Wildlife Corridors	Nil	No notified or officially identified wildlife corridor present in and around project site.	Nil
	Forest Area	Med	Patches of open tropical thorn forest or scrub forest are present in the buffer area of the proposed project site.	• Ensure no damage is caused to forest area due to pollution, dust, movement of vehicle, people through forest areas. • Ensure thick green belt on project site periphery to control pollution.

	Mangroves	Nil	No mangroves are present on the coast due to sandy beach. In the study area.	• Nil
	Corals	Nil	No coral reef area present on the coast falling in the study area.	Nil
	Breeding/ nesting areas	Med	Sandy beach stretch between Nana Layja to Bambhdai falling in the buffer area /study area is known for sporadic nesting of two species of Seaturtles.	• Ensure no damage, disturbance is caused due to any of the project activities, pollution, dusting, material flow etc. during construction or operation phase. • Promote conservation, protection and propagation of these species . • Monitor status of this habitat as part of comprehensive biodiversity monitoring plan.

6.2. Conservation Plan for Schedule-I species

6.2.1. Conservation Plan for Critically Endangered Plant Species:

Gugal: (*Commiphora wightii*)

Status: Our field survey in the proposed project area revealed that there is a critically endangered plant species present in the open scrubland as well as forest areas present in the buffer area. This plant was found with low density in the buffer area. This plant has high medicinal values and is facing the threats of extinction by overexploitation for commercial purpose (Silori et al., 2004; Joshi, 2002; GUIDE 2009) from Kutch. However, recently Gujarat Forest Department has accomplished a large scale project on plantation of *Commiphora wightii* in Gujarat. Through this project thousands of plants were raised and planted in entire Kutch region.



This project has improved the number and density of the species in the region.

Impacts: The construction of Soda Ash, Sodium Bicarbonate plant along with Co-generation power plant and related facilities would involve large scale movement of heavy vehicles, excavation, loading unloading, material handling, creation or widening of roads etc. Dusting and pollution due to these activities could potentially affect surrounding habitats where this species thrives. Apart from these the air borne dusting and pollution due to operation phase could also settle in the surrounding area and the forest areas where these plants are present. Therefore, dusting and pollution during construction and operation phases can potentially affect the density and distribution of this species in the buffer area.

Recommendations: GHCL shall put in place all kind of pollution control measures so that the surrounding vegetation is not degraded and this species along other plants survive normally in the study area. GHCL shall carryout comprehensive biodiversity monitoring at regular intervals in order to check impact of their project activities on surrounding area and special emphasis shall be given to this species. It is also recommended that company should take up plantation of *Commiphora wightii* by involving local forest department, which has vast experience of carrying out plantation of this specialized plant species. GHCL and the Kutch West Forest Division shall mutually design the plantation activity.

6.3. Conservation Plan for Schedule-I Fauna

Among the fauna, we reported total 14 animal species. As mentioned above, the faunal wildlife species include a species of Reptiles, 8 species of birds and 5 species of mammals.

6.3.1. Reptile/ Indian Flap Shell Turtle

Status: During our study this species of reptile was recorded form the small village ponds in the study area. The species is resident and breeding in the buffer areas. The Indian Flap shell Turtle (*Lissemys punctata*) is a freshwater species of turtles are widespread and common in the South Asian

provinces. They are listed as Schedule-I species under Wildlife Protection Act 1972 and as Least Concerned as per IUCN threat categories.

Impacts: Since this species is an aquatic, it may be subjected to impacts related to water pollution and hydrological impacts arising due to project activities. These may include dusting, pollution, degradation of water sources, soil characteristics, choking of drainages etc. This species is otherwise not hunted or eaten by the people. Therefore, changes of degradation of overall aquatic habitat qualities in the buffer area are likely to affect these species and their distribution.



Recommendations: GHCL shall put all kind of pollution control measures in place so that surrounding area ecological conditions are not degraded. During construction it shall be seen that no drainage, ponds etc. are damaged or altered. GHCL shall carryout biodiversity monitoring at regular intervals in order to check impact of their project activities on surrounding area and special emphasis shall be given to monitoring of surface (drainage, check dams, ponds) water and wetlands in the buffer area.

6.3.2. Reptile/Seaturtle

A coastal beach admeasuring total 23 km lies in the study area on the coast of Bambhdai-Bada-Pachotiya-Bhada–Nana Layja villages. Most part of the coastal area falling in the study area is sandy and has presence of sand dunes of varying height and width. The southern boundary of proposed project site is located near the sea coast of Bada village which covers a stretch of approximately 2.0 km length. The coastal area near project site has narrow beach width and get inundated regularly during high tides. Our field observations, literature review and consultation with local NGOs suggest presence of sporadic nesting activities of 2 species of Seaturtle on 19.5 km long sandy coastal stretch from Bambhdai to Nana Layja. According to literature survey (*Sunderraj et al 2013*) the coastal stretch between Bambhdai –Bada-

Nana Layja has reported density of 1.4 seaturtle nests per kilometre. This density of nests could be considered sporadic in nature compared to mass seaturtle nesting activities occurring on eastern coast of India. Moreover, as per our field survey, we observed that width of supra tidal areas on the coast near the proposed project boundary is narrow and has dense vegetation and steep slope. These conditions may not be very suitable for nesting activities of seaturtle on the coastal stretch of 2.0 km that is located south of the proposed project boundary. However, the proposed project in absence of mitigation measures could result in following impacts on seaturtle.

Direct loss of habitat: The project facilities would include laying of intake and outfall pipelines from the southern boundary of the project area into the Arabian Sea. The laying of seawater intake and outfall pipelines corridors would required to be carried out through the sand dune area and the intertidal area on the coast. The area required/occupied (approximately 50 mtrs width) for laying of pipelines could result in the direct loss of coastal habitat i.e. sand dunes and intertidal areas. This would occupy a very small coastal habitat and resultant impact in terms of loss of habitat could be considered negligible.

Changes in morphology of coast: The activity of laying of intake and outfall pipeline corridors may damage or change the morphology of the sand dunes and the intertidal areas on the coast. This might affect the nesting activities of seaturtle. Moreover, as per CRZ notification sand dunes are classified as ecologically sensitive areas.

It is therefore recommended that laying of intake and outfall pipeline corridors shall be done underground without disturbing the morphology of sand dune, forest area (mostly dominated with *Prosopis juliflora*) or the intertidal area. The pipeline corridors shall be laid underground on entire length of sand dunes and intertidal area i.e. landward end of sand dune to the low tide line in the seaward side. This would ensure no damage, or alteration of the morphology of coastal habitats. Apart from this, if there is any alteration in the coastal habitat caused by construction activities, movement of heavy vehicles etc. shall be restored.

Direct disturbance to nesting: The construction activities would enhance presence of people, machines, lightings etc. These activities may deter the females approaching for nesting on the beach during breeding season. This may affect nesting activity of two species of seaturtle if appropriate mitigation measures are not considered. It is therefore recommended that laying of intake and outfall pipeline corridors on coast shall not be carried out during peak breeding seasons of the two species of the seaturtle.

Increase in artificial illumination on the coast: The proposed project boundary lies near sea coast. The industrial development on the coast also results in higher illumination near beach areas, this is one of the major impacts of coastal development known to disturb and distract seaturtle nesting and hatchlings. The artificial beachfront lighting problem may be the most manageable of the human-caused sea turtle disturbances. Although some beachfront lighting is necessary for safety and security, light management measures can help prevent interference with sea turtle nesting habitat while still addressing human safety concerns. These measures include following.

- Turning off unnecessary lights during the nesting season.
- using a smaller number or lower wattage of lights; repositioning, shielding, redirecting, lowering, or recessing fixtures so light does not reach the beach;
- Moreover, sea turtles are less affected by red, yellow, and low-pressure sodium-vapor lights, which can be substituted for ordinary lights.

Pollution on Coast: Since the proposed project lies near the coast, the airborne fugitive dusts and other pollutants during construction and operation phases could pollute beach and cause changes in physical and chemical property of natural beach. It is therefore, recommended to control all types of pollution by strictly adhering to pollution control measures. Thick green belt of local hardy species shall be created to control air pollution.

Apart from above mentioned mitigation measures, the project proponent as part of their Corporate Environment Responsibility (CER), shall monitor nearby coast along project area for seaturtle nesting and in case of significant changes, proper mitigation measures shall be taken in consultation with experts and the

forest department. The project proponent though their CER budget shall also financially support research and conservation activities carried out for seaturtle by Gujarat Forest Department.

6.3.3. Birds/ Indian Peafowl

Status: The Indian Peafowl *(Pavo cristatus*) was recorded from the surrounding scrubland, villages, agriculture fields etc. in the buffer area. It is a resident breeder in the Indian subcontinent. The bird was justifiably declared as the national bird of India in year 1963 due to its 'flagship' value founded on its glorious position in mythology and its widespread distribution in the country. The species is found in dry semi-desert, scrub and deciduous forests. It forages and nests on the ground but roosts on top of trees. It eats seeds, insects, fruits, small mammals and reptiles. The Indian Peafowl is a ground nesting bird and it lays a clutch of 4-8 eggs which take 28 days to hatch. The eggs are light brown and are laid every other day usually in the afternoon. The male does not assist with the rearing, and is polygamous. Poaching of peacocks for their feathers and poisoning by feeding on pesticide treated seeds are known threats to wild birds. Under the law, collection of tail feathers is allowed only when the bird sheds them. The Indian peafowl is under various threats that include the demand for feathers and wild meat, conflict with farmers during cropping season, increased use of chemical fertilizers and pesticides and habitat degradation.



Impacts: Our field study reported presence of Indian Peafowl in the buffer areas of project site. The species was observed in the buffer area of 10 km radius particularly near human habitations, villages and agriculture fields. Since our study reported presence of Indian Peafowl in the buffer area, its possibility of nesting in buffer area could not be ruled out. Since Indian Peafowl is a ground nester, several project activitie can have adverse impacts on their nesting

grounds such as pollution, degredation of soil and vegetation from surrounding ara and in the forest areas. Direct disturbance by presence of people, vehicle, their noise, vibrations, lights etc. can potentially disturb most of the bird species.

Recommendations: following actions for the conservation and protection are suggested in wildlife conservation action plan to reduce impacts of project related activities on the species. Based on our field observation on the distribution, behavioral ecology, conservation need, and envisaged impacts of proposed project, we identified several species specific actions that would help reduce the impacts of project activities on Indian Peafowl as under.

i. Since Indian Peafowl is a ground nesting bird, heavy vehicle movement, presence of people, excavation activities could disturb their nesting activities.

ii. Avoid vehicle movement in the area where nesting is found. The movement of vehicles or humans shoul be prohibited in vicinity of the nesting area.

iii. Electric lines shall be designed to minimize the potential for electrocution of indian peafowl and other such large birds.

iv. Lightings within the project area could potentially deter the species presence. Therefore, GHCL shall ensure that minimum illumination comes out from the project area. This can be done by adjusting the angles of the light sources and using low intensity focused bulbs inside the project area.

v. Tree Plantation shall be carried out by GHCL in the surrounding villages and schools etc. in the buffer area. This would help the species and provide them much needed roosting place.

vi. Staff involved in construction activities shall be trained and made aware of Indian Peafowl's status as National Bird of India, and Schedule-I species protected under Indian Wildlife Protection Act 1972. This is important because if there are any casualties with this species occurs

then they should report it to the project authorities and the local forest department to carryout further necessary actions.

vii. Thick green belt of local hardy species shall be created to control air pollution.

6.3.4. Birds/ Schedule-I Raptors

Status: Total 5 bird species i.e. terrestrial Raptors belonging to Schedule-I of Wildlife Protection Act 1972 are reported from the study area. These species are Black shoulder kite, Oriental Honey Buzzard, Marsh Harrier, Shikra and Short-toed Snake Eagle. Of these 5 species of Raptors, none are reported from the core area and all 5 are reported from buffer area. Except Marsh Harriers rest all 4 species of raptors are resident breeders of India, Gujarat and Kutch. Almost all the raptor species are recently added to Schedule-I list through amendment made in year 2013. All the reported species are listed as Least Concerned category by IUCN. Marsh Harrier is migratory raptor species that arrives in this area during winter season.



Impacts: These 5 species of terrestrial raptors are predators and occupies tertiary consumers positions in the food chain and ecological pyramids. Therefore, any change in primary productivity would affect their distribution, density and population in the region. Therefore, project activities resulting in air, water and noise pollution, degradation of vegetation could potentially affect the habitat of these bird species and their population in the study area. Moreover, direct disturbance by presence of people, vehicle, their noise, vibrations, lights etc. can potentially displace most of the raptors species from the project area and its immediate surroundings.

Recommendations: It is recommended that GHCL shall take utmost care in controlling dust, fugitive emissions using state of the art technologies and put in

place all types of pollution control measures during construction and operation phases which would ensure minimum degradation of surrounding vegetation, forest area vegetation and waterbodies. Minimize vehicle movements around the project areas. Adjust lightings within core area and ensure minimum illuminations spreads outside the project area. Keep all the machineries maintained so that minimum noise and vibrations are generated in the surrounding area. Thick green belt of local hardy species shall be created to control air pollution.

6.3.5. CHINKARA (*Gazella bennettii*)

Status: The important herbivore present in the buffer area is Chinkara which is protected as Schedule-I species in Wildlife Protection Act 1972. During our survey, we reported presence of Chinkara through direct sightings in the buffer area in the study area. Indian gazelle is a shy animal and avoids human habitation. It stands at 65 centimetres and weighs about 23 kilograms. It can go without water for long periods and can get sufficient fluids from plants and dew. Although most individuals are seen alone, they can sometimes be spotted in groups of up to four animals. It lives in grasslands and desert areas in India. Its population is on the decline due to it being hunted for game. Narayan Sarovar Wildlife Sanctuary and its surrounding areas in Abdasa Taluka of Kutch are known for Chinkara population. The species is common in landscape of Kutch and North Gujarat. The species is listed as Schedule-I in Wildlife Protection Act 1972 and as 'Least Concerned' by IUCN. The species needs safe, undisturbed arid semi arid plains with open and sparse vegetation.



Impacts: This species is likely to be using open scrubland areas and forest areas for their feeding and breeding. They are also likely to be using waterbodies in the buffer area for their requirement of water. The impacts of project activities on herbivore are likely to be direct as they are primary consumers in the eco-system. Degradation of soil, vegetation and habitat due to

chronic pollution loads, the species would lose its feeding ground and breeding area. Therefore, changes in overall habitat qualities in the buffer area are likely to affect these species. The direct disturbance to these species by vehicle traffic, human intrusion is also issue of some concern.

Recommendations: It is recommended that company shall take up strict pollution control measures (air, water and noise) which would take care of major issue of habitat degradation for the species. Thick green belt of local hardy species shall be created to control air pollution. GHCL shall also support forest department in conducting awareness of local people towards wildlife conservation and law reinforcement and anti poaching activities in the study area. During construction and operation phases, GHCL shall inform their workers and staff not to engage in chasing, teasing or hunting of Chinkara as it is prohibited under wildlife protection act 1972.

6.4. Wildlife & Ecological Mitigation Measures

Based on our field study, information collected and consultation with project proponent, we recommend following mitigation measures as self regulatory, monitoring and compensatory measures for protection, conservation and betterment of wildlife and ecology in the surrounding area of project site.

6.4.1. Regulatory Mitigation Measures & Recommendations

i. Laying of intake and outfall pipeline corridors shall be done underground without disturbing the morphology of sand dune or the intertidal area. This would ensure no damage, or alteration of the morphology of coastal habitats. Even if there is any alteration in the coastal habitats caused by construction activities, movement of heavy vehicles etc. it shall be restored.

ii. Adjust lightings within and outside the project area in such a way so that there is less disturbance and distraction to wildlife. Lighting towards the coastal area boundary shall be adjusted with special care so that seaturtle are not affected.

iii. Strict control on dust pollution using various methods and technologies shall be carried out.
iv. During construction water sprinkling on roads and soil dumps shall be carried out to control dust pollution.
v. During operation phase Air quality standards (emission of pollutants like Particulate Matter) must be maintained as per GPCB/CPCB norms in and around the project site.
vi. Ambient noise pollution and vibrations during construction and operation phases shall be within limits of the standards mentioned.
vii. Plantation of thick green belt on periphery of the project site shall be created using local and hardy species.
viii. Ensure minimum movements of vehicles or people on the coast and no unauthorized movement through the Forest Areas located nearby in the study area.
ix. Ensure safe passage of runoff through drainages located nearby the project area.
x. Ensure no fly ash, sediments, pollutants, or any raw materials are spill out and flow into nearby drainage during construction or operation phase of the project.
xi. GHCL shall ensure that their construction workers and other workers during construction or operational phase shall not be involved in chasing, teasing, poaching and hunting activities of birds, reptiles or mammals around the project site.
xii. All other general measures to keep environmental parameters within permissible standards.

6.4.2. Compensatory Measures & Recommendations

There are few ecologically important habitats and Threatened species of plants and animals are present in the study area. Therefore, GHCL shall take utmost care during construction and operation phases so that these areas and species are not affected by their activities. Following are some of the recommendations that would help in propagation, protection and conservation of such habitats and species in the study area.

xiii. In order to compensate for the potential degradation of *Commiphora wightii* habitats GHCL shall carry out its plantation through Kutch-West Forest Division, Bhuj.

xiv. Sandy coastal stretch of Nanalayja to Bambhdai villages has been identified as an important Seaturtle nesting beach in the study area. Since coast near proposed project area is less likely to support nesting activities of seaturtles, no significant impacts are envisaged. However, GHCL shall ensure that no materials (dust, fly Ash or sediments) form their premises flows through air to the coastal areas and alter the texture of sandy beach. It is recommended that GHCL through their CER budget shall financially support Seaturtle conservation activities being carried out by the forest department.

xv. Since India Peafowl and other Schedule-I bird species are recorded in the study area, GHCL shall carryout tree plantation in the surrounding villages, schools, roads so that these species are provided with more safer roosting places in the study area.

6.4.3. Monitoring Measures & Recommendations

xvi. After commencement of the project GHCL shall carryout ecological & biodiversity monitoring at every 5 years for 10 years and take necessary corrective measures accordingly. GHCL shall bear the cost of third party monitoring. Monitoring of status of biodiversity and wildlife shall be monitored with specific emphasis on status of Seaturtle nesting, sand dunes, *Commiphora wightii*, forest areas, waterbodies in the study area.

6.5. Implementation of Mitigation Plan

Since the project is located outside the protected areas and their eco-sensitive zones in Kutch, most of the wildlife mitigation recommendations are self regulatory for user agency, therefore the implementation of these mitigation measures shall be carried out by the project proponent (GHCL) through their own staff and CER budget. However, there are several recommended activities which would be carried out by Kutch West Forest Division, Bhuj. GHCL shall

provide financial support through their CER budget to Kutch West Forest Division to carry out these recommended ecology/wildlife mitigation activities.

A special emphasis on ecological conservation shall be given by extending special responsibility to senior environment authority within the management of the proposed project authority. A senior ecologist shall be consulted on regular basis to oversee ecological/wildlife conservation activates under CER/CSR. The senior personal responsible for the conservation of ecology shall report directly to the head of the organization.

6.6. Monitoring of Mitigation Plan & Compliances

Though, most of the recommendations are self regulatory for user agency, monitoring of these recommendations and other conditions imposed by various agencies towards wildlife mitigation measures shall be monitored by a third party agency. Third party monitoring would involve ecological/biodiversity study at interval of 5 years for 10 years. These studies shall be carried out to evaluated long term impacts of the proposed project activities on the wildlife, biodiversity, waterbody, ecology and forest areas present in the 10 km periphery of the project site. Therefore, as per guidelines issued by the Principle Chief Conservator of Forests, Wildlife dated 13th August 2018, user agency shall allocate up to 5% of the total cost of mitigation plan as third party monitoring cost. Total Rs. 10.0 Lakh shall be allocated by the GHCL for monitoring of mitigation plan for the period of 10 years.

Since the area falls under the jurisdiction of Kutch West Forest Division, the overall official monitoring of the implementation of mitigation plan would be carried out by the Kutch West Forest Division, Bhuj. Therefore, as per guidelines issued by the Principle Chief Conservator of Forests, Wildlife dated 13th August 2018, user agency shall allocate and pay the monitoring and administrative cost to the forest department. For carrying out overall monitoring activities, user agency shall pay Rs. 10.0 Lakh for monitoring and administrative cost to the Kutch West Forest Division.

6.7. Financial Allocation for Wildlife Conservation Activities

Following is the proposed budget allocation for 10 years after approval from all statutory bodies permitting the construction and commencement of the project (Table-6.3). GHCL shall make financial allocations for taking up wildlife mitigation measures and for contribution to forest department for carrying out activities towards propagation, protection and conservation of wildlife from their CER budget. GHCL shall also carry out several activities through their own budget and staff.

Table-6.3: Proposed financial allocation for mitigation and conservation measures.

S. No	Activity	Implemen -ting Agency	Duration Years	Rate/Year (Lakh)	Total Amount (Lakh)
A	**Implementation Activities**				
1	Carryout Tree plantation in the villages, schools roadsides etc. areas in study area.	GHCL	10 years	5.0	50.0
2	Carryout plantation of *Commiphora wightii* in RF areas and maintenance (to be paid by GHCL)	KWFD	5 yeas	2.0	10.0
3	Contribution to Forest department for Sea Turtle Conservation Activities (to be paid by GHCL)	KWFD	10 years	2.0	20.0
				Subtotal	**80.0**
B	**Monitoring & Compliances Activities**				
6	Ecological & Biodiversity monitoring by third party once every 5 years for 10 years after commencement of project	GHCL	At every 5 year for 10 years	7.5	15.0
7	Monitoring and administrative activity (to be paid by GHCL) by Kutch West Forest Division	KWFD	First year		10.0
8	Documentation and preparation of Annual compliance report. 10 years	GHCL	Annual	2.0	20.0
				Subtotal	**45**
				Total (A=B) Amount in Lakh	**125.0**

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Annexure- I:
Curriculum Vitae of the Expert, Dr. Bharat Jethva (Wildlife Biologist)

Academic qualification:

Ph.D. in Ecology & Environment -FEB-2003 from Wildlife Institute of India-FRI Deemed University-. Thesis title: 'Feeding Ecology and Habitat Needs of Wolves in the *Bhal* Area of Gujarat'.

M.Phil., Zoology, 1995 Department of Zoology, School of Sciences, Gujarat University Ahmedabad.

M.Sc., Zoology 1994., Department of Zoology, School of Sciences, Gujarat University Ahmedabad. India

B.Sc., Zoology, 1992 from Bahauddin College-Junagadh, Saurashtra University Gujarat, India.

Work experience:

1. Currently working as Category-A Accredited Expert for Ecology & Biodiversity, by National Accreditation Board Government of India and Recognized by Ministry of Environment Forests & Climate Change for Environment Impact Assessment (EIA) experts.

2. More than **20 years of experience** in the field of Wildlife Research and Conservation with special emphasis on Endangered species, Conservation and research on Endangered Birds (ornithological), Environment Impact Assessment, Wetlands, Coastal and Marine Ecosystems, Grasslands and Desert Ecosystems.

3. Worked as **Asian Waterbird Census Coordinator** with Wetlands International-South Asia, New Delhi from September 2008 to June 2011. Coordinated Asian Waterbird Counts in Asian region.

4. Worked as **Scientist** for 5 years (1st September 2003 to 31st August 2008) at GEER Foundation (an autonomous institute under Gujarat Forest Department), Gandhinagar.

5. As **Senior Research Fellow** in the Conservation of the India Wolf Research Project at Wildlife Institute of India from January-2000 to August 2003.

6. As **Junior Research Fellow,** in the Conservation of the India Wolf Research Project at Wildlife Institute of India. From December-1997 to December-1999.

7. As **Technical Assistant** on Conservation of the Indian Wolf Research Project at Wildlife Institute of India. From November 1995 to December 1997.

Memberships:

1. Member of IUCN-Flamingo Specialist Group.
2. Member Bird Conservation Society of Gujarat
3. Executive Committee member Mangrove Society of India –Goa,
4. Member- International Society for Mangrove Ecosystems-Japan
5. Member Sirenian International, USA

Technical reports published:-

1. Status, distribution and habitat Survey of **Great Indian Bustard** *Ardeotis nigriceps* in Gujarat, 2008. Project sponsored by Ministry of Environment and Forests, Government of India.

2. Status of ***Gyps* Vultures In Gujarat, 2007**- A comprehensive state-wide survey of vulture nests and population. Project sponsored by Ministry of Environment and Forests, Government of India. Published by GEER Foundation.

3. **Biodiversity of Purna Wildlife Sanctuary** a comprehensive ecological and socio-economic study. Mammals and socio-economic studies 2007.

4. **Biodiversity of Jessore Wildlife Sanctuary** a comprehensive ecological and socio-economic study. Contribution in studies on mammals 2008.

5. Movement Pattern of **Wild Ass Across the Proposed Kachachh Branch Canal** (Sardar Sarovar Narmada Nigam Limited) on the Northern Fringe of Wild Ass Sanctuary in Gujarat, 2006.

6. Status of ***Gyps* Vultures In Gujarat, 2005-** A comprehensive state-wide survey of vulture nests and population. Published by GEER Foundation

7. **Proceedings** of the workshop on **"Cranes and Community In Gujarat**-a holistic conservation strategy for future" held on 23rd November-2004 at GEER Foundation, Gandhinagar, Gujarat, India.

8. Ecological Impacts of **Lignite Mining in Kutch** with Special Emphasis on the Indian Grey Wolf and its Habitats, 1997. WII-EIA Technical Report No-19, Wildlife Institute of India.

Peer reviewed scientific publications:-

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2. Jethva B. D. and Jhala Y. V. 2003. Foraging Ecology, Economics and Conservation of Indian Wolves in the Bhal Region of Gujarat, Western India. **Biological Conservation:** 116: 351-357.

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8. Sheetal Punjani, **Bharat Jethva**, Preeti Shrivastava: 2012. Effects of fructose on Radiation induced lenticular opacity. International Journal of Scientific & Engineering Research, Volume 3, Issue 11, November-2012 ISSN 2229-5518.

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2. Childress, B., Nagy, S. and Hughes, B. (Compilers). 2007. International Single Species Action Plan for the Conservation of the **Lesser Flamingo** (***Phoenicopterus minor***). AEWA Technical Series No. --. Bonn, Germany.

3. Contribution to Chapter on Dugong of Asia, in a Book on Dugong (*Dugong dugon*) published by Elen Hinse. James Cook University of Australia.

Trainings obtained:

1. Training Programme on '**Mainstreaming Biodiversity in Energy Sector**' held in Wildlife Institute of India, Dehradun, Uttarakhand on 3-5 August 2015.

2. One week Regional Training Programme on **Wetland Management and Conservation** held between 2-6th May 2008 at GEER Foundation, Gandhinagar, Gujarat.

3. UNESCO Regional training program on **Satellite Image Processing** for Natural Resources Management (21-31 January 2002), conducted by Centre for Geo-Sciences and Engineering, Anna University, Chennai.

4. **Animal Welfare** Training Course 1995. Conducted by Animal Welfare Board of India, Ministry of Environment and Forests held at Sakkarbaug Zoo, Junagadh Gujarat.

Selected presentations/Abstracts in conferences:

1. Jethva Bharatkumar, A. G. Untawale, Jayantibhai Chauhan, Shigeyuki Baba. "Mangrove plantations by local community in Sabarmati Estuary, Gulf of Khambhat, Gujarat". Silver Jubilee Mangrove Conference on July 26-27 2017.

2. Jethva Bharat, A. G. Untawale, Shigeyuki Baba. "Mangrove Plantation in Sabarmati Estuary, Gulf of Cambey in Gujarat". International Conference on Sustainable Mangrove Ecosystems: Managing A Vital Resource For Achieving The SDGS and the Paris Agreement. 18-21 April 2017, Bali, Indonesia.

3. Conservation Potential of Green Sea Turtle (*Chelonia mydas*) in Gujarat. National workshop on Marine biodiversity and community held at GEER Foundation with the support of MoEF, Government of India at Ahmedabad.

4. Jethva B. 2005, Vulture Conservation initiatives in Gujarat, Abstract and Oral Presentation in the conference of Society for Conservation Biology Asia Chapter held in Kathmandu, Nepal, November-2005.

5. Jethva B. 2005, Crane Conservation and community in Gujarat, Abstract and Oral Presentation in the conference of Society for Conservation Biology Asia Chapter held in Kathmandu, Nepal November-2005.

6. Jethva B and Jhala Y.V 2003, Foraging ecology, economics, and conservation of Indian wolves. Abstract for an oral presentation in International Wolf congress to be held at Banff, Alberta Canada on September-25–28, 2003.

7. Jhala Y.V., Jethva B, and Chauhan K, 2001. The Role of Predation by Wolves (*Canis lupus pallipes*) and Jackals (*Canis aureus*) on Blackbuck (*Antelope cervicapra*) in Velavadar National Park, India. Presentation in International Canid Conference held in Oxford University U.K.

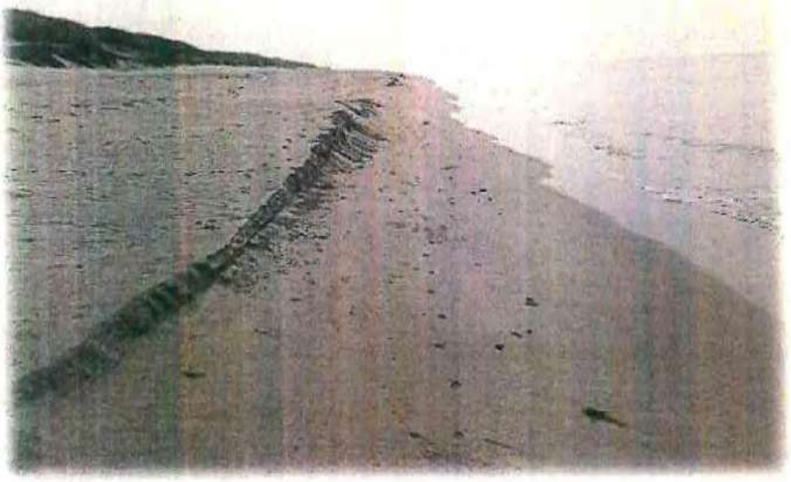
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सत्यमेव जयते

A REPORT ON THE
" STUDY ON STATUS SURVEY AND CONSERVATION PLAN FOR SEA TURTLES ALONG MANDVI TALUKA OF BHUJ, GUJARAT"



Zoological Survey of India
M-Block, New Alipore,
Kolkata – 700 053

April 2019

the wildlife conservation plan and company's approach to protect and support conservation of wildlife around the project as per below objectives:

2. OBJECTIVES

1. Survey on the status of breeding / nesting ground of sea turtles at the project location.

2. Recommendation for action plan for conservation of sea turtle in the project location.

3. STUDY DURATION:

The olive ridley turtle reported to nest between June and early November on the Gujarat coast while green turtle nesting takes place between July and ends of January. However, the data sources silent on the exact nesting season. Moreover, olive ridley peak nesting occurs between July and November. Sporadic nesting takes place throughout the year along Gujarat coast (Sundarraj *et* al. 2013). Therefore, a rapid survey was done for duration of approx. six months from end of September 2018 to end of March 2019, so that sea turtle nesting activities during the peak breeding season, if any in the study area could be documented effectively.



The coastal stretch from Mota Layja end to the Bada village (upto the creek) beach was surveyed on foot by the field personnel engaged for the purpose for recording any nesting/crawl marks of turtles along the coastal stretch including stretches along which the project is proposed. Field visits to the project location was made by the ZSI team of scientists twice from last week of September 2018 and last week of March 2019. The team also made an assessment of the coastal and marine habitat along with overall biodiversity of the sites in line with the objectives.

collectors and not actual sighting of nests. Again as per the report of Sundarraj et al. (2013), the Forest Department identified 11.5 km along Bada – Nana Layja coastal stretch as potential for nesting with 27 nests (2.35 nests/km) and 6.0 km coastal stretch between Layja Nana–Mandvi palace with 6 nests (1.0 nest/km). Therefore, **comparison of the data and reporting of nesting of the two species of turtles along the Kachchh coast require corroboration.**



5.2. Status of sea turtle nesting at the proposed Project Location of M/s GHCL:

5.2.1. ZSI Observations:

The olive ridley turtle reported to nest between June and early November on the Gujarat coast while green turtle nesting takes place between July and ends of January although sporadic nesting have been reported to takes place throughout the year along Gujarat coast (Sundarraj *et* al. 2002; 2013). For documentation of nesting of sea turtles, if any, along the coastal stretch of the GHCL, the entire ~ 1.4 km beach surveyed (project location in the seafront (sector 1-14), ~ 1000 m buffer (Sector 1-3) on both east and west end of the project location) was monitored intensively by the field personnel deployed for the purpose and information was also obtained on beach dynamics on the coastal area on a weekly basis.

Data collected on the beach dynamics of proposed GHCL project site and adjacent coastal stretch indicate that average beach width is < 15 m and get inundated during high tide upto the *Prosopis* vegetation/dunes, except at creek mouth which is considerably widen (see Table 2). Therefore, **the entire coastal stretch of beach is narrow, varying in width with the backshore sandy ridge rising abruptly from 5-7 m above and dense *Prosopis juliflora* vegetation touching HTL.** In particular, the proposed project site has narrow width of beach except at the western end of creek mouth (> 10 m) and at middle (Sector 7-9; ~ 10 m). Also, the entire coastal stretch between sectors 4 to 11 **due to its narrow beach width, gets inundated during high tide and are not suitable/not preferred by sea turtle for laying eggs.**

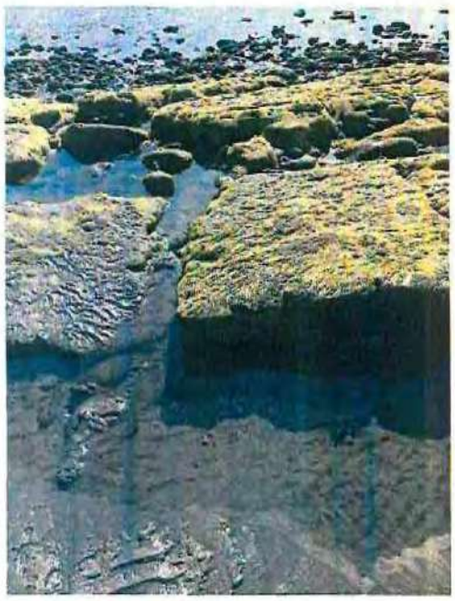
Apart from background dense vegetation of Babul (*Prosopis juliflora*) close to the high tide line (landuse pattern), the predominant floral beach composition are that of beach grass and

beach binding creekers *viz. Launea sarmetosa, Cyperus arenarius, Fimbristylis miliacea, Ipomea pes-capre* and *Spinifex littoreus*. Presence of animals in the coastal stretch of the proposed GHCL project site was assessed by direct sighting and tracks and signs. During the field visit, Feral dogs (*Canis familiaris*) were frequently observed canids on the beach, and common Jackal (*Canis aureus*) was encountered once. This could be due beach due to dense vegetation cover. Also, fecal pallets of Blue Bull (*Boselaphus tragocamelus*) observed on the beach indicating this animal visiting the coast during low tide. **Considering high level of presence of feral animals and carnivores all along the beach, Gujarat State Forest Department translocating all the nests to the turtle hatchery at Mandvi and Nalia.**



The selection of a suitable nesting site is very important at many levels: not only for the female turtle but also for a proper embryo development, and the subsequent hatchling survival (Miller *et* al., 2003). Nesting site selection is governed by a number of clues, depending on both internal physiological factors and external environmental factors. According to Mortimer (1990; 1995), environmental factors of a suitable nesting beach must have: easy accessibility to the beach, nest placement at enough height for avoiding tidal inundations, sand properly cohesive for building a nest and ease gas diffusion, and specific temperatures for a proper maturation of the egg. Wood and Bjorndal (2000), also suggested that the nest placement must avoid being too close (to avoid inundation or erosion). Beach slope, width and length Beach slope not only influences the female trying to ascend to the top of the beach but also the new hatchlings going all the way seawards. According to Wood and Bjorndal (2000), slope is the most important factor influencing the nest site selection in sea turtles. Studies by López-Castro *et* al. (2004), defined that the characteristics of olive ridley nesting sites include smooth-sloped beaches and without vegetation cover and determined an average of width of 17-65 m (López-Castro et al., 2004). Nest elevation is an important factor in order to isolate and protect the nest from tidal inundation. Green turtles tend to place their nests in elevations between 1-3 m (Johannes and Rimmer, 1984). Although no substantial information is available, the presence of beach vegetation seems to affect the choice of a nesting site (Mortimer, 1982) and so, vegetation is a factor that may affect sea turtle nesting also. Green turtles and loggerhead turtles prefer areas where supra-littoral vegetation occurs (Whitmore and Dutton, 1985; Hays and Speakman, 1993; Garmestani et al., 1997). According

to Bilinski et al (2001) thick vegetation or refuse carried by tides (generally logs) can obstruct the nesting areas and thus reduce the hatchling success.



During the nearly six months daily monitoring of the ~ 3 km beach between September 2018 – March 2019 (from Mota Layja side to the Bada village creek), we did not encounter any sea turtle and fresh/old nests or crawl marks of turtles on the beach. Since many of the factor for selection of a suitable nesting site are not conducive (beach width, vegetation cover, rocky substratum and slope in the intertidal and subtidal region, tidal inundation, presence of animals on the beach), nesting, if all, occurring is therefore highly sporadic at the project location of GHCL and on occasionally. However, the ~ 7 km stretch between Rukmawati river mouth and Mandvi palace is sandy, vegetation to HTL is wide and much of the sporadic nesting could be taking along this coastal stretch.

The olive ridley and the green turtles are annual nesters and lay eggs more than once in a single season. The data of Gujarat Forest Department and Sundarraj *et* al. (2013) about 68 nests over five years (2007-08 to 2012-13) along the Mandvi coastal stretch (73 km) averages for 14 nests per year that implies 1 nest/5 km beach, which is highly sporadic and is a scenario of entire coastline of India, so far as sea turtle nesting is concern. Also, the 6 km beach between Mandvi palace and Nana Layja reported to be only 6 nests in five years in this coastal stretch.

The nesting of sea turtles along the coastal stretch Mandvi is highly sporadic as well as high nest predation and therefore it is possible that forest department translocated all the nests to the hatchery (Sundarraj *et* al. 2013). **During the present study, interview with local fisherman/coastal dwellers could not confirm the exact nesting location from which these coastal dwellers bring sea turtle eggs for translocation at hatchery maintained by Gujarat State Forest Department at Mandvi.**

hatching period since heavy equipment and activity can deter nesting, crush eggs, and/or prevent hatchlings from successfully emerging out of the nest from nearly shore.

Migration and movement of sea turtles from Indian coastal waters is not adequately known except for two studies by Wildlife Institute of India on olive ridley migration and movement in the Bay of Bengal based on satellite telemetry on turtles. Based on the study, WII has recommended that (a) inviolate onshore nesting areas that requires special protection, restoration and management approaches and (b) concentrated and diffused offshore breeding congregation zones in the marine habitat that requires different protection, monitoring and management strategies. Also, considering the fact that the olive ridley is Vulnerable and Green turtle is endangered species and included in the Schedule-I of the Wildlife (Protection) Act, 1972 as well as species of international conservation importance due to inclusion in CITES (Convention of International Trade in Wildlife Flora and Fauna) Appendix and CMS (Convention on Migratory Fauna), the following measures are suggested as recommendations.

6. CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion:

1. During approx. six months daily monitoring from September 2018 – March 2019, no sea turtle nest / fresh crawl marks were observed along the shore/beach surveyed. However, secondary sources of information revealed the coastline of Mandvi about 20 km form proposed site as important sea turtle nesting habitat along Kutch.

2. Based on the detailed field survey & monitoring of sea turtle nesting, due to its narrow width, the proposed GHCL site beach gets inundated during high tide and thereby unfavorable for sea turtles for laying eggs. It was observed that due to its narrow beach width, vegetation cover, slope, presence of pebbles and rubbles and presence of predators on the beach sea turtles may not favoring this area for laying eggs.

3. However the 7 km stretch between Rukmavati river mouth (about 20 km from proposed project site) and Mandvi palace (about 16 km from project site) is sandy, vegetation to HTL is wide and much of the sporadic nesting could be taking place along this coastal stretch.

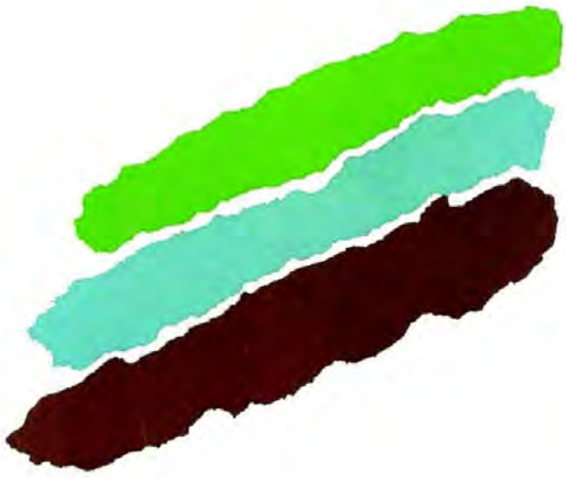
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Marine EIA/EMP for Seawater Intake and Effluent Disposal for Greenfield Chemical Complex off Bada coast, Arabian Sea

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Marine EIA/EMP for Seawater Intake and Effluent Disposal for Greenfield Chemical Complex off Bada coast, Arabian Sea

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3.6.7 Reptiles

In the Gulf, the reptiles are mainly represented by marine turtles *Chelonia mydas* and *Lepidochelys olivacea* which have their breeding and spawning ground on the sandy beaches along the coast as well as on the islands particularly along the southern Gulf. No turtle however was sighted off Bada during `the study period.

3.6.8 Mammals

The mammals are chiefly represented by dolphin (*Delphinus delphis*), whale (*Balaenoptera* spp) and Dugong (*Dugong dugon*) in the Gulf especially along the Jamnagar coast. Whales and Dugong were not sighted in the study area during the study period. However, Dolphins were sighted during field study in offshore regions.

3.6.9 Sand dunes

Sand dunes are the innermost portion of the beach. They are subject to massive erosion by wind and get shifted inland by high monsoon winds and tides when coastal storms strike the coast. Thus, by arresting the storm surges, at least partially, the dunes act as barriers to the impact of the sea on land thereby reducing the damage to landward developments. The dune area also provides habitat for shore birds and many species of plants and animals.

Coastal area of Bada is well protected by well-developed and stable sand dunes dominated by babul and grass as shown in Plate 7.

Apart from physical observation by CSIR-NIO, Mumbai, M/s GHCL limited engaged CSIR-NIO, Goa for specific study of sand dune and to find the corridor for seawater intake and effluent disposal pipeline. A detail report submitted by CSIR-NIO is given as Annexure-I.

3.6.10 Mangroves

Mangroves are salt tolerant forest ecosystem of tropical and subtropical intertidal regions of the world. Where conditions are sheltered and suitable, the

STATUS SURVEY AND SITE-SPECIFIC CONSERVATION PLAN FOR SEA TURTLES FOR PROPOSED GREENFIELD CHEMICAL COMPLEX NEAR VILLAGE BADA, TALUKA - MANDVI, DISTRICT - KACHCHH, GUJARAT

Submitted to

M/s. GHCL Limited

Submitted by

Gujarat Institute of Desert Ecology (GUIDE)
Opp. Changleshwer Temple
Mundra Road, Bhuj-370 001
Kachchh, Gujarat

January 2023

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1.0. INTRODUCTION

Sea turtles, aptly termed as living fossils, due to its long evolutionary and geologic history. Thus, Sea turtles represent an ancient and distinctive part of the world's biological diversity. Sea Turtle is a large reptile that has a thick shell covering its body and lives in the sea most of the time, coming ashore annually on sandy beaches to lay eggs. Sea turtles have played vital roles in maintaining the health of the world's oceans for more than several million years. These roles range from maintaining productive coral reef ecosystems to transporting essential nutrients from the oceans to beaches and coastal dunes.

There are seven known species of sea turtles that inhabit in the world's oceans; the Leatherback, Green, Olive ridley, Hawksbill, Loggerhead, Kemp's ridley and Flatback turtles. Out of the total seven species, former five species of sea turtles inhabit the Indian water for feeding and breeding purposes (M. Rajagopalan, 1997). All the five species of sea turtles are endangered and under the Schedule I of the Wild Life (Protection) Act 1972.

Sea turtles have remarkable life cycles which makes them fascinating to both biologists and wildlife enthusiasts. They are found in all major ocean basins, and typically inhabit tropical and subtropical waters, although individuals are known to have been found in the colder waters of the Arctic (Sea turtles of India, 2011) regions.

Once they leave the breeding beach as hatchlings, only females will return to land during the nesting period while male sea turtles generally never return to land, except in some instances where they have been known to bask. Consequently, most research has been confined to that brief period in their life cycle when they do come ashore. Most sea turtles undertake long distance migrations, as hatchlings and juveniles, during a long pelagic phase in the open ocean sea, and as adults between their feeding and breeding grounds (Sea turtles of India, 2011). Loggerheads migrate over 12,000 km across the Pacific from their feeding habitats in Baja California to their nesting grounds in Japan. Green turtles migrate from their feeding grounds in Brazil to nest on Ascension Island, a speck in the middle of the Atlantic Ocean (Sea turtles of India 2011). On the east coast

families of sea turtles are believed to have existed, of which two families survived into the current era: Dermochelyidae and Cheloniidae.

1.1.2 Life History of Sea Turtles

1.1.3 Reproduction

Males and females begin the reproductive cycle by migrating from their feeding grounds to breeding grounds. Feeding and breeding grounds may be separated by several thousands of kilometers. Courtship and mating occur primarily in the offshore waters of the breeding ground; the male mounts the female, holding her with claws in his fore flipper and proceeds to mate. Both males and females may mate with several different individuals.

1.1.4 Nesting

Several weeks after mating, the females come to shore for nesting, mostly during the night periods. They crawl above the high-water mark, find a suitable nesting site, clear away the surface sand (making a body pit), and dig out a flask shaped nest with their hind flippers. This may be two to three feet deep depending on the size of the turtle. They lay about 100 – 150 eggs in the nest and fill it with sand; some species thump the nest with their body to compact the nest. Once the turtle starts laying eggs, they go into a 'nesting trance' and are less easily disturbed during this stage. They then throw sand around the nest to camouflage it and return to the sea. Beach selection is affected by accessibility of the beach as well as height and substrate. Different turtles prefer different types of beaches to nest. For example, Olive ridleys and Leatherbacks prefer wide beaches and sand bars at river mouths, while Hawksbills and Green turtles prefer small island beaches. Most turtles nest more than once during a season, with roughly two weeks separating each nesting event. After they have completed nesting, they return to their feeding grounds until the next breeding migration, which may be a year or years later.

7. Bhavnagar	152	100.75	7	0.07
8. Ahmedabad		No potential nesting habitat		
9. Kheda /10 Anand		No potential nesting habitat		
11. Bharuch		No potential nesting habitat		
12.Surat		No potential nesting habitat		
13.Valsad*	90	28.50	21*	0.23*
Overall Total	1313	519.75	676	1.38

*Very old nesting locations. Source: Sunderraj *et al.*, 2002

1.1.10. Genesis of the Project

GHCL Limited is one of the leading manufacturers of Soda Ash (Anhydrous Sodium Carbonate) in the country. GHCL has signed an Memorandum of Understanding with Govt. of Gujarat during the Vibrant Gujarat Summit in 2017 for the establishment of Greenfield Chemical Complex in Kachchh District. Thus, in order to create new Greenfield capacity for Soda ash and to meet growing demand from user industry and to honour the commitment made during Vibrant Gujarat Summit, it is proposed to set up Greenfield Chemical Complex in District Kachchh. The Greenfield Chemical Complex comprise of manufacturing units for Soda Ash (Light and dense), Sodium Bicarbonate, Captive Power plant and Seawater Intake and Effluent Disposal System. Project site has been identified near the coastal stretch along Arabian Sea Coast near village Bada, about 30 km from Mandvi (approx. stretch 22 52 25.38 N, 69 8 21.15" E - 22 52' 57.10 N, 69 7'33.09" E).

The proposed project is majorly Soda Ash production which is different from the present establishments along the Kachchh coast like Ports, SEZ, Petroleum and petrochemical complexes, ultra-mega power plants, cement industry, salt works, mining etc. Any significant marine traffic is not expected from the project which can lead to increase in existing vessel traffic in the Gulf.M/s GHCL Ltd. was established in 1983. The company is mainly in business of Soda Ash and Sodium Bi-carbonate manufacturing. The manufacturing plants are located at Sutrapada, District Gir-Somanth in the State of Gujarat, India. It contributes to almost 25% to 29% of the annual domestic demand of the country. Soda Ash product is having significance because of its use in major consumption related sectors like chemicals, detergents, water treatment, glass manufacturing, pulp and paper, textile and mining industry etc. Sodium Bicarbonate is widely used in Food

industry. As there is no sustainable water resources present in the vicinity except Arabian Sea, thus, it is proposed to withdraw seawater from Arabian Sea off Bada coast. At present all major Soda Ash Plants in India are located along the sea coast.

MoEF & CC had granted ToR for the project in August, 2021. GHCL had engaged CSIR-NEERI and CSIR-NIO for the preparation of EIA reports w.r.t Terrestrial and Marine environment. Company has also engaged CSIR-NIO Goa unit for carrying out the study on Sand Dune morphology while Wildlife and ecology related studies had been carried out by a NABET accredited Functional Area Expert. In 2019, the Zoological Survey of India (ZSI) has done the site-specific study on sea turtle for the GHCL. The proponent GHCL Ltd. applications for securing environment, forest and CRZ clearance are under scrutiny level at MOEF & CC and Gujarat State Coastal Zone Management Authority. There are some literature's available on the sporadic nesting of Sea Turtles along the sandy coast of Mandvi region which requires to prepare conservation plan for the area under project influence. Therefore, GHCL has consulted Gujarat Institute of Desert Ecology (GUIDE), Bhuj for carrying out study "Status Survey and Site-specific Conservation Plan for Sea Turtles".

The proposed chemical complex will be set up landwards to the existing sand dune stretch. The sand dune and shore area will be used for laying seawater intake and effluent disposal pipelines. The pipelines have to be laid through sand dune stretch as there is no natural passage available in this area. For protection of sand dunes, the pipeline will be laid through underground tunnelling. The laying of seawater intake and effluent disposal pipelines is a one-time activity and the activity will be restricted up to construction phase only. As the pipelines are part of utility infrastructure for the proposed project no significant source of illumination is separately required for them. GHCL ltd. had applied for diversion of forest land required for laying seawater intake and treated effluent disposal pipelines.

The Soda Ash manufacturing along with Captive Co generation power plant requires large quantity of water for cooling process. In the absence of any other

sustainable source of water in the project area it is proposed to withdraw required quantity of water from nearby Arabian Sea coast off Bada through an efficient seawater intake system. The combine effluent generated from various streams of plant like process and utilities, etc. after mixing/diluting with return once through cooling water/fresh seawater will be released to a recommended location off Bada coast (EIA studies, NIO Mumbai) through a pipeline and diffuser system in order to achieve effective dilution and dispersion. The released effluent will meet the discharge standards notified for Soda Ash Industry.

Accordingly, a proposal and scope of the study was sent to M/s. GHCL and to undertake the field studies on Sea Turtles in the project location within 10 km radius and on the basis of the proposal submitted by GUIDE to M/s. GHCL, a Work Order (No. 4530003859) was released by M/s. GHCL for carrying out detailed study on "Status Survey and Site-specific Conservation Plan for Sea Turtles for proposed Greenfield Chemical Complex at village Bada, Taluka - Mandvi, district - Kachchh, Gujarat" at the project location.

The above study was carried out in the proposed Greenfield Chemical Complex Project location of M/s. GHCL, LTD along the Arabian Sea Coast near village Bada located in the Kachchh district of Gujarat on the Status Survey and Site-specific Conservation Plan for Sea Turtles and suggest Site Specific Conservation Plan and company's approach to protect and support conservation of wildlife around the project as per below objectives:

1.1.11. Objectives

1. Identify and assess the status of different sea turtle Species in the study area.
2. Identify and evaluate the status of breeding/nesting ground of sea turtle in the study area.
3. Suggest mitigation measures to minimize the identified impacts on the project components
4. Prepare the Site-specific Conservation Plan of Sea turtle species for the proposed project.

2.0. BACKGROUND AND LITERATURE REVIEW

The state of Gujarat on the west coast of India has 92 species of reptiles from 63 genera belonging to 20 families (Vyas, 1998), which includes four species of sea turtles, namely Olive ridley, Green, Leatherback and Hawksbill turtles. However, nesting of only olive ridley and green turtles has been documented on the Gujarat coast (Bhaskar, 1978 and 1984; Kar and Bhaskar, 1982), while the other two species are occasionally sighted by local fishermen. Though sea turtle research activities started in late 1970's in Gujarat coast, most of them were short term and rapid surveys. Frazier (1980) has discussed the threats to the sea turtles of Gujarat in terms of eggs and animal poaching, and there is information on an international tag record (Firdous, 1991) and a necropsy of a stranded animal (Frazier, 1989). Except for these notes and a few sketchy and old survey reports, there is no other information on these nesting populations and potential nesting habitats. Based on one time survey by Sunderraj *et al.*, (2002) discussed nesting density, egg predation and provided qualitative information on threats like mining and beach contamination due to spread of oil particles and sea garbage. However, very limited long-term data is available on Green sea turtles for Mandvi coast, though the Gujarat coast supports the only significant nesting of green turtles along the coast of India.

However, in the Kachchh region the sandy beach of Suthri (22°57.305 - 69°00.121) coast is identified as turtle nesting habitat based on the assessment of the Conservation Priority Index (CPI) with a value of 0.53 and is categorized as a candidate site for conservation (Saravanan *et al.*, 2013) which is located significantly away from present study area.

Later, in 2019 the Zoological Survey of India (ZSI) has carried out the site-specific study from September 2018 to March 2019 "Status Survey and Conservation Plan for Sea Turtle" for the GHCL and did not encounter any sea turtle and fresh/old nests or crawl marks of turtles on the beach. Nevertheless, between Mandvi and Pingleshwar is sandy coast and this stretch attracts Sea Turtle for visiting these areas during the breeding seasons (ZSI, 2019).

There are few studies which have discussed the direct and indirect threats to sea turtles and their habitats in India. Nest predation by animals and local people for consumption of eggs is a common threat to sea turtles along the Indian coast (Frazier, 1980; Kar and Bhaskar, 1982; Bhaskar, 1984, 1993; Rajagopalan *et al.*, 1996; Pandav *et al.*, 1998). Incidental catch in fishing gear like trawl and gill net has been reported as the major threat in different coastal districts (Rajagopalan *et al.*, 1996; Pandav and Choudhary, 1999; Pandav *et al.*, 1997; Pandav 2001; Tripathy *et al.*, 2003). Coastal plantations (Pandav *et al.*, 1998) and sand mining along the nesting beaches have been documented as major threats to turtle habitat (Bhaskar, 1984 and Andrews, 2000). All these threats have been reported along the Gujarat coast (Bhaskar, 1984; Sunderraj *et al.*, 2002). However, the magnitudes of their impacts need to be studied with long term monitoring programmes.

3.0. STUDY AREA

Gujarat state is situated along the North-western frontier of India, coast is endowed with two Gulfs in which Gulf of Kachchh is the largest inlet of the Arabian Sea.

Kachchh district derived it name from *Kachuba* (Turtle) due to its Geographical Characteristics; turtle-like shape. The district lies 78 °.89' to 71 °.45' E longitude and 22 °.44' to 24°.41'N latitude. The district encompasses a total area of 45,652 km^2 and is poorly endowed in terms of its land quality, as about 23,310 km^2 (51%) area is covered by saline deserts (Greater and Little Ranns). The coastal area of Kachchh district consisting of Lakhpat, Abdasa, Mandvi, Mundra, Anjar, Gandhidham and Bhachau talukas which lies along the southern and north-western part of the district.

The district falls under arid tract which faces serious climate related problems like; low annual rainfall (326 mm), high rates of evaporation, less surface water availability for irrigation, alarming fall of ground water table and quality and increasing salinity.

The present study area in the Kachchh district is located along the Gulf of Kachchh which is situated in the northern Arabian Sea. The Gulf of Kachchh is 140 km in length, and 70 km wide near the mouth and gets narrowed at the head of the embayment. It is a macro-tidal environment with tidal ranges between 3 m at the mouth to about 5 m at the head. There are number of ports, jetties and industrial developments all along the coastal areas of the Gulf of Kachchh.

The Kachchh mainland, which bounds the northern side of Gulf of Kachchh, has several southward flowing seasonal rivers and streams such as Naira, Kankawati, Chok, Sai, Vengdi, Kharod, Rukmawati, Khari, Nagavanti, Phot, Bhuki, Mitti, Sakra and Larekh empty their water into the Gulf of Kachchh and the Arabian Sea.

The present study area has confined to the northern coast of the Gulf of Kachchh, near to coastal villages Modkuba to Nana Layja of the Mandvi taluka of the Kachchh district.

The few villages near to coast of the Mandvi taluka falls under the study area;

Modkuba coastal village is also a gram panchayat. The village encompasses an area of is 1200.62 ha that supports 132 households and a total population of 562 peoples (Census 2011).

Bambhadai village has an area of 3582.12 ha, that supports 151 households and a total population of 382 peoples.

Bada village has an area of 3725.45 ha, that supports 592 households and a total population of 2,719 peoples.

Panchatiya village has an area of 1133.09 ha, that supports 155 households and a total population of 711 peoples.

Bhada village has an area of 616.18 ha, that supports 187 households and a total population of 802 peoples.

Layja Nana village has an area of 1002.8 ha, that supports 197 households and a total population of 960 peoples (Census 2011).

The above villages hold very meagre human population (382 to 960 individuals), however, Bada is the largest village (3725ha) and more populated village (2719 individuals) when compared to other villages.

Proposed Industrial Development by GHCL

The proposed site is recognised to set up a green field chemical complex with Soda Ash, Sodium bi carbonate manufacturing plant supported by utilities like solid fuel based captive co-generation power plant, sea water intake and effluent disposal system, RO system and associated infrastructure near village Bada, taluka Mandvi, District Kachchh, Gujarat. The identified site is located near the stable coast off Bada stretch near Mandvi (Figure 1).

The core area proposed for establishment of the project plant (Figure 1) covers around 547 ha (1350 acres) of both private unirrigated agriculture land and Government owned land (Sarkarshree land), near the Bada village of Mandvi

Taluka in Kachchh district of the state of Gujarat. The proposed land area is having sparse vegetation dominated by *Prosopis juliflora* and other thorny scrubs. There were no major streams and drainage within the proposed area. The Soda Ash process along with captive co-generation power plant in totally requires huge quantity of cooling water. The sea water requirement for process cooling, RO/DM plant, utilities and process plant effluent dilution etc., would be met by draining seawater from the Arabian Sea Coast in proximity to the project location.

The Arabian Sea coast is located south of the proposed boundary of the project. The area is located at 6.0 km distance from the National Highway NH-41. The project site does not fall in 10.0 km periphery of any National Park or Sanctuary or eco-sensitive zones.

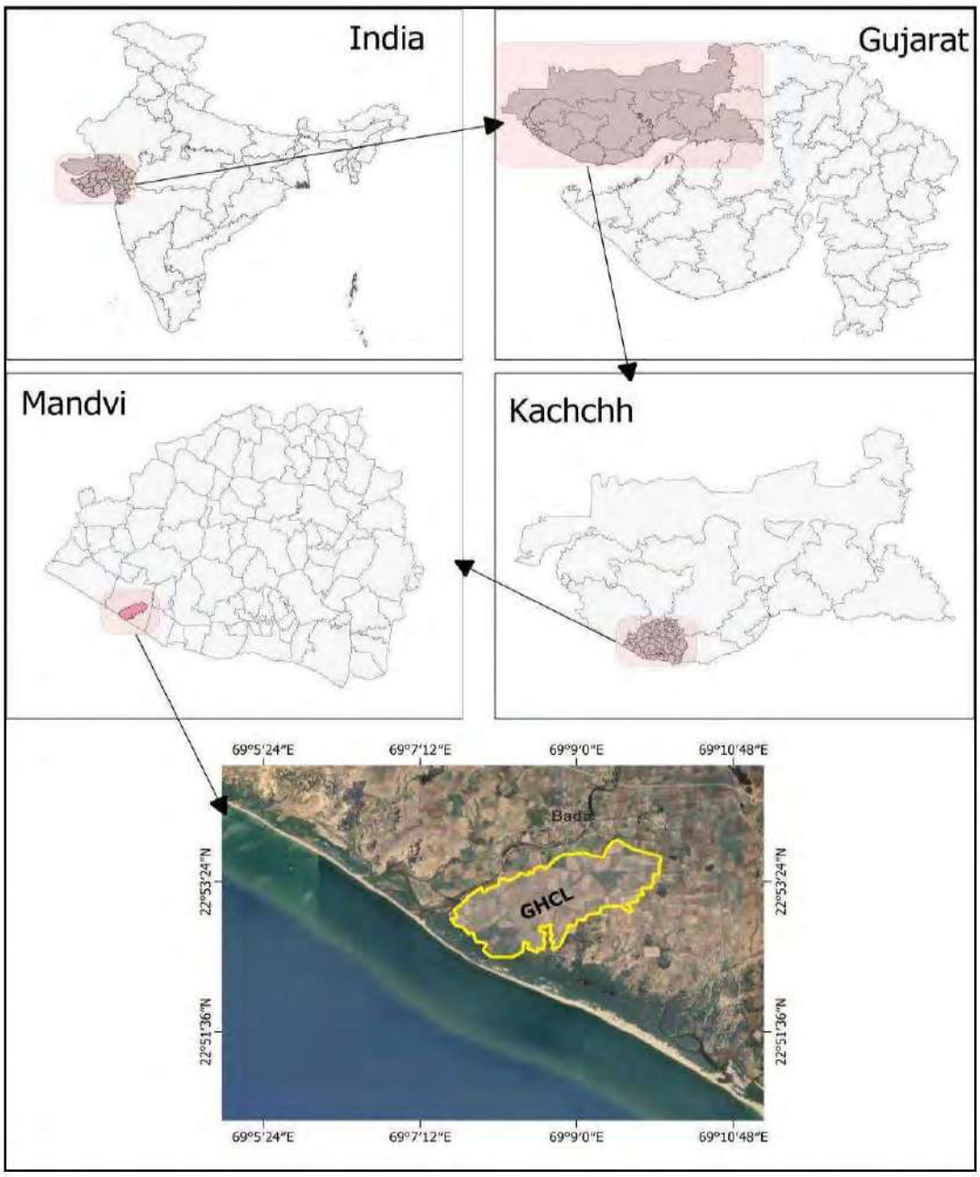


Figure 1: Proposed Project Location Near Bada Village of Mandvi Taluka of Kachchh District in Gujarat

3.1.1. Study Duration

The Olive ridley turtle reported to nest between June and early November on the Gujarat coast while green turtle nesting takes place between July and ends in January. However, sporadic nesting takes place throughout the year along the Gujarat coast (Sundarraj *et al.* 2013). Therefore, surveys were carried out from June 2022 to January 2023, so that sea turtle nesting activities during the peak breeding seasons, if any in the study area could be documented effectively.

The coastal stretch from Nana Layja (Aashar Mataji Temple) to Modkuba beach was surveyed on foot by the survey team consisting of Scientists and field personnel from GUIDE for the purpose of recording any nesting/crawl marks of turtles along the coastal stretch including stretches along which the project is proposed. Along with that, the team also made an assessment of the coastal and marine habitat along with overall biodiversity of the site in line with the objectives.

3.1.2. Coastal and Beach Characteristic Feature of The Study Area

The coast at Nana Layja (Aashar Mataji Temple) to Modkuba coast segment has almost continuous occurrence of sandy beaches and back-shore dunes, except at Naira River mouths. The beach ridges are 3-5m high with a steeper (~15°) seaward slope. The presence of stabilized and active coastal dunes is marked all along the coast behind the beach ridges. Overall, the intertidal zone is steeper and narrow however, also has some broad intertidal zone areas. Many seasonal rivers and streams flow in this segment, river Sai and Vengadi is important. The beach profile feature like, tital variations, height of dune, geomorphology, beach width, inundation risk, etc. were considered on site while understanding the surveyed beaches for their suitability with reference to turtle nesting.

This coastal segment between Nana Layja and Mandvi has a presence of features like 20-50 m wide beaches, about 50-200 m wide coastal dunes and a number of coastal streams. The coastline is composed of minor cuspets along the seaward margin of the beach, beach cusps of 30 to 70 m average length along the berm outline and sand waves of 500-700 m length, which includes all the minor

6.1.1. CONCLUSIONS

The coastal area of the country and along the Gujarat coast is subject to natural and anthropogenic pressures. Coastal Vulnerability Index (CVI) values categorized for the Gujarat coast into four risk level classes, in which 785 km (45.67 %) of the Gujarat coast is under high to very high-risk category due to an anticipated rise in sea level. The coastal regions under very high-risk category are along north-western parts of the Gulf of Khambhat, the northernmost parts of the Gulf of Kachchh and western parts of the Kachchh coast (M. Mahapatra, 2015). As per R. S. Kankara *et al.,* (2018) the Kachchh coast experiences all three categories; i.e., erosion (92.72km), accretion (124.26km) while stable coast covers 169.66km out of the total coastal length of 386.64km. As per SAC (2021), along the northern coast of the Gulf of Kachchh erosions are observed to the south of Rukmavati River (41F05SW), near Mandvi (41F05SW), north of Kharod River (41F01SE). The coastal areas of Panchatiya, Bhada and Mandvi experiences erosion and accretion at some places and with changes in the hightide line when compared from 2004-06 to 2014-16 while Bambhadai coastal belt has changes in the high-tide lines (SAC, 2021). Krunal Patel *et al.,* (2022) reported through a multi-temporal Landsat digital data over the period from 1978 to 2020 highlighted that the highest coastal erosion took place in the Kachchh district. High coastal erosion was observed in 62.3km length, moderate to 115.60km and low erosion was recorded in 132.70km stretch, totalling to 310.60 km stretch facing various degree of erosion problems.

The problems associated with coastal erosion, accretion and changes in high tide line has led to loss or submergence of certain coastal areas and changes in the availability of suitable nesting locations in the study area during the recent past. Sea turtles prefer nesting location which are sandy and exposed to sunlight for hatching success. In general, all sea turtle species tend to nest above the high-water mark to reduce the risk of tidal inundation or egg wash out (Fowler, 1979 and Mortimer, 1982). The above natural causes would have some influence on the availability of suitable nesting locations that prevented the turtles to find suitable locations along the coast. Therefore, our observations suggests that the coast near the proposed project site may not be appropriate for sea turtle

nesting due to inundation risk due to narrow supra tidal region, significant dune height, unfavourable slope features, dense vegetation and presence of predators like dogs, jackals etc. This could be the reason; no direct or indirect evidences of sea turtle nesting was observed from the study area during the eight months monitoring from June, 2022 to January 2023.

However, previous records/study indicates that the coastline of Mandvi about 25 km from proposed site is important for sea turtle nesting habitat in Kachchh. Based on the detailed field survey and monitoring of sea turtle nesting, due to its narrow width, the proposed GHCL site beach gets inundated during high tide and thereby not favourable for sea turtles for laying eggs. It was observed that due to its narrow beach width, vegetation cover, slope, presence of pebbles and rubbles and presence of predators on the beach are the reasons that the sea turtles may not favouring this area for nesting purposes. However, the stretch between Nana Lyja (Asar mata) and Modkuba (about 5.0 km from proposed project site) and Mandvi palace (about 25 km from project site) is sandy, vegetation to high tide line is wide and much of the sporadic nesting could be taking place along this coastal stretch and Chacchi to Suthri is highly significant for probable sea turtle nesting. In Kachchh district, the coastal beach at Suthri was recommended as important beach to be managed for sea turtle nesting by the Wildlife Institute of India (Saravanan *et al.,* 2013)

6.1.2. Recommendations

Nesting beach surveys were widely used for monitoring sea turtle populations. Surveys may be conducted on a single day (a 'snapshot' of a nesting beach) or may be intensive, long-term structured monitoring of sites during the whole nesting season. Since methodologies vary widely, it is often difficult to compare surveys conducted at different sites, or even surveys of the same site carried out by different methods at different points of time. Hence, it is of utmost importance to use a standardized method that is repeatable and comparable. Nesting surveys often begin with beach assessments, which identify potential nesting sites, seasons and the species using the area for nesting. Often, preliminary beach

surveys can be combined with primary nesting assessments, as long as the survey is carried out during the nesting season (Shanker *et al.* 2010).

Educating the fisherfolk and coastal residents regarding the conservation of sea turtles can help to reduce egg poaching, sewage pollution, sand mining, and recovery of turtles in their fishing nests. Coastal industrial sectors can help through sustainable plans for further expansions and developments along the coast and also reduce coastal pollution. Further can provide infrastructural and financial support for research and sea turtle conservation.

- GHCL to carry out laying of pipeline / tunneling work in consultation with geo-technical experts and use proven construction methodologies for such terrains, so that the disturbance on the habitats will be minimized . Therefore, it is mandatory to select the adaptive methodology and agency considering their experience for carrying out such work.
- It is recommended to draw an activity schedule chart and adhere to timelines as any overrun of construction duration may lead to impact the near shore area. GHCL to restore the near shore habitat once the construction activity gets completed.

  GHCL to select efficient process technology and implement an effective environment monitoring programme to keep the released effluent within standards specified for Soda Ash Industry, which is to be monitored by marine monitoring agency periodically to asses the ambient sea water quality near effluent discharge locations.
- It is recommended to maintain the cleanliness of the shore area and create awareness and conduct beach clean up programmes.
- Further, GHCL to put marker buoys at seawater intake and effluent disposal locations for navigational aids.
- It is recommended to make awareness programmes for contractors and workmen regarding conservation of sea turtles.

  GHCL to inform / report to the local Forest Dept. in the event of any sighting of sea turtles near the project coast.

- Mounting of lighting fixtures as low as reasonably possible in order to minimize lighting effect towards shore which should not affect sea turtle during the nesting season.
- Overall, GHCL to obtain necessary EC-CRZ approval from MOEFCC prior to conduct of any activities to the project location.

Final Environmental Impact and Risk Assessment Study for "Greenfield Chemical Complex" of GHCL Ltd.

(Light Soda Ash Plant of Capacity 3000 TPD, Dense Soda Ash 1500 TPD, Sodium Bicarbonate 600 TPD with Solid Fuel based Captive Co-generation Power Plant (120 MW capacity), Seawater Intake and Effluent Disposal System)

Village Bada, Taluka Mandvi, District Kutch, Gujarat"

Sponsor:
GHCL Limited,
GHCL House,
Opp. Punjabi Samaj Seva Hall, Navrangpura
Ahmedabad

Schedule: 4(e), Category A
TOR Letter: IA-J-11011/293/2021-IA-II(I)
Baseline Period: December 2019 – February 2020

Council of Scientific and Industrial Research (CSIR)
National Environmental Engineering Research Institute (NEERI)
Nehru Marg, Nagpur 440 020 (Maharashtra)

November 2022

Final Environmental Impact and Risk Assessment Study for "Greenfield Chemical Complex" of GHCL Ltd.

(Light Soda Ash Plant of Capacity 3000 TPD, Dense Soda Ash 1500 TPD, Sodium Bicarbonate 600 TPD with Solid Fuel based Captive Co-generation Power Plant (120 MW capacity), Seawater Intake and Effluent Disposal System)

Village Bada, Taluka Mandvi, District Kutch, Gujarat"

Sponsor

GHCL Limited,
Ahmedabad

Council of Scientific and Industrial Research (CSIR)
National Environmental Engineering Research Institute (NEERI)
Nehru Marg, Nagpur 440 020
(QCI/NABET Accreditation letter no. NABET/EIA/2124/RA0227)

November 2022

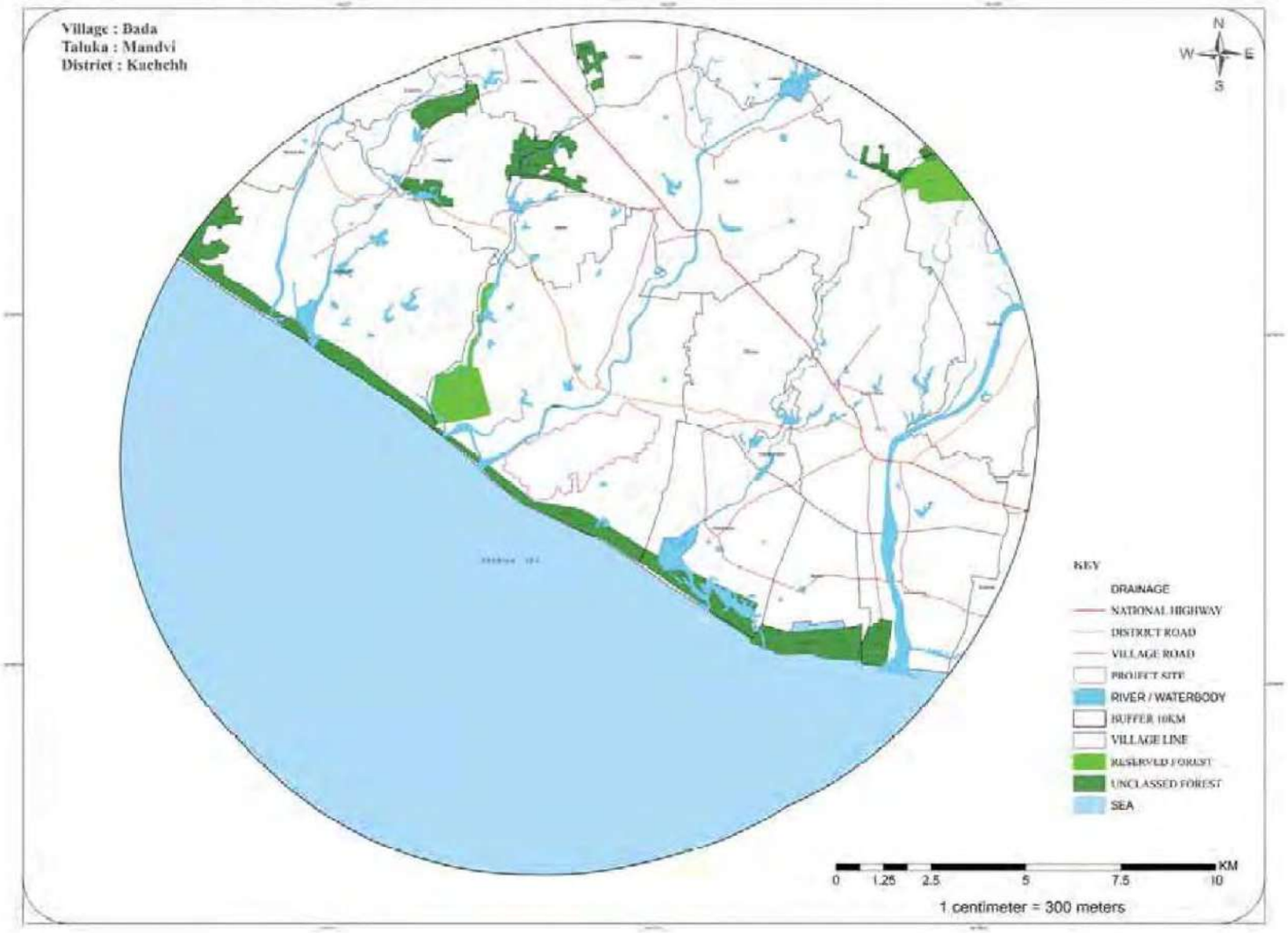
4.4.2. Waterbodies

Our observation and literature review suggests that there are no major wetlands present within the study area i.e. 10.0 km buffer area of the project site. However, there are total 6 seasonal drainages that run north to south in the study area. These drainages have small check dams built on them which are known to accumulate overflowing runoff water for a short period. Apart from being important hydrological features in the semi-arid area, these check dams provide important habitat for many bird species and water source for wildlife in the region. One such seasonal drain is known as Vengdi River which flows from North to South adjacent to project site in western side of proposed project site (Map-4.3). There is one check dam on this river adjacent to project site boundary of the proposed project site. However, all such drainages are seasonal in nature and flows only during rainy days. These drainages flows water from main land to Arabian sea on Kutch coast. Apart from drainages and check-dams, there are number of ponds located in the study area. These ponds mostly have smaller catchment areas and are located near villages, wastelands, forests, or in the agriculture areas to hold rainwater for domestic use such as drinking for human as well as cattle, washing clothes, irrigation etc. One of the closest small minor seasonal ponds is located at 250 mtrs. in south-east direction from the proposed project boundary. A village pond is located at Bada village in north-east direction. These ponds may not be important hydrological features but they provide crucial source of drinking water for wildlife in the region.

4.4.3. Seaturtle Nesting Beach

The sandy stretches of Kutch district are known for sporadic nesting of two species of sea turtles i.e. Olive ridley (*Lepidochelys olivacea*) and Green Seaturtle (*Chelonia mydas*). Gujarat Ecology Commission a Government of Gujarat Organization has carried out a study as part of World Bank aided Integrated Coastal Zone Management (ICZM) Project titled "*Evaluation of Sea Turtle Nesting Population and Threats to Nesting Beaches: Suggest*

Map-4.3: Locations of River, Waterbodies, ponds etc. in the study area.



Conservation and Management Strategies" (also referred as Sunderraj et al 2013). The study based on secondary data (from Gujarat Forest Department and Sunderraj et al 2002) identified total 10 stretches of Seaturtle nesting beaches on Kutch coast.

The study based on available data sources for 10 stretches(Table-4.4) concluded that Bada-Layja Nana, Layja Nana-Mandvi Palace and Mandvi Palace-Mandvi beach were found to be the potential beaches on Kutch coast (Sunderraj et al 2013). According to Sunderraj et al 2013, sandy beach between Bada to Layja nana having length of 11.5 km is first rank beach for seaturtle nesting whereas beach between Bambhdai to Bada of 8 km length ranks 3rd most important nesting beach of Kutch coast.

Table-4.4: Potential Seaturtle nesting beaches identified on Kutch coast (*source Sunderraj et al 2013*).

S. No	Coastal Stretch	Distance (Km)	No of Nests- 1	D/km (RO)	No of nests - 2	D/km (RO)	MRO	FR
1	Pingleshwer – Kamond	4.0	4	1.0 (3)	1	0.25 (8)	5.5	4
2	Kamond – Suthri	5.6	0		2	0.36 (6)	6.0	5
3	Suthri – Chhachhi	10.5	0		3	0.29 (7)	7.0	6
4	Chhachhi – Bambhdai	10.5	0		1	0.09 (9)	9.0	7
5	Bambhdai – Bada	8.0	0		7	0.87 (5)	5.0	3
6	Bada –Layja Nana	11.5	27	2.35 (2)	21	1.82 (2)	2.0	1
7	Layja Nana – Mandvi Palace	6.0	6	1.0 (3)	11	1.83 (1)	2.0	1
8	Mandvi Palace –Mandvi	6.5	29	4.46 (1)	11	1.69 (3)	2.0	1
9	MandviE–Gundiali	6.0	0		0	0	0	
10	Gundilai – Tragadi	4.0	2	0.50(4)	4	1.0(4)	4.0	2
	Total	**72.6 km**	**68**		**61**	**100**		

Data Sources: 1-GSFD-Kachchh Circle, 2- Sunderraj et al 2002, Rank Order, MRO-Mean Rank Order, FR-Final Rank

According to above mentioned study, density of seaturtle nests is higher (1.8 to 2.3 nest/km) on the coastal stretch between Bada and Nana Layja villages, however, nest density is relatively lower on the coast of Bada and

Bambhdai villages (0 to 0.8/km) (Table-4.4). This difference in nesting could be due to difference in the beach morphology i.e. available beach width, beach slope, vegetation type, disturbance level, predators etc.

The length of the coast in the study area is 23.0 km east to west. Only 2.0 km area falls near the proposed project site. During our field visits we did not observe direct or indirect signs of nesting of seaturtle on the coast near project site. However, sandy beach on the coast of Bambhdai, Pachotiya, Bhada and Nana Layja are likely to have sea turtle nesting activity due to its suitable morphology and past records.

In general, all sea turtle species tend to nest above the high water mark to reduce the risk of tidal inundation or egg wash out (Fowler 1979; Mortimer 1982). During our field visits we observed that the open sandy beach width decreases as we travel on the coast from Nana Layja village (east) to Bada village coast (west). Even bare perusal of 'Google Earth' image reveals that the open beach width is higher on the coast of Bhada and Panchotiya villages which decrease on Bada village coast. Moreover, the width of sandy beach in the supra tidal region near proposed project site is very narrow due to presence of dense *Prosopis juliflora* vegetation on stabilized sand dunes. Also, during our visits we observed that there is a steep slope and dense vegetation in the supra tidal region on the beach near proposed project site. Presence vegetation such as *Prosopis juliflora* is seen to hold sand and stabilized sand dunes (Plate-4.1). We also observed higher presence of predators such as jackals and dogs on the beach.

Therefore, our primary observations suggests that the coast near the proposed project site may not be suitable for seaturtle nesting due to narrow supra tidal region, steep slope, dense vegetation and presence of predators such as dogs and jackals. Though, our observations suggests that there may be no or negligible probability of seaturtle nesting, a proper systematic study shall be carried out to find out the exact status of seaturtle nesting in the study area through an expert.

Map- 4.4: Coastal habitats around project area in the study area.



ADDENDANUM of EIA REPORT

FOR

"Greenfield Chemical Complex" of GHCL Ltd. (Light Soda Ash Plant of Capacity 3000 TPD, Dense Soda Ash 1500 TPD, Sodium Bicarbonate 600 TPD with Solid Fuel based Captive Co-generation Power Plant (120 MW capacity), Seawater Intake and Effluent Disposal System) Village Bada, Taluka Mandvi, District Kutch, Gujarat"

GHCL Limited,
GHCL House, Opp. Punjabi Samaj Seva Hall,
Navrangpura, Ahmedabad.

CATEGORY: 4 (e) and 1(d), 'A'

Baseline Monitoring Period [December 2022 to February 2023]
Baseline Study Carried By: T. R. Associates Laboratory
(NABL Certificate Number: TC-7896)

PREPARED BY:

T. R. ASSOCIATES
[NABET ACCREDITED EIA CONSULTANT]
A-401, S. G. Business Hub,
B/w sola Bhagwat & Gota Over Bridge,
Near Umiya Campus, S. G. Highway, Ahmedabad – 380060
E-MAIL: adm.trassociates@gmail.com
CONTACT NO.: 09825371099

NABET Accreditation No.: NABET/EIA/2326/RA 0293 valid up to April 8, 2026.

JANUARY, 2024

trassociates.in

A-401, S.G.Business Hub, Between Sola Bhagwat & Gota Over Bridge, Near Umiya Campus, S.G. Highway, Ahmedabad - 380060. Gujarat. | P : +91 98253 71099, +91 97241 49800 | E : adm.trassociates@gmail.com

OUR SERVICES : ENVIRONMENTAL CONSULTANT | ENVIRONMENTAL LABORATORY
EXPLOSIVE CONSULTANT | PROJECT CONSULTANT | CHARTERED ENGINEER

T. R. ASSOCIATES

UNDERTAKING

I, Mr. T. R. Patel, Proprietor of T. R. Associates, a QCI/NABET accredited consultant for Soda Ash Industry and Thermal Power Plant, here confirm that we have checked/verified the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) report for the "Greenfield Chemical Complex" of GHCL Ltd., at Bada, Kutch.

We have verified the EIA/EMP report, and prepared an addendum report describing our findings and observations. This report conveys our satisfaction with the data presented in the EIA/EMP report.

Furthermore, it is important to note that a fresh baseline study has been conducted by T. R. Associates Laboratory, a NABL accredited laboratory. This study was conducted during the winter season from December 2022 to February 2023. The results of this baseline study have been incorporated into the EIA Addendum report.

Date: 30.01.2024

Place: Ahmedabad

T. R. ASSOCIATES AHMEDABAD

Mr. T. R. Patel,

Proprietor,

T. R. Associates

PART A: DECLARATION BY ACO AND EXPERTS CONTRIBUTING TO THE ADDENDUM OF EIA REPORT

Declaration by experts contributing to the EIA study for proposed soda ash manufacturing plant at Village Bada, Taluka – Mandvi, District Kutch, Gujarat by **M/s. GHCL Limited.**

I, hereby certify that I was a part of the EIA team in the following capacity that developed the EIA report.

EIA sector number as per NABET	14 & 4	**Name of the sector**	Soda Ash Industry & Thermal power plants

EIA CO-ORDINATOR

Name:	**Mr. T. R. Patel**
Signature:	
Date:	30th January, 2024.
Period of Involvement:	**November, 2022 – January, 2024**
Contact information:	**M/s. T. R. Associates** A-401, S. G. Business Hub, B/w. Sola Bhagwat & Gota Over Bridge, Near Umiya Campus, S. G. Highway, Ahmedabad – 380060. Contact No.: 98253 71099 adm.trassociates@gmail.com

FUNCTIONAL AREA EXPERTS

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
1	**AP** Air Pollution Monitoring, Prevention & Control	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Baseline monitoring visit; • Identification of impacts of the proposed project based on industrial activities and proposing mitigation measures; • Finalisation of EIA Addendum report.	30/1/24
		Mrs. Hiral Shah	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Data Collection and identification of pollutants; • Baseline monitoring visit and noted filed observation; • Verification of ambient air quality results. • Preparation of EIA Addendum report.	Hiral Shah 30/1/24
2	**AQ** Meteorology, Air Quality Modeling & Prediction	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Verification of primary data received, for air quality modelling; • Finalization of EIA Addendum report; • Identification of impacts of the proposed project and suggesting mitigation measures.	30/1/24
		Mrs. Hiral Shah	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Identify fuel characteristics, calculate proposed pollution load generation due to combustion of fuel; • Collection of primary and secondary meteorological data; • Air Quality Modeling for Point source and Line source; • Preparation of EIA Addendum report.	Hiral Shah 30/1/24

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
			Period of Involvement:	
3	**WP** Water Pollution Monitoring, Prevention & Control	Mr. Malav Dalwadi	November, 2022 – January, 2024 **Tasks:** • Site visit; • Verification of analysis results; • Contributiuon in preparation of EIA Addendum; • Identification of impacts of the proposed project and suggestion for its mitigation measures.	30/1/24
		Mr. Darshit Dave	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Baseline monitoring visit and collected water samples & noted field observation and co-relate with baseline monitoriong results; • Perform ground truth verification of relevant ground water & surface water. • Onsite preservation of samples; • Onsite parameter measurement.	30/1/24
4	**SHW** Solid & Hazardous Waste Management	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Finalization of categorization of sources of non-hazardous & hazardous/solid waste from proposed project; • Finalization of quantification of hazardous waste generated from industrial activities; • Identification of impacts of the proposed project & suggestions for mitigation measures related to solid & hazardous waste management. • Finalization of action plan for fly ash & gypsum generation from desulphurisation plant.	30/1/24.

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
			Period of Involvement:	
	SHW (SW & HW)	Mrs. Hiral Shah	November, 2022 – January, 2024 **Tasks:** • Review of categorization of sources of non-hazardous & hazardous/solid waste from proposed project; • Verification of quantification of hazardous waste generated from industrial activities; • Preparetion of action plan for fly ash & gypsum generation from desulphurisation plant.	Hiral Shah 30-1-24.
5	**RH** Risk Assessment & Hazards Management	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit; • Finalization of disaster management plan; • Verification of impacts of the proposed project and suggesting mtitgation measures; • Finalisation of RH report.	30/1/24.
		Mr. Darshit Dave	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit with EIA coordinator, FAEs and relevant team members; • Analysis and Identification of impact of the proposed project from the manufacturing process and storage hazards. • Verification & review of RH report.	30/1/24
6	**SE** Socio-Economics	Mrs. Snehaben Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Collection of secondary data; • Evaluation of socio economic status from primary data; • Assessment of the possible changes to socio-economic issues arising out of the project; • Identification of impacts of the proposed project on surrounding environment and suggesting mitigating measures; • Preparation of SE report.	Patel 30/1/24

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
7	**SC** Soil Conservation	Dr. B. T. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site and field visit for baseline monitoring; • Collection of soil samples; • Compilation of data; • Review & finalization of results for soil analysis; • Interpretation of results of soil analysis; • Identification of impacts of the proposed project on soil environment and suggestion of its mitigation measures.	30-01-2024
8	**N** Noise	Mr. Rajendra Gohil*	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site and field visit for baseline monitoring; • Review & finalization of noise monitoring results; • Identification of impacts of the proposed project on surrounfing environment & suggestions for mitigation measures.	Rajendra Gohil 30/1/24
9	**HG** (Hydrology, Ground Water & Water Conservation) **&** **GEO** (Geology)	Mr. I. M. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Collection of secondary data; • Site visit; • Primary data collection; • Verification of secondary data during site visit; • ground water quality results; • Identification of impacts & mitigation measures; • Preparation of FAE report.	30/1/24.

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
10	LU Land Use	Mr. Vishwas Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit; • Preparation and Finalization of landuse map of study area; • Preparation & finalization of landuse report.	30/1/24
11	EB Ecology and Biodiversity	Dr. Pankaj Joshi*	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit; • Varification of primary data; • Identification and assessment of impacts of proposed activities of project on biological environment; • Preparation and finalization of EB report.	30/1/24

Note: * Empaneled Expert

Name of the EIA consultant organization: T. R. ASSOCIATES

NABET Certificate No.: NABET/EIA/2326/RA 0293 valid up to April 8, 2026.

S. No.	Issue related to	Verbal/ written nos. of issues	Concern in PH	GHCL LTD reply	Action Plan	Fund Required	Timeline	Responsibility
					• GHCL Ltd is committed for conservation plan for sea turtles and sand dunes as suggested by various studies.			
15	Turtle	3	Regarding presence of turtles on the coastline of Bada Regarding information on endangered species not mentioned in EIA report	--	• Study on Status Survey and Conservation Plan for Sea Turtles along Mandvi Taluka, Bhuj, Gujarat by **Zoological Survey of India, Kolkata (April,2019)** is attached with	• Contribution to Forest department for Sea Turtle Conservation Activities- 0.20 crore which is included in **EMP cost**	10 years	GHCL Ltd

T. R. ASSOCIATES

			Regarding hatching and presence of sea turtles		EIA report. • ZSI study report mention that they did not any encounter any sea turtle and fresh/old nests or crawl marks of turtles on the beach. Since many of the factor for selection of a suitable nesting site are not conducive. • As per additional Ecological and Biodiversity study, suggests that the coast near the proposed project site may not be suitable for sea turtle nesting due to narrow supra tidal region, steep slope, dense vegetation and presence of predators such as dogs and jackals. Though, observations suggest that there may be no or negligible probability of sea turtle nesting. • GUIDE is also engaged for study of turtle survey and preparing conservation plan. Premiliary observation are found to be similar. GHCL Ltd is committed for conservation plan for sea turtles and sand dunes as suggested.			
16	Schedule 1 species (Peacock, Googal. Turtle,	4	Regarding presence of greater numbers of peacocks nearby and	--	• Details of schedule -1 species and conservation plan is	• The proposed budget	10 years	GHCL Ltd

S. No.	Issue related to	Verbal/ written nos. of issues	Concern in PH	GHCL LTD reply	Action Plan	Fund Required	Timeline	Responsibility
	Sandha and indian Monitor Lizard)		stated in report Presence of reptiles and amphibians not reported Related to study of presence of Indian Monitor Lizard in study area Regarding presence of gugal trees,		already incorporated in EIA report. • GHCL shall make financial allocations for taking up wildlife mitigation measures and for contribution to forest department for carrying out activities towards propagation, protection and conservation of wildlife. • GHCL Ltd have submitted Conservation Plan (Flap shell turtle, Green Sea turtle, Indian monitor lizard, Olive Ridley Sea turtle, Black shoulder kite, Eurasian Spoonbill, Indian Peafowl, Marsh Harrier, Oriental Honey Buzzard, Shikra, Short-toed Snake Eagle, Chinkara and Gugal - Schedule –I species and Critically Endangered species) to CWLW department of Gujarat.	allocation for conservation of Schedule 1 species for 10 years is 1.36 crore which is included in **EMP cost**		
17	Conservation Plan	2	Regarding conservation plan for Schedule 1 species	--	• GHCL shall make financial allocations for taking up wildlife	• The proposed budget allocation for	10 Years	GHCL Limited

			Concern regarding green sea turtles and conservation plan for them		• mitigation measures and for contribution to forest department for carrying out activities towards propagation, protection and conservation of wildlife. • The unit have submitted Conservation Plan (Flap shell turtle, Green Sea turtle, Indian monitor lizard, Olive Ridley Sea turtle, Black shoulder kite, Eurasian Spoonbill, Indian Peafowl, Marsh Harrier, Oriental Honey Buzzard, Shikra, Short-toed Snake Eagle, Chinkara and Gugal - Schedule –I species and Critically Endangered species) to CWLW	conservation of Schedule 1 species for 10 years is 1.36 crore which is included in **EMP cost**		

T. R. ASSOCIATES

S. No.	Issue related to	Verbal/ written nos. of issues	Concern in PH	GHCL LTD reply	Action Plan	Fund Required	Timeline	Responsibility
					department of Gujarat.			
18	Form 1(Water Bodies, Temples, Schedule 1 Species)	5	Regarding presence of waterbody not shown in form-1 Regarding religious places and lakes not mentioned in PFR report Waterbody not mentioned in form-1 Data given in form-1 and EIA are different Waterbody not mentioned in form-1	--	• Environmental settings are given in Chapter-1 and Chapter-5 of EIA report. Approximate distance of water bodies, temples etc are given in EIA report. • Through drainage studies of the area, it was observed that there is one stream of 1st order entering the plant area from north. Although, it has small catchment area, it is proposed that this stream, will be diverted to nearby passing Vengadi River in the west. • There are also pond inside the premises. It is proposed that pond i.e. inside the premises will be used to store entire annual surface runoff plant use. If permitted by concern authority.	• Cost of drainage network of surface runoff, rainwater collection pond, EMS training and rain water harvesting system – 53 crores which is included in **EMP cost**	--	GHCL LTD
19	Govt. Land	3	Regarding type of land to be procured by the industry Regarding status of government land to be procured Providing data for proving gauchar land	--	• There is no gauchar land within proposed project site. M/s GHCL has applied to Industries Commissioner and District Collector for allotment of aforesaid land. Industries Commissioner has granted In Principle approval for Bonafied Industrial Purpose. District Collector has initiated actions for allotment of Govt. waste land.	--	--	GHCL LTD

20	CER - Fishing	8	Regarding details of Pagadia fisherman not mentioned and Marine EIA is misinterpreted	--	• Proper seawater intake and treated effluent disposal (ensure maximum dilution) shall be done as per	• A provision of Rs. 1 crore to be earmarked for the	During construction and	GHCL LTD

T. R. ASSOCIATES

S. No.	Issue related to	Verbal/ written nos. of issues	Concern in PH	GHCL LTD reply	Action Plan	Fund Required	Timeline	Responsibility
			Regarding disturbance to fishes due to presence of pipeline Regarding status of fishing near Bada and Mandvi Related to number of fishermen not incorporated in study Related to presence of dead fishes not reported in study, fishing carried out for commercial purpose Regarding presence of fisherman in study area Regarding the impact due to project activities on fishes Regarding chances of reduction in number of fishes		Marine EIA report prepared by NIO • Industry should be ensured that the effluent released to the sea meets the prescribed GPCB/ CPCB norms at all times. This should be verified through tracer studies after the outfall becomes operational. • Details of Fishery and fishermen including their family and population are given in Chapter-3 of marine EIA report. • Other than construction phase,	biodiversity management plan to be implemented in the project area during construction phase and operation phase which is included in **EMP cost** • For periodic monitoring of the marine area environment during project Construction phase, a provision of Rs. 0.5 crore to earmarked. • For operation phase, Rs. 0.5 crore per year to be kept provision for the monitoring.	Operation phase	

-TRUE COPY-

Final Environmental Impact and Risk Assessment Study for "Greenfield Chemical Complex" of GHCL Ltd.

(Light Soda Ash Plant of Capacity 3000 TPD, Dense Soda Ash 1500 TPD, Sodium Bicarbonate 600 TPD with Solid Fuel based Captive Co-generation Power Plant (120 MW capacity), Seawater Intake and Effluent Disposal System)

Village Bada, Taluka Mandvi, District Kutch, Gujarat"

Sponsor:
GHCL Limited,
GHCL House,
Opp. Punjabi Samaj Seva Hall, Navrangpura
Ahmedabad

Schedule: 4(e), Category A
TOR Letter: IA-J-11011/293/2021-IA-II(I)
Baseline Period: December 2019 – February 2020

Council of Scientific and Industrial Research (CSIR)
National Environmental Engineering Research Institute (NEERI)
Nehru Marg, Nagpur 440 020 (Maharashtra)

November 2022

Final Environmental Impact and Risk Assessment Study for "Greenfield Chemical Complex" of GHCL Ltd.

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Village Bada, Taluka Mandvi, District Kutch, Gujarat"

Sponsor

GHCL Limited,
Ahmedabad

Council of Scientific and Industrial Research (CSIR)
National Environmental Engineering Research Institute (NEERI)
Nehru Marg, Nagpur 440 020
(QCI/NABET Accreditation letter no. NABET/EIA/2124/RA0227)

November 2022

GHCL Limited

UNDERTAKING for M/s. GHCL Limited.

I, **Shri NN Radia –** Chief Operating Officer (COO) of **M/s. GHCL Limited** located at Village Bada, Taluka Mandvi, District Kutch, Gujarat **do hereby give undertaking** with reference to MoEF & CC O.M. No. J-11013/41/2006-IA.II.(I) dated 05th October 2011, that the data and information given in the Environmental Impact Assessment (EIA) report are factually correct and we will responsible for any discrepancy in the EIA report.

We also undertake that content including information & data of the EIA report is own by us and data or information not taken from any other EIA report.

The above stated fact is true to the best of my knowledge.

Date: 17.11.2022
Place: Ahmedabad

For M/s. GHCL Limited
Shri NN Radia –
Chief Operating Officer (COO)

National Environmental Engineering Research Institute (NEERI)

I, Dr. R.J. Krupadam, **Senior Principal Scientist, National Environmental Engineering Research Institute (NEERI)** located at Nehru Marg, Nagpur, Maharashtra 440020, **do hereby give undertaking** with reference to MoEF&CC O.M. No. J-11013/41/2006-IA. II. (I) dated 04th August 2009, that we have prepared EIA report M/s. GHCL Limited. located at **Village Bada, Taluka Mandvi, District Kutch, Gujarat** as per Terms of Reference (ToR) prescribed wide letter no.: **No. IA-J-11011/293/2021-IA-II(I)** dated **10th August 2021**. The stated ToR have been complied with and the data mentioned in the EIA report are factually correct. CSIR-NEERI is a NABET accredited for materials manufacturing sector such as chlor-alkali. This undertaking is subjected NABET clearance on this project.

The above stated fact is true to the best of my knowledge.

Date: 29.11.2022
Place: Nagpur

For, M/s. **National Environmental Engineering Research Institute (NEERI)**

Dr. R.J. Krupadam
Senior Principal Scientist &
Project Leader

डॉ. आर. जे. कृपादम
एम.एससी.(टेक), पी.एच.डी., एफ.आर.एस.सी.
वरिष्ठ प्रधान वैज्ञानिक एवं प्राध्यापक
समन्वयक, ए.सी.एस.आई.आर.
सी.एस.आई.आर.-राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान(नीरी)
नेहरू मार्ग, नागपुर-440 020 (भारत)

Declaration by Experts Contributing to the *Environmental Impact and Risk Assessment & Risk Assessment Study for Greenfield Chemical Complex of GHCL Ltd. At Village Bada, Taluka Mandvi, District Kutch, Gujarat.*

I, hereby, certify that I was a part of the EIA team in the following capacity that developed the above EIA.

EIA coordinator : **Dr R. J. Krupadam**

Signature & Date : 11.8.2021

Period of involvement : **April 2019 – July 2021**

Contact information : **Senior Principal Scientist,**
CSIR-NEERI, Nehru Marg, Nagpur 440020
Ph: +91 712 2249884, Fax: +91 712 2249896

EIA Co-coordinator : Dr. M. Suresh Kumar

Functional Area Experts/TM :

Sr. No.	Functional Areas	Name of the Expert/s	Involvements (period and task**)	Signature and Date
1	Air pollution Monitoring Prevention and Control (AP)/Air Quality Modeling and Prediction (AQ)	Dr. T.V.B.P.S. Rama Krishna	Air Quality AQ	
2	Water Pollution Monitoring Prevention and Control(WP)	Dr. R. J. Krupadam Er. M. Karthik Mr. Y.J Baseshankar (TM)	Water Quality ETP Evaluation, Water EMP Marine Water Quality Water Quality Monitoring	
3	Noise & Vibration (NV)	Dr. G.L. Bodhe Mr. Guddu Kumar (TM)	Noise Monitoring Prediction of Impacts and EMP	
4	Socio-economic Aspects (SE)	Dr. G.K. Khadse Mr. Sanjay Bodhale	Socio-economic Status Quality of Life	
5	Soil Conservation (SC)and Hydrogeology (Hg)	Dr. R.J. Krupadam Ms. Pravin Naoghare (TM)	Soil Conservation Soil Quality	
6	Land-use & Land cover (LULC)	Dr. Ritesh Vijay	Remote Sensing & GIS for LU/LC	
7	Risk Assessment & Hazard Management (RH)	Dr. R. J. Krupadam Dr. Santosh Ghuge	Risk Assessment Hazard Management	

Declaration by the Head of the accredited consultant organization

I, Dr. Sadhana S. Rayalu, hereby, confirm that the above-mentioned experts prepared the "Environmental Impact and Risk Assessment study for Greenfield Chemical Complex of GHCL Ltd., at Village Bada, Taluka Mandvi, District Kutch, Gujarat State. I also confirm that the consultant organization shall be fully accountable for any mis-leading information mentioned in this statement.

Signature	:	06/10/2021
Name	:	Dr. Sadhana S. Rayalu
Designation	:	Senior Most Scientist/In-charge
Name of the EIA Consultant Organization	:	CSIR-NEERI
NABET Certificate No & Issue date	:	NABET/EIA/1821/SA 0119, 01.07.2021 (Renewal applied)

निदेशक / Director
सी.एस.आई.आर.-राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान
CSIR-National Environmental Engineering Research Institute
नेहरू मार्ग/, नागपुर-440 020 (भारत)
Nehru Marg, Nagpur-440 020 (India)

	Mangroves	Nil	No mangroves are present on the coast due to sandy beach. In the study area.	• Nil
	Corals	Nil	No coral reef area present on the coast falling in the study area.	Nil
	Breeding/ nesting areas	Med	Sandy beach stretch between Nana Layja to Bambhdai falling in the buffer area /study area is known for sporadic nesting of two species of Seaturtles.	• Ensure no damage, disturbance is caused due to any of the project activities, pollution, dusting, material flow etc. during construction or operation phase. • Promote conservation, protection and propagation of these species . • Monitor status of this habitat as part of comprehensive biodiversity monitoring plan.

6.2. Conservation Plan for Schedule-I species

6.2.1. Conservation Plan for Critically Endangered Plant Species:

Gugal: (*Commiphora wightii*)

Status: Our field survey in the proposed project area revealed that there is a critically endangered plant species present in the open scrubland as well as forest areas present in the buffer area. This plant was found with low density in the buffer area. This plant has high medicinal values and is facing the threats of extinction by overexploitation for commercial purpose (Silori et al., 2004; Joshi, 2002; GUIDE 2009) from Kutch. However, recently Gujarat Forest Department has accomplished a large scale project on plantation of *Commiphora wightii* in Gujarat. Through this project thousands of plants were raised and planted in entire Kutch region.



also known to prefer nesting on island beaches mainly, the beaches of tropical and subtropical areas near continental coasts and around islands.

For regulating development activities, the coastal stretches within 500 metres of High Tide Line (HTL) on the landward side are classified as Category I (CRZ-I): (i) Areas that are ecologically sensitive and important, such as national parks/marine parks, sanctuaries, reserve forests, wildlife habitats, mangroves, corals/coral reefs, areas close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty/historically/heritage areas, areas rich in genetic diversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time, (ii) Area between Low Tide Line (LTL) and the high Tide Line (HTL). However, using this logic, most sandy beaches on the east and west coasts of India (which total over 6000 km) would have to be designated as CRZ-I, simply by virtue of the low-density ridley nesting that occurs, and this hardly seems practical given human population densities along the Indian coast (Shanker, 2002) and will restricts the setting up and expansion of any industry, operations or processes.



The shoreline protection to be any defensive measures used to protect areas from inundation, the effects of waves on structures, beach erosion, salinity intrusion, and the loss of natural resources (Witham, 1990). Protection methods are often divided into two types: hard stabilization methods and soft stabilization methods. Soft stabilization methods include beach nourishment and dune construction. Beach nourishment is the most often utilized soft stabilization method. An important benefit of beach nourishment is that it can assist with replacing the sand supply along the shoreline, which the stabilization of navigational inlets often disrupts. Due to the popularity of beach nourishment as a shore protection method, it is important

NIO/SP-22/2020

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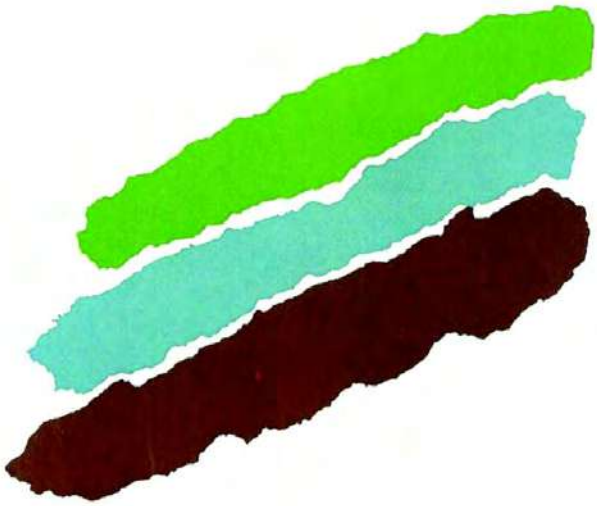
SSP3239

Marine EIA/EMP for Seawater Intake and Effluent Disposal for Greenfield Chemical Complex off Bada coast, Arabian Sea

SPONSORED BY

GHCL Limited, Ahmedabad

December 2020



सीएसआईआर - राष्ट्रीय समुद्र विज्ञान संस्थान

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Marine EIA/EMP for Seawater Intake and Effluent Disposal for Greenfield Chemical Complex off Bada coast, Arabian Sea

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December 2020

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PROJECT TEAM	SPECIALIZATION
Dr. Anirudh Ram S. Jaiswar	Chemical Oceanography
Dr. Rakesh P. S.	Biological Oceanography
Dr. Udhaba Dora	Physical Oceanography
Dr. Umesh Kumar Pradhan	Chemical Oceanography
Dr. C. Mohandass	Biological Oceanography
Dr. Soniya Sukumaran	Biological Oceanography
Dr. Haridevi C.K.	Biological Oceanography
Dr. Abhay B. Fulke	Biological Oceanography
Mr. Udayakrishnan PB	Chemical Oceanography
Mr. Angad Gaud	Chemical Oceanography
Mr. Laxman Kumbhar	Chemical Oceanography
Mr. Sandeep Yadav.	Chemical Oceanography
Ms. Meena Chauhan	Chemical Oceanography
Ms. Deepika Jagdale	Chemical Oceanography
Mr. Saurabh Lonkar	Chemical Oceanography
Ms. Vaishnudurga Parthipan	Chemical Oceanography
Mr. Midhun	Biological Oceanography
Ms. Aayushi Maloo	Biological Oceanography
Ms. Komal S. Khade	Biological Oceanography
Ms. Pooja Kharat	Biological Oceanography
Mr. Ashish K Sasidharan	Physical Oceanography
Mr. Shubam	Physical Oceanography

EXECUTIVE SUMMARY

Introduction

M/s. GHCL Limited was incorporated in October, 1983. The company has established itself as a well-diversified group with an ascertained footprint in chemicals, textiles and consumer product segment. In chemicals, the company mainly manufactures Soda Ash (Anhydrous Sodium carbonate) that is major raw material for detergents and glass industries and Sodium bicarbonate (baking soda) which is mainly used in Food industry. To meet growing demand for Soda ash it now proposes Greenfield Chemical Complex with Soda Ash (11,00,000 TPA), Dense Soda Ash (5,00,000 TPA), Sodium bicarbonate (2,00,000 TPA) manufacturing plants supported by utilities like captive co-generation power plant (120 MW), seawater intake and effluent disposal system, RO-DM system and associated infrastructure at Village Bada, Taluka Mandvi, District Kutch, Gujarat. GHCL had signed an M.O.U in January, 2017 during Vibrant Gujarat Summit, 2017 for Greenfield Chemical Complex in the District Kutch of Gujarat state.

The Soda Ash process along with captive co-generation power plant in totality requires huge quantity of cooling water. The seawater requirement of about 16 x 10^5 m^3/day for process cooling, RO/DM plant, domestic use, utilities and dilution requirements etc. would be met from seawater from the Arabian Sea coast in proximity to the project location. The diluted combined effluent of about 15.8 x10^5 m^3/day generated from process, brine preparation/purification rejects, RO/DM plant rejects, utility rejects etc. after dilution with return cooling water/fresh seawater would be released at an appropriate location in the marine coastal zone of Arabian Sea meeting norms specified by Gujarat Pollution Control Board (GPCB)/ and/or Central Pollution Control Board (CPCB).

As per the Ministry of Environment Forests & Climate Change (MoEF&CC), Government of India (EIA), notification dated 14th September 2006 and Coastal Regulation Zone (CRZ) Notifications 2011 and 2019 Marine Environmental Impact Assessment (MEIA) study is required to be carried out for the proposed project. The main purpose of the report will be to establish baseline data, prediction of impacts and

suggests the measures required to minimize adverse impacts likely to be caused by the project activities on marine ecology.

M/s. GHCL limited had approached CSIR-NIO to assess the impacts (if any) of proposed project/activity on marine environment off Bada, Gujarat. Accordingly, baseline oceanographic data were collected during October, 2018 and March, 2019 by CSIR-NIO covering an area of more than 10 km^2 around the waters off Bada, Gujarat to meet the following objectives:

Objectives

a) To evaluate the prevailing hydrodynamics and ecological status off Bada coast.
b) To suggest suitable location for intake and mode for pumping seawater.
c) To suggest suitable location and mode of discharging of effluent.
d) To assess impact of seawater intake and outfall on coastal ecology.
e) To recommend suitable environmental management plan to Minimize any adverse impact on marine biota.

Project description

This section contains information regarding process, seawater intake system, quality and quantity of the effluent, effluent disposal system etc. as provided by M/s GHCL limited. Soda Ash (Na_2CO_3) is classified as a heavy chemical. The major raw materials for Soda Ash are salt and chemical grade limestone. Process requires uninterrupted supply of utilities such as steam at various pressures, electric power, seawater for cooling, freshwater for process etc. The dry liming energy efficient process will be used for manufacturing Soda Ash. To meet power and steam demand an integrated captive cogeneration power plant is proposed. Process being exothermic requires large quantity of water for process cooling requirement, seawater based once through cooling is necessary. Seawater intake system and effluent disposal system are proposed to meet the water requirement and effluent dispersion.

The proposed project site is located near Village Bada in Mandvi Taluka, District Kutch, Gujarat. It is located about 70 km from district headquarter Bhuj, 25 km from Mandvi. It is geographically located at the Arabian Sea coast off Bada village. The nearest broad gauge railway station and airport are at Bhuj. The road connectivity of Bada village is through NH 41 which is connecting Mandvi and Naliya. The nearest sea port is at Mundra about 70 km. The proposed project site is identified after evaluating 5 alternative sites based on various environmental parameters. The Soda ash manufacturing with Captive power generation requires huge quantity of water for cooling; this calls for site selection near to the sea coast.

The market of soda ash in India is anticipated to cross $2.8 billion by the end of 2025. Growing demand for soda ash from numerous industries such as glass, soap & detergents, pulp & paper, etc., is expected to drive the India soda ash market The Greenfield Chemical Complex is proposed to set up Soda ash and Sodium Bicarbonate manufacturing plants to achieve additional capacities. India's glass industry stood at USD3.9 billion in 2015, and the industry is forecast to grow at a CAGR of 13% during 2016-2025. Globally, glass industry accounts for more than 60% of soda ash consumption. However, in India detergent industry is the largest consumer. The detergent market is one of the segment of the FMCG market in India that has high growth potential. Increasing rate of modernization and improving living standards of consumers are positively influencing the demand for soda ash. The Soda Ash per capita consumption in India is 2.8 Kg only. If India has to reach to the level of per capita consumption of a developed nation, which is approximately 17 Kg of Soda Ash then addition of capacity is must.

The Soda ash manufacturing process being exothermic in nature large quantity of seawater which needs to be drawn from the nearby Arabian sea. As no sweet water source is available in project area which support uninterrupted water supply to process plants and utilities it is required to set up RO DM plant for making sweet water from seawater. The effluent from process plants and utilities required to be disposed off at a suitable location where effective dilution is available for dispersion. Thus, to meet the overall water requirement for proposed project seawater intake and effluent disposal is proposed for the Greenfield Chemical Complex.

On implementation of the proposed project, around 1,200 Nos of suitably qualified people direct employment to take place. Further, there will be also indirect jobs and business opportunities to the local people such as daily wage labourers, transporters and raw material suppliers. This may be of the order of 3,000 people. The project would increase and generate opportunities for ancillary and auxiliary business at the local and regional levels too.

Soda Ash: Soda ash (Na_2CO_3) is manufactured by the reaction between sodium chloride and limestone with ammonia as an intermediate carrier. The major steps involved in the process are as follows: (a) Brine purification in which the saturated brine is treated with soda ash and milk of lime to remove residual impurities. (b) Limestone calcination whereby limestone is mixed with coke and charged to lime kilns to produce CO_2 and CaO. Part of CaO is hydrated with sweet water to make milk of lime for treatment of brine. Major part of lime is ground and fed to Prelimer for release of ammonia. (c) Ammonia is absorbed in purified brine in absorber and thereafter CO_2 from compressors is fed in carbonation columns to obtain crude sodium bicarbonate as a solid phase which is filtered and decomposed to Soda Ash (Na_2CO_3) in calciner.

The filtrate containing NH_4Cl is reacted with $Ca(OH)_2$ in prelimer stills to recover NH_3 in ammonia still which is recycled. Ammonia still discharge is the major effluent from soda ash industry. This effluent contains high concentration of inorganic non-toxic solids and liquid is rich in salts with traces of NH_3. About 300 to 500 kg of solids are produced per tonne of soda ash manufactured. The effluent after removal of NH_3 is diluted with return cooling seawater to meet disposal norms of GPCB/CPCB.

Power plant: Circulating fluidized bed combustion (CFBC) technology will be adopted for the proposed captive power plant. A 120MW captive co-generation power plant consisting of Double extraction cum condensing turbo-alternator and required capacity lignite/coal/pet coke based CFBC Boilers; along with captive power plant machineries will be installed in order to meet internal steam and power requirement.

Studies conducted

The oceanographic investigations were conducted at 11 subtidal and 3 intertidal transects during October-November 2018 (postmonsoon) and March 2019 (premonsoon). The analyses were performed as per recommended oceanographic procedures.

Model studies

Predictions on dilution and dispersion of pollutants, SS transport and bed level changes were done on the basis of 2D models.

Prevailing marine environment

The coastal area off Bada in an area of about 180 km^2 was investigated for its environmental characteristics such as physical processes, water quality, sediment quality and biological characteristics. The status was evolved for 2 seasons namely postmonsoon and premonsoon during 2018-19.

Water quality

The average water temperature varied in accordance with the air temperature and was generally below 30°C. The average pH was between 7.9 and 8.4 and was in the range of seawater pH. The average SS varied (25-137 mg/l) as the sea bed is uneven rocky or sandy. Turbidity varied (1.1-53.1 NTU) in accordance with SS. High average salinity (37.5-38.1 ppt) indicated particular characteristic of the area between Okha and Jakhau where evaporation exceeds precipitation. The water was well mixed vertically as well laterally.

DO content, a vital water quality parameter influencing the health of aquatic biota, was in excess of 5 mg/l indicating the area well oxygenated. Consequently, BOD of the coastal water was low (av 0.7 – 2.9 mg/l). The average concentrations of PO_4^{3-}-P (0.1 – 2.5 µmol/l) and NO_3^--N (1.5 – 7.0 µmol/l) were in the range expected for the coastal area. Low levels of NH_4^+-N (av 0.4 – 1.8µmol/l) and NO_2^--N (av ND-0.5 µmol/l) indicated good oxidizing conditions in water.

The average concentrations of PHc (2.4 – 15.6 µg/l) and phenols (17.0 – 48.2 µg/l) were low and in the range commonly encountered in uncontaminated coastal waters.

The prevailing water quality off Bada compared well with that of the coastal waters off Okha and Jakhau which are adjacent to the study are.

Sediment quality

The surface sediment of the study area had variable texture but generally subtidal area dominated by silt. The subtidal as well as the intertidal sediments off Bada indicated considerable variation of trace metals but their values indicate lithogenic origin in the region and there is no indication of build-up of heavy metals in the region.

The Corg (<1 %; dry wt) and phosphorus (448 - 1841 µg/g; dry wt) contents in sediments were low and represented the baseline. The concentrations of PHc (0.1 – 0.3 µg/g; wet wt) in the sediment were also low and revealed uncontaminated status of the sediment with respect to PHc.

The prevailing sediment quality of the nearshore for premonsoon was comparable with that of the coastal waters off Okha and Jakhau.

Flora and fauna

Bacterial count like TVC in water and sediment was low and without any specific trend. Pathogens were rarely noticed suggesting clean and natural coastal system off Bada.

The concentration of chlorophyll a in the coastal water (0.4 – 1.4 mg/m^3) indicated variable and patchy phytoplankton biomass. The concentration of phaeophytin (0.1 – 0.9 mg/m^3) was low. The phytoplankton population was variable in accordance with the trend in phytopigments. Overall, 42 genera were recorded in the region with the common occurrence of Cylindrotheca, Navicula, Pseudo-nitzschia, Thalassiosira etc.

Mangroves were absent along the Bada coast. The intertidal rocky region however sustained marine algal species and well-established sand dunes are bordering the seashore of Bada region. The sand dune flora was dominated by babul and grass vegetation.

The zooplankton standing stock in terms of biomass (0.2 – 20.2 ml/100m^3) and population (1.4 – 193.3 × 10^3 no/100m^3) was indicative of an overall moderate secondary production and varied widely. The composition of zooplankton was fairly diverse and consisted mainly of copepods, decapods larvae, Chaetognaths and lamellibranchs. Overall 24 faunal groups were identified. Fish eggs and fish larvae though at a low percentage, occured in majority of the zooplankton collections. Decapod larvae occured in all zooplankton samples.

The intertidal macrobenthic standing stock in terms of population and biomass varied from 0 to 8150 no/m^2 and from 0 to 182.5 g/m^2; wet wt respectively. The fauna was mainly constituted by polychaetes and amphipods. The faunal group diversity varied between 0 and 15 groups. The subtidal benthic macrofaunal standing stock in terms of population and biomass varied from 0 to 1925 no/m^2 and from 0 to 6.04 g/m^2; wet wt with poor faunal group diversity (0 - 15 no). The faunal composition indicated overall dominance of Amphipods followed by Polychaetes.

The region has no established trawling grounds for fishery operations due to uneven bottom topography associated with rocky zones, hence, the trawlers operated at other areas for fishing. December to May is the peak fishing period while the period from June to August is the lean season. The common fishes in the landings of the Kutch District were Shrimps, Bombay duck, Small scieniedes, Coilia, Other clupeids, cat fish, Ribbon fish and Jew fish.

The Bada region does not sustain reef building corals as the intertidal area is largely sandy though intermittent rock exposures are there. Extensive survey was conducted during October, 2018 and March, 2019 in the intertidal regions of the proposed project area and corals were not sighted in the project area. The area is devoid of mangroves.

Reptiles

In the Gulf, the reptiles are mainly represented by marine turtles *Chelonia mydas* and *Lepidochelys olivacea* which have their breeding and spawning ground on the sandy beaches along the coast as well as on the islands particularly along the southern Gulf. No turtle however was sighted off Bada during `the study period.

Mammals

The mammals are chiefly represented by dolphin (*Delphinus delphis*), whale (*Balaenoptera* spp) and Dugong (Dugong dugon) in the Gulf especially along the Jamnagar coast. Whales and Dugong were not sighted in the study area during the study period. However, Dolphins were found sighted during field study in offshore regions.

Avifauna

The Bada coast offers different marine habitats like rocky and sandy intertidal areas for a variety of resident and migratory birds. The birds use these habitats as their active feeding ground especially during low tide. A total of 28 bird varieties were spotted during the field work from the study area. The most common birds recorded are herons, crows, cormorants, Plover, egrets, etc from the project vicinity.

Physical processes

During post monsoon season, the maximum tide was 4.06 m with an average of 2.4 m and during pre-monsoon season maximum tide was 3.5 m with an average tide of 2.46 m.

During the observation, the maximum current speed was 117 cm/s with an average of 62 cm/s in October 2018. Similarly, the maximum current speed was 35 cm/s with an average of 18 cm/s observed during March 2019 campaign. Most of the time, the current direction during flood phase was around 100^0 while that was around 300^0 during ebb phase in October 2018 as well as March 2019. The

direction varied between 100 to 300° which shows that the effluent possibly moves along the coast.

Modeling studies for marine facilities

GHCL proposes to establish marine facilities namely seawater intake and effluent disposal in the coastal waters off Bada. The suitability of these sites has been studied by using the numerical models. They are described below.

Hydrodynamic modeling

Numerical modeling was done using Hydrodyn-FLOSOFT, HydrodynPOLSOFT and Hydrodyn-SEDSOFT software for prediction of tides and currents; dilution and dispersion processes in marine areas; and sediment transport in tidally driven zones. The model runs were made for a period of 15 d for different seasons. The comparison of the observed and the computed tides as well as current components indicated good agreement between the two.

Seawater intake

It is proposed to withdraw seawater from the Arabian Sea by gravity through a submarine pipeline.

a) Locations of intake: It is proposed to establish the seawater intake site at one of the two sites given below.

IT1: 22°52'01.07"N; 69°07' 28.9" E (depth 3.3 m below CD). IT2: 22°51'57.44"N; 69°07' 32.44" E (depth 3.63 m below CD).

b) Behaviour at intake: From the model studies, it can be concluded that no significant changes in flow regime are expected due to continuous with-drawl of seawater at intake IT1 and IT2.

Effluent release

It is proposed to release the effluent at the bottom in the Arabian Sea through a submarine pipeline.

a) Locations of release: It is proposed to release the effluent into the sea at two sites given below.

OF2_1: 22°52'15.79"N; 69°06'14.35"E (depth 9.47 m below CD),

OF2_2: 22°52'6.65" N; 69°05' 59.08"E (depth 10.71 m below CD)

b) Behaviour of effluent: The effluent if released at OF2_1 and OF2_2, the levels of critical parameters in the effluent around the location and small central patch namely temperature: 5° C above ambient, SS: 1000 mg/l and ammoniacal Nitrogen as N: 50 mg/l attain the ambient levels of temperature: 28°C, SS: 93 mg/l and ammonia: 0.047 mg/l at 300 m (max) distance from the outfall.

Free form of ammonia is toxic to some marine organisms at low concentrations. The concentrations of ammonia predicted at OF2_1 and OF2_2 would be higher than the natural levels in a very narrow distance of disposal. However, at the ambient pH of seawater much of this ammonia is expected to be converted to NH_4^+-N, the form in which it is non-toxic to marine organisms.

Based on the results of numerical modelling it can be concluded that the water quality of the coastal area off Bada would not deteriorate with respect to temperature, SS and ammonia beyond 300 m distance from the outfall except in the immediate vicinity of the outfall where the temperature, SS and ammonia would be relatively higher but in the range considered tolerable to marine biota.

The bed level changes due to release of SS of 1000 mg/l from the effluent would be 0.002 - 0.028 m (max) at the outfall with no significant variation in the rate of erosion/deposition for both the locations. The deposited SS in the vicinity of the outfall would be advected to settle over a large area as the fine-grained SS erodes. This would reduce in time as the seabed gets re-established itself to a new hydraulic regime. In short term however there is a possibility of siltation due to continuous discharge of the effluent.

The output clearly shows that behaviour of the effluent released at OF2_1 and OF2_2 was similar. Also, the ambient condition would attain within 300 m (max) in both the cases. Presence of soft mud at OF2_1 and OF2_2 negates the

possibility of presence of subtidal corals. Hence both the locations are recommended suitable for the effluent release.

C) Near-field dilution: Based on the results of the Buoyant / Forced-Jet Model, it is suggested that the effluent should be released with a minimum initial jet velocity of 3.01 m/s through a 20 port diffuser at 9.47 m and 10.71 m below CD depth above 0.5 m from the bottom. As the effluent plume descends through the water column, it would attain initial dilution by 30-40 times.

Potential marine environmental impacts

Seawater intake

a) Scheme: The alignment for IT1 and is selected on the basis of lesser area and volume of excavation required to lay the pipeline and consequent reduction in benthic losses due to shorter length. Since the alignment corridor is devoid of mangroves and corals, their destruction due to the development is unlikely. The gradient of the buried pipeline will be so maintained that the seawater flows at a constant rate under gravity.

b) Potential marine environmental impacts: Major potential negative marine environmental impacts due to the proposed activities would be largely associated with (a) construction phase of laying of the intake pipelines and b) operational phase due to circulation pattern, changes in erosion-deposition processes, as well as impingement and entrainment of biota.

i) Construction phase: Adverse impacts of the proposed project on the marine environment during the construction phase could be due to modifications in the hydrodynamic characteristics of the area, degradation in water and sediment qualities and consequent impact on biota depending on the construction methodology selected and duration.

Hydrodynamic characteristics: As the trenching and burial of the pipeline would be across the intertidal zone with a sandy beach and subtidal zone with hard substratum, the construction if not conducted in a stipulated time and planning, there can be minor and local erosion both sides of the trench due to non-

compacted sand moving into the trench. However, due to the limited length of the trench and shallow excavation, this would not be significant. Apart from this, the coastal dynamics are unlikely to be influenced by the construction activities.

Water quality: The bed sediment disturbed at the excavation site would generate SS which may remain in suspension for some time at the construction site. However, considering the sandy nature of the sediment it is expected to settle fairly quickly. The impact would be localized, temporary and confined only to the construction phase of trenching, pipe laying and trench filling.

Sediment quality: Since the area that would be disturbed is small, the excavated sediment volume is unlikely to cause change in the sediment texture on a wider area of the seabed excepting in the close vicinity. Such impact would be negligible.

Flora and fauna: Construction activities in the corridor areas would influence the local biotic communities, particularly the macrobenthos along the corridors selected for laying the pipeline. As the sediment is not enriched in C_{org}, its suspension in the water column is unlikely to deplete DO in this dynamic marine area and DO availability would not constrain the biotic processes. The danger of biota getting exposed to pollutants released from the sediment interstitial water when the bed is disturbed, is low. The nearby zone are devoid of mangrove vegetation and corals. Hence, there would be no impact on these habitats.

The impact of turbidity due to enhanced levels of SS if any, would be local and temporary with the phytoplankton community structure remaining more or less unaltered as the enhancement in turbidity during the activity is expected to be low.

Since the pipe line through Sand duneswill be through tunnelling, the loss of sand dunes is not envisaged.

Miscellaneous: The aesthetics of the coastal zone off Bada would deteriorate temporarily due to the presence of construction machinery, materials and leftover solid waste.

If the construction is prolonged due to time-overruns or improper planning, the adverse influence would increase accordingly.

The birds using the intertidal area around the project site are not expected to be impacted adversely as the limited excavation does not warrant the use of heavy machinery and large vessels. Marine reptiles and mammals would not be affected due to the construction activities since they keep away from such sites. Since there are no major commercial fishing operations close to the shore, the impact on fisheries would be minor.

ii) Operational phase: Marine environmental implications during the operational phase of the project would be confined to the probable negative influence of seawater intake on hydrodynamic characteristics, water quality, sediment quality, and flora and fauna of the region.

Hydrodynamic characteristics: As the flow of seawater in the sump is by gravity, the change in the current speeds and water levels during operations of the intake system would be marginal as predicted and the overall hydrodynamics of the region would remain unaltered.

The change in the current velocities due to withdrawal of seawater would be minor and would not alter erosion/deposition in the area.

Flora and fauna: General water quality of the coastal area would not be affected adversely. Hence, the biological characteristics of the region would not be influenced except for minor negative impact on macrobenthic community in the vicinity of the intake due to limited local disturbance to the sediment.

Cross-contamination with effluent discharge: GHCL has been considering release of treated effluent in the Arabian Sea. Based on numerical modelling it has been predicted that the impact of the effluent on release would not be evident beyond 300 m (max) distance from the outfall location OF2_1 and OF-2-2.

The intake locations (IT1 and IT2) are at a distance of more than 2000 m southeast of the proposed effluent release sites. Hence, transport of effluent in the intake area would not occur.

Effluent disposal

a) Scheme: Both the locations (OF2_1 and OF2_2) have been recommended for the effluent release since behaviour of the effluent is similar in both the cases and the released effluent would attain the ambient levels within 300 m (max) distance. Since the area is devoid of mangroves and corals their destruction due to the development is unlikely. Well established sand dunes of sea shore would not be disturbed as the land base pipe line will be through tunnelling.

b) Potential marine environmental impacts: Potential negative impacts on marine ecology can arise during the construction as well as the operational phases of the effluent release scheme.

I) Construction phase: Adverse impacts of the proposed effluent release scheme on the marine environment during the construction phase could be due to modifications in the hydrodynamic characteristics, degradation in water and sediment qualities and impact on biota.

Hydrodynamic characteristics: The hydrodynamics of the area would get influenced during a short period of trenching and pipe laying only. Hence the impact on the characteristics would be localised and temporary.

Water quality: Trenching/pipe laying in the area having hard substratum/sand has relatively low potential to disperse the bed sediment. The impact would be localized, temporary and confined only to the construction phase. The sediment of the region is unpolluted; hence, there would not be deterioration in the water quality on this account.

Sediment quality: Since the area possesses hard substratum/sand and the excavated sediment is a small volume, it is unlikely to cause change in the sediment texture on a wider area.

Flora and fauna: The intertidal corridor is largely composed of sand with isolated patches of seaweeds with a few species. Hence, no significant loss of flora and fauna is envisaged. Loss of localized weeds would be easily recouped by fresh recruitment once the activities are terminated.

Miscellaneous: The aesthetics of the coastal zone would deteriorate due to the presence of construction machinery and materials, make-shift huts of labour force etc. Left-over solid waste and that generated during construction would be a source of nuisance if not cleared from the site. If the construction is prolonged due to time-overruns or improper planning, the adverse influence would increase accordingly.

The birds using the intertidal area around the project site would be disturbed particularly if the construction activity is scheduled during their migratory months. However, this would be limited to only construction phase. Since there are no major commercial fishing operations close to the shore, the impact on fisheries would be minor

ii) Operational phase: Marine environmental implications during the operational phase could be due to the release of the effluent on water quality, sediment quality, and flora and fauna of the region as follows:

Hydrodynamic characteristics: The release of the effluent at 9.47 and 10.71 m depth (CD) would not influence the hydrodynamic characteristics. Though, accumulation of the sand along the sides of the pipeline is expected, that would provide additional area for benthos to re-colonise.

Water quality: The predicted maximum water temperature in a small area around the diffuser would be 33°C which is lower than the threshold of 35°C considered for tropical marine areas. Hence the release of the effluent is unlikely to cause thermal shock to the flora and fauna even in the vicinity of the diffuser.

An incremental increase of SS in a small area is unlikely to negatively influence the biota even in the vicinity of the diffuser.

The ambient conditions would be attained within 300 m distance from the outfall location.

A major fraction of the SS would settle but fine particles would remain in suspension for a longer duration. This would impart a milky hue to the water

around the diffuser under continuous release of effluent. This however would not affect the flora and fauna since the SS in the effluent in non-toxic.

Sediment quality: The SS in the effluent is inorganic in nature and largely composed of constituents commonly occurring in the marine environment. Considering the sediment type off Bada, the settlement of the effluent associated SS is unlikely to grossly modify sediment character of the region.

Flora and fauna: The general water quality of the coastal area would not be affected negatively. Hence, by and large, the biological characteristics of the region would not be affected adversely except for some negative impact on macrobenthos in the vicinity of the diffuser, due to the settlement of SS. The SS though not harmful, it may change the sediment character locally and the macrobenthos community would have to adjust to this modified habitat.

Cross-contamination with seawater intake: The vital parameters in the treated combined effluent would attain near ambient levels of the water quality at a distance of about 300 m (max) from the effluent disposal points OF2_1 and OF2_2. Hence its cross-contamination with the seawater intake which is more than 2000 m away is ruled out.

Mitigation Measures

The marine segment off Bada sustains seaweeds and limited fishery potential. Hence, adequate precautions are required to prevent deterioration in marine environmental quality beyond the pipeline corridor as described below.

Construction phase

Both terrestrial and marine components of the project should be coordinated with planning that takes the tidal conditions into account since the work also involves intertidal stretch. The excavated sediment should not be kept in the intertidal zone. It should be properly stored on land and used for back-filling the trenches. Fabrication yard should be located sufficiently away from the shore and transport of pipes, machinery etc. to the site should be through a pre-decided corridor.

Work force misusing the intertidal and supratidal areas should be avoided by establishing the makeshift facilities for workers sufficiently away from the HTL and sand dunes on the landward side and proper sanitation should be provided to them to prevent abuse of the intertidal region.

The noise level during transport and construction of marine facilities should be kept to a minimum.

The intertidal and nearshore areas should be restored to their original contours once the marine construction activities are completed. General clean-up along the corridor areas, and intertidal segment etc. should be undertaken and discarded materials including left-over soil should be removed from the intertidal site. The aesthetic quality of surroundings should be restored on completion of the construction phase.

Operational phase

a) Seawater intake: Since the pipes are large (2 m dia.), large fishes may enter the pipe along with the intake water. To mitigate this each pipe end should be fitted with bars (either vertical or horizontal) to avoid chocking.

Screens should be provided in the intake design to avoid the fish and other organisms entering the intake system passing the bars.

Cleaning and clearing of bio-fouler such as barnacles on and inside the pipe openings and sediment in the sump etc. should be done on regular basis to maintain efficiency of the intake system. The cleared material should not be dumped in the sea or on the intertidal areas. It should be washed thoroughly with freshwater to remove its salt content and disposed off in landfills.

As a navigational safeguard, the location should be adequately protected and identified with a marker buoy.

b) Effluent disposal: It should be ensured that the effluent released to the sea meets the prescribed GPCB/ CPCB norms at all times.

It is predicted that the effluent would attain 30-40 times initial dilution. This should be verified through tracer studies after the outfall becomes operational. The effluent release scheme can then be adequately modified to ascertain necessary dilution, if required. The efficiency of the diffuser must be checked periodically (once in 2 y or so) and if necessary, it should be cleaned to revert back to the dilution ascertained through initial tracer studies.

As a navigational safeguard, the effluent release location should be adequately protected and identified with a marker buoy.

Management of marine environment

It is necessary to verify the predicted environmental changes from the pre-project baseline apart from ascertaining and periodically checking the efficiency of the diffuser through periodic monitoring. For this purpose, the baseline environmental status should be established through intensive monitoring. The post-project monitoring can be just prior to the commencement of effluent release, after 6 months of commencement of operations and once a year from the commencement of operation, or as recommended by MoEF & CC.

The results of each monitoring should be carefully evaluated to identify significant changes, if any, from the baseline. Gross deviation from the baseline may require a thorough review of the effluent disposal scheme to identify the causative factors leading to these deviations and accordingly, corrective measures to reverse the trend would be necessary. The parameters to be monitored are listed below:

a) Water quality: Water samples obtained from 2 levels in the vertical when the depths exceed 3 m, should be studied for temperature, SS, turbidity, pH, salinity, DO, BOD, dissolved phosphate, nitrate, nitrite, ammonia, PHc and phenols. For shallower waters, surface samples can be analysed.

b) Sediment quality: Sediment from subtidal and intertidal regions should be analysed for texture, C_{org}, phosphorus, chromium, nickel, copper, zinc, cadmium, lead, mercury and PHc.

c) Flora and fauna: Biological characteristics should be assessed based on primary productivity, phytopigments, phytoplankton populations and their generic diversity; biomass, population and group diversity of zooplankton; biomass, population and group diversity of benthos; seaweeds and fish quality.

Costs for Implementation of EMP

A provision of Rs. 10.0 million to be earmarked for the biodiversity management plan to be implemented in the project area during construction phase and operation phase.

For periodic monitoring of the marine area environment during project construction phase (considering 2 years), a provision of Rs. 5.0 million to earmarked. For operation phase, Rs. 3.0 million per year to be kept provision for the monitoring.

MARINE BIODIVERSITY CONSERVATION AND MANAGEMENT PLAN

Although maintenance of biodiversity cannot be the only goal for ecosystem-based management, it could provide a common currency for evaluating the impacts of different human activities on ecosystem functioning and can act as a critical indicator of ecosystem status. A management regime based on social acceptance, with the power of moral persuasion from within the group of participants, is the only way to manage widely dispersed resources which are shared by a multitude of small and large users.

Mitigation Measures

Mitigation measures are most successful when they are considered from the outset of the project rather than as a later stage solution to an identified problem. This can allow the design of the facility to include solutions to potential environmental problems rather than finding a solution, which fits with the design. Mitigation measures should therefore be considered from the outset of the project and discussions on the appropriate mitigation measures will likely to continue after submission of the Environmental studies as planning conditions are agreed upon. An appropriate specialist who has assessed the impacts usually suggests mitigation measures.

Mitigation can take varying forms including, in order of Best Practice, first:

A. **Avoidance –**This would require the project to be designed or the site selected to avoid any environmental impacts.

B. Reduction –This can be achieved by the addition of mitigation measures such as bunding, screening, or applying abatement technology;

C. Compensation – Where impacts have been unavoidable this method can be used and can involve the improvement of a related environmental issue for example replanting of a deforested area in an alternative location.

D. Remediation –This option would involve the cleanup and restoration of an area where the environmental impact is unavoidable; and

E. Enhancement –This method involves the improvement of the site beyond the existing baseline.

A management regime based on social acceptance, with the power of moral persuasion from within the group of participants, is the only way to manage widely dispersed resources which are shared by a multitude of small and large users. A national approach to address broad-scale threats to marine biodiversity requires effective management regimes that engender industry and community support.

Development of Plan

Improvement of baseline information

Methods and systems for the effective and efficient collection and utilization of information will be considered for a systematic accumulation of information and knowledge regarding marine biodiversity. Marine areas of particular importance for conserving biodiversity will be identified based on scientific knowledge.

Implementation of measures

Measures for conservation and sustainability of marine biodiversity will be implemented in accordance with the characteristics of the existing ecosystems and other significant influencing factors present in the nearshore coastal water.

Identification of factors and implementation of measures

To promote conservation of marine biodiversity and its sustainable use appropriately, causes of the problems and those responsible for actions to reduce their impacts will be identified. Measures will be conducted with methods and procedures suitable to solve these problems, under cooperation among relevant parties.

Enhancement of pristine areas

Designation of conservation zones in the area will be promoted appropriately using the existing systems to improve the local marine biodiversity in the region. For conservation and sustainable use of marine biodiversity, a concept of effective networking will be considered, and if required, an independent system will be considered as well.

Stakeholder's involvement

Scientific information and knowledge regarding the current status of marine biodiversity and its importance to humankind will be educated to the public. To establish a network for cooperation and coordination among various agencies, and awareness of conservation and sustainable use of marine biodiversity through social activities will be increased.

Significance of managing and conserving marine biodiversity:

Marine biodiversity broadly promotes the provision of marine ecosystem functions, including those critical to human survival and well-being.

Conservation of marine biodiversity increases the likelihood that marine ecosystems can continue to provide various services and serves as a hedge

against environmental change, increasing the chance that ecosystems can adapt and recover following disturbance.

Conserving marine biodiversity should become a common aim of marine as well as coastal ecosystem-based management for all agencies involved in regulating the marine environment.

Management for marine biodiversity may have to rely on, in part, on the management of surrogates, such as habitat types, population size, and related biodiversity characteristics.

Fishery management

The goal of this fishery management plan is to guide and manage fishing vessels inland waters in accordance with the principles of ecologically sustainable development. This includes maintaining fishing at sustainable levels, protecting habitats and aquatic environments on which fisheries resources depend and maintaining and where possible improving the social and economic benefits to all fishing community.

Biodiversity monitoring plan

The plan aims to create an enabling integrated coastal and marine biodiversity management and protection, and to mainstream marine and coastal biodiversity into national plans and coastal zone management plans, with particular focus on biodiversity. As such, it provides an opportunity to coordinate with past and new initiatives in the region to address gaps in assessments, and seek sustainable and economically viable policy and technological options for the protection of key marine and coastal biodiversity to be included in coastal zone management plans and integrated into national plans. General monitoring is needed to prevent the loss of existing biodiversity of the region.

Marine Biodiversity Conservation Plan

The conservation and restoration measures can be taken up individually by the project proponent and also can be carried out by constructing a consortium with all the adjoining industries. These measures should be executed in

collaboration and consultation with the experts in the field and authorities responsible as per the jurisdiction. The national and regional conservations efforts can also be supported as far the buffer zone is concerned. Several international bodies also carry out many conservation and restoration programs as well as the local and regional organization that are well versed with the present study area.

Environmental management cell (EMC)

Apart from having an Environmental Management Plan, it is so also necessary to have a permanent organizational set up charged with the task of ensuring its effective implementation of mitigation measures and to conduct environmental monitoring. Identify and list out environmental aspects due to the operation of the proposed project

The EMC's responsibility for implementing the EMP requires regular interaction with the environment regulatory authorities such as GPCB, GCZMA, MoEF & CC and the Indian Coast Guard.

Audits and inspections

EMC will be responsible for implementing Compliance Assurance activities, namely environmental audits. Internal audits and reviews of environmental procedures shall be conducted annually. Third party audits of environmental procedures shall be conducted periodically.

Project benefits

The Indian Subcontinent is one of the world's fastest growing Soda Ash markets, driven by India's booming economy. The Soda Ash per capita consumption in India is 2.8 kg only. If India has to reach the per capita consumption as of developed nations, which is approximately 17 Kg of Soda Ash then addition of capacity is must. The proposed project will cater to the growing demand of Soda ash and Sodium bicarbonate which is used in diversified sectors and industries ranging from chemicals, construction and FMCG. It will create direct and indirect employment generation during, planning, construction and operation phase of the project. This will lead to employment and uplifment of scio economic

activities and status in the region. It will also create supporting industries/businesses related to logistics, supply chain, manpower supply, construction equipments, hotels etc.

Recommendations

It is recommended that M/s GHCL can withdraw 16,00,000 M^3/day of water from two intake locations (IT1: 22° 52’ 1.07’’N; 69° 07’ 28.96’’E and IT2: 22°51’57.44” N; 69°07’32.44” E).

The disposal of 15,80,000 M^3/day of effluent at two out fall locations OF2_1: 22°52'15.79"N; 69°06'14.35"E (depth 9.47 m below CD), OF2_2: 22°52'6.65" N; 69°05' 59.08"E (depth 10.71 m below CD) will not impact the marine environment. The GHCL has to take approval from concerned authorities before commencement of the work.

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ADDENDANUM of EIA REPORT

FOR

"Greenfield Chemical Complex" of GHCL Ltd. (Light Soda Ash Plant of Capacity 3000 TPD, Dense Soda Ash 1500 TPD, Sodium Bicarbonate 600 TPD with Solid Fuel based Captive Co-generation Power Plant (120 MW capacity), Seawater Intake and Effluent Disposal System) Village Bada, Taluka Mandvi, District Kutch, Gujarat"

GHCL Limited,
GHCL House, Opp. Punjabi Samaj Seva Hall,
Navrangpura, Ahmedabad.

CATEGORY: 4 (e) and 1(d), 'A'

Baseline Monitoring Period [December 2022 to February 2023]
Baseline Study Carried By: T. R. Associates Laboratory
(NABL Certificate Number: TC-7896)

PREPARED BY:

T. R. ASSOCIATES
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JANUARY, 2024

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EXPLOSIVE CONSULTANT | PROJECT CONSULTANT | CHARTERED ENGINEER

T. R. ASSOCIATES

UNDERTAKING

I, Mr. T. R. Patel, Proprietor of T. R. Associates, a QCI/NABET accredited consultant for Soda Ash Industry and Thermal Power Plant, here confirm that we have checked/verified the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) report for the "Greenfield Chemical Complex" of GHCL Ltd., at Bada, Kutch.

We have verified the EIA/EMP report, and prepared an addendum report describing our findings and observations. This report conveys our satisfaction with the data presented in the EIA/EMP report.

Furthermore, it is important to note that a fresh baseline study has been conducted by T. R. Associates Laboratory, a NABL accredited laboratory. This study was conducted during the winter season from December 2022 to February 2023. The results of this baseline study have been incorporated into the EIA Addendum report.

Date: 30.01.2024

Place: Ahmedabad

T. R. ASSOCIATES AHMEDABAD

Mr. T. R. Patel,

Proprietor,

T. R. Associates

PART A: DECLARATION BY ACO AND EXPERTS CONTRIBUTING TO THE ADDENDUM OF EIA REPORT

Declaration by experts contributing to the EIA study for proposed soda ash manufacturing plant at Village Bada, Taluka – Mandvi, District Kutch, Gujarat by **M/s. GHCL Limited.**

I, hereby certify that I was a part of the EIA team in the following capacity that developed the EIA report.

EIA sector number as per NABET	14 & 4	**Name of the sector**	Soda Ash Industry & Thermal power plants

EIA CO-ORDINATOR

Name:	**Mr. T. R. Patel**
Signature:	
Date:	30th January, 2024.
Period of Involvement:	**November, 2022 – January, 2024**
Contact information:	**M/s. T. R. Associates** A-401, S. G. Business Hub, B/w. Sola Bhagwat & Gota Over Bridge, Near Umiya Campus, S. G. Highway, Ahmedabad – 380060. Contact No.: 98253 71099 adm.trassociates@gmail.com

FUNCTIONAL AREA EXPERTS

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
1	**AP** Air Pollution Monitoring, Prevention & Control	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Baseline monitoring visit; • Identification of impacts of the proposed project based on industrial activities and proposing mitigation measures; • Finalisation of EIA Addendum report.	30/1/24.
		Mrs. Hiral Shah	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Data Collection and identification of pollutants; • Baseline monitoring visit and noted filed observation; • Verification of ambient air quality results. • Preparation of EIA Addendum report.	Hiral Shah 30/1/24
2	**AQ** Meteorology, Air Quality Modeling & Prediction	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Verification of primary data received, for air quality modelling; • Finalization of EIA Addendum report; • Identification of impacts of the proposed project and suggesting mitigation measures.	30/1/24.
		Mrs. Hiral Shah	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Identify fuel characteristics, calculate proposed pollution load generation due to combustion of fuel; • Collection of primary and secondary meteorological data; • Air Quality Modeling for Point source and Line source; • Preparation of EIA Addendum report.	Hiral Shah 30/1/24

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
			Period of Involvement:	
3	**WP** Water Pollution Monitoring, Prevention & Control	Mr. Malav Dalwadi	November, 2022 – January, 2024 **Tasks:** • Site visit; • Verification of analysis results; • Contributiuon in preparation of EIA Addendum; • Identification of impacts of the proposed project and suggestion for its mitigation measures.	30/1/24
		Mr. Darshit Dave	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Baseline monitoring visit and collected water samples & noted field observation and co-relate with baseline monitoriong results; • Perform ground truth verification of relevant ground water & surface water. • Onsite preservation of samples; • Onsite parameter measurement.	30/1/24
4	**SHW** Solid & Hazardous Waste Management	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Finalization of categorization of sources of non-hazardous & hazardous/solid waste from proposed project; • Finalization of quantification of hazardous waste generated from industrial activities; • Identification of impacts of the proposed project & suggestions for mitigation measures related to solid & hazardous waste management. • Finalization of action plan for fly ash & gypsum generation from desulphurisation plant.	30/1/24.

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
			Period of Involvement:	
	SHW (SW & HW)	Mrs. Hiral Shah	November, 2022 – January, 2024 **Tasks:** • Review of categorization of sources of non-hazardous & hazardous/solid waste from proposed project; • Verification of quantification of hazardous waste generated from industrial activities; • Preparetion of action plan for fly ash & gypsum generation from desulphurisation plant.	Hiral Shah 30-1-24.
5	**RH** Risk Assessment & Hazards Management	Mr. T. R. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit; • Finalization of disaster management plan; • Verification of impacts of the proposed project and suggesting mtitgation measures; • Finalisation of RH report.	30/1/24.
		Mr. Darshit Dave	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit with EIA coordinator, FAEs and relevant team members; • Analysis and Identification of impact of the proposed project from the manufacturing process and storage hazards. • Verification & review of RH report.	30/1/24
6	**SE** Socio-Economics	Mrs. Snehaben Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Collection of secondary data; • Evaluation of socio economic status from primary data; • Assessment of the possible changes to socio-economic issues arising out of the project; • Identification of impacts of the proposed project on surrounding environment and suggesting mitigating measures; • Preparation of SE report.	Patel 30/1/24

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Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
7	**SC** Soil Conservation	Dr. B. T. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site and field visit for baseline monitoring; • Collection of soil samples; • Compilation of data; • Review & finalization of results for soil analysis; • Interpretation of results of soil analysis; • Identification of impacts of the proposed project on soil environment and suggestion of its mitigation measures.	30-01-2024
8	**N** Noise	Mr. Rajendra Gohil*	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site and field visit for baseline monitoring; • Review & finalization of noise monitoring results; • Identification of impacts of the proposed project on surrounfing environment & suggestions for mitigation measures.	Rajendra Gohil 30/1/24
9	**HG** (Hydrology, Ground Water & Water Conservation) **&** **GEO** (Geology)	Mr. I. M. Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Collection of secondary data; • Site visit; • Primary data collection; • Verification of secondary data during site visit; • ground water quality results; • Identification of impacts & mitigation measures; • Preparation of FAE report.	30/1/24.

Sr. No.	Function Area	Name of the FAEs	Involvement & Task	Signature
10	LU Land Use	Mr. Vishwas Patel	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit; • Preparation and Finalization of landuse map of study area; • Preparation & finalization of landuse report.	30/1/24
11	EB Ecology and Biodiversity	Dr. Pankaj Joshi*	**Period of Involvement:** November, 2022 – January, 2024 **Tasks:** • Site visit; • Varification of primary data; • Identification and assessment of impacts of proposed activities of project on biological environment; • Preparation and finalization of EB report.	30/1/24

Note: * Empaneled Expert

Name of the EIA consultant organization: T. R. ASSOCIATES

NABET Certificate No.: NABET/EIA/2326/RA 0293 valid up to April 8, 2026.

SECTION 2.6: TECHNOLOGY AND PROCESS DESCRIPTION

(A) Details of Liquid Effluent Treatment and Disposal:

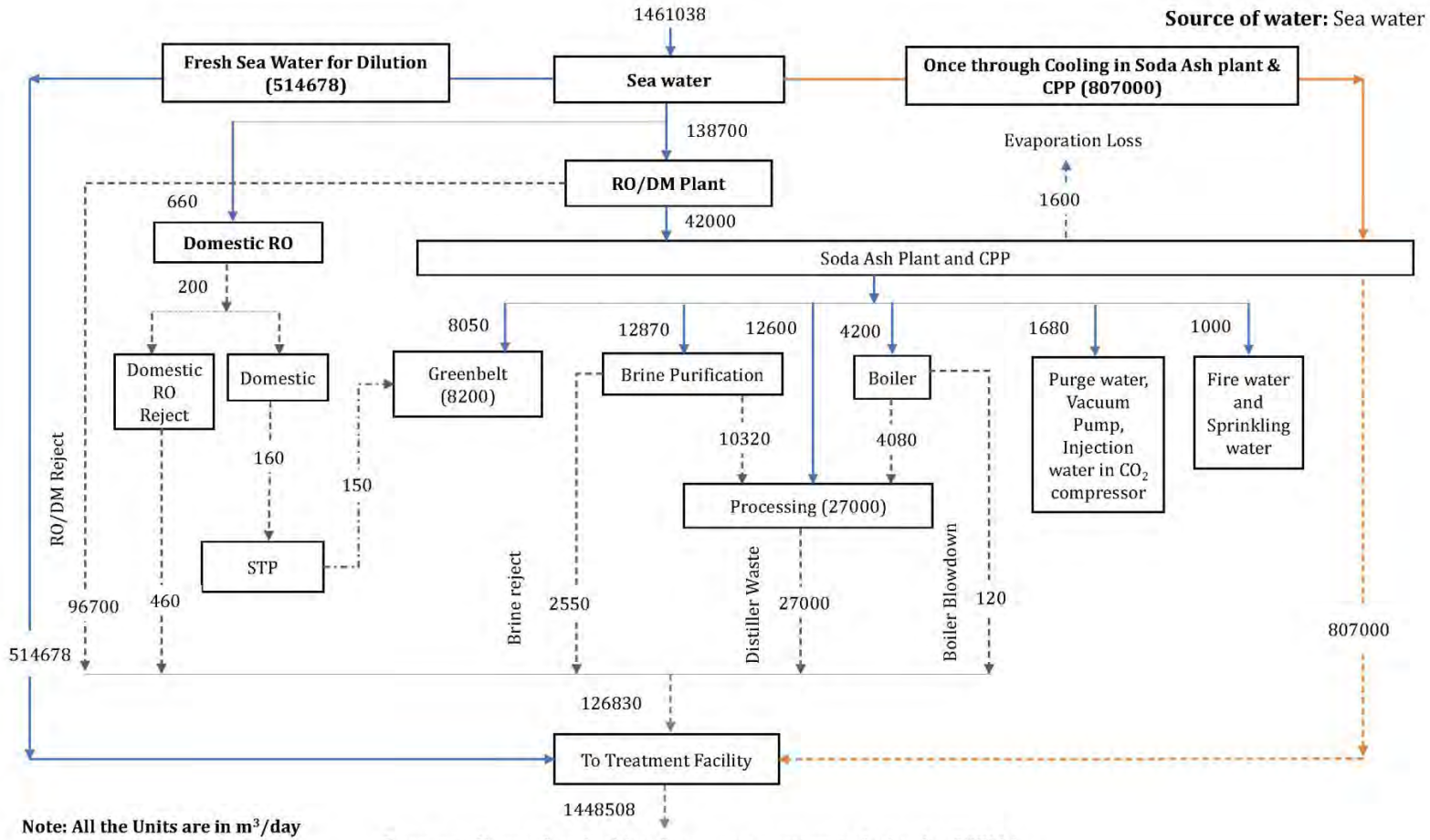


Table 2.4: Water Requirement for the Proposed Project for the Soda Ash Capacity of 3000 TPD

Sr. No.	Use	Wet Lime m^3/day	Source
1.	Domestic	200	Desalinated Seawater (Seawater feed will be 660 m^3/day)
2.	Industrial		
a	Process water in Soda Ash Plant and Captive Power Plant	42,000	RO/DM Plant (Seawater feed for RO/DM plant will be 1,12,290 m^3/d for dry lime and 1,38,700 m^3/day for wet lime)
	Brine Purification	12,870	RO/DM Plant
	Processing	12,600	RO/DM Plant
	Boiler	4,200	RO/DM Plant
	Purge water, Vacuum pump, Injection water in CO_2 compressor	1,680	RO/DM Plant
	Greenbelt Development	8,050	RO/DM Plant
	Fire water and Sprinkling water	1,000	RO/DM Plant
	Evaporation Loss	1600	RO/DM Plant
3.	Seawater for once through Cooling in Soda Ash Plant, CPP etc.,	8,07,000	Source: Seawater
4.	Fresh seawater for dilution	5,14,678	Source: Seawater

Table 2.5: Wastewater Generation from the Proposed Project for 3000 TPD Capacity of Soda Ash

Sr. No.	Use	Wet Lime, m^3/day	Mode of Utilization/ Disposal
a	Domestic	160	Domestic wastewater (160 m^3/day) will be treated in STP and the treated water will be reused (150 m^3/day) for the Greenbelt development.
b	Desalination plant Reject	460	The reject from Desalination plant will be treated in the ETP.
a	Processing	27000	The Process effluent generated i.e. from distiller waste, brine purification reject, RO/DM rejects and Boiler blowdown will be disposed of along with once through return cooling water/fresh seawater into Arabian Sea as per recommendation by GCZMA. The characteristics of the discharge water are within the norms prescribed by CPCB.
b	Brine preparation reject	2550	
c	RO/DM Reject	96700	
d	Seawater once through return system and Fresh seawater for dilution	13,21,678	
e	Boiler Blowdown	120	

Industrial Effluent:

- The wastewater generation streams will be from soda Ash plant and Captive Co-generation power plant. The main effluent parameter to be ensured with respect to the GPCB/CPCB standards will be pH, temperature and suspended solids.
- The Soda ash effluent stream will be mixed with brine treatment plant reject, Boiler blow down from CPP and once through return cooling Seawater which in turn will bring down the temperature, pH as well as to reduce concentration of suspended solids. Online pH, NH3 and temperature monitoring system will be provided to maintain the records.
- The treated effluent conforming to the prescribed norms will travel through a channel and ultimately will be disposed into Arabian sea at a designated disposal point as per recommendation of CSIR-NIO through a submerged pipeline.
- A diffuser system for proper dispersion of effluent will be laid in the Arabian Sea ensuring the requirement of minimum depth and the exit velocity. The Effluent treatment scheme for Soda ash plant is shown in below **Figure 2.8**.

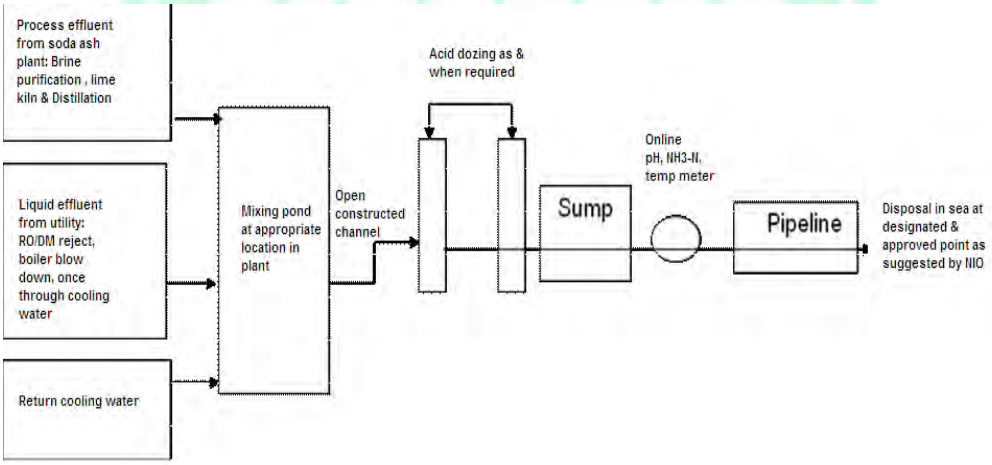


Figure 2.8: Process Flow Diagram of Effluent Treatment for the Proposed Soda Ash Plant

Details of Diffuser system:

The flow-field of effluent released into open waters is controlled by the momentum and buoyancy forces. If the release is made through a sub-surface outfall, generally just above the bed, the mixing is initially achieved by the momentum forces and later by the buoyancy forces. The dilution, which is confined to the area of release, is termed as the near-field dilution. Hence, the effective water column available above the release greatly controls circulation and stratification. It is important to design an effluent disposal scheme in a manner to achieve maximum possible near-field dilution. The diffuser system petameters i.e. length of diffuser block and number ports and the dimensions are calculated based on initial and far field dispersion modeling.

The depth of water available at two outfall locations for OF2_1 and OF2_2 are around 9.4 m and 10.7 m below CD respectively. The proposed outfall locations and water depths at outfall locations are shown in Table. With this background, the study has been carried out to establish the conceptual designs of the outfall structures for achieving better dilution and to be suitable hydraulically / environmentally with

the Effluent quality as specified in tabulated below. The Effluent outfall system is designed for Effluent of 1000 mg/ltr Suspended Solids and other regulated parameter in effluent as tabulated below.

Sl No	Outfall Location	Depth @ Outfall (m) CD	Source Concentration (mg/l)	Distance from LFP (km)
1.	OF2_1	9.4	SS-1000 mg/l, NH4-N-50 mg/l and Temperature- 33^{0}C	2.185
2.	OF2_2	10.7	SS-1000 mg/l, NH4-N-50 mg/l and Temperature- 33^{0}C	2.686

- **Diffuser System:**

  A diffuser of 60 m length having 20 numbers of ports having 440mm diameter each pipeline was decided for the outfall. The diffusers were decided to be placed along the main pipeline line. The port discharge height was fixed as 500 mm above the sea bed level.

  A study of behavior of the multiport discharge was carried out using Buoyant Jet model (BJM) for near field characteristics of the plume. The results from the simulations on BJM is tabulated in following.

Plume Width(m)	Plume angle with Pipe(deg)	Horizontal distance of plume(m)	Vertical Depth (m)	Dilution rate (%)
2.0	14.6	5.1	1.8	7.2
3.2	13.9	7.5	2.5	13.6
4.4	12.8	9.9	3.0	21.1
5.5	**11.3**	**12.4**	**3.6**	**29.4**
6.7	9.3	14.8	4.0	38.5
7.9	6.8	17.3	4.4	48.3
9.1	3.8	19.8	4.6	58.7
10.3	.3	22.3	4.7	69.5

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Domestic Effluent:

- Initial processing of domestic wastewater occurs in a Sewage Treatment Plant (STP) with a focus on utilizing treated water for plantation and Greenbelt development in the vicinity.
- The wastewater undergoes preliminary treatment involving a Bar Screen Chamber and an Oil & Grease Trap tank to capture extraneous and floating matter effectively.
- Subsequently, the sewage is directed to a Collection Tank cum Equalization tank, where it undergoes equalization processes.
- The equalized sewage is then pumped for secondary treatment in an Aeration tank and Secondary Clarifier, with the clear supernatant being collected in a holding tank.
- Further as polishing treatment the effluent is passed through a two-stage process, involving a Pressure Sand Filter (PSF) and an Activated Carbon Filter (ACF).
- Upon completion of the polishing treatment, the treated wastewater undergoes disinfection before being employed for landscaping and gardening purposes.
- The biological sludge generated during the treatment process is directed to a sludge drying bed, with the resulting treated sludge utilized as manure in gardening activities.

Details of Sewage Treatment Plant Units

Sr. No.	Name of the units	No. of Unit	Capacity of unit
1	Bar Screen	1	10.5 m^3/hr
2	Oil and Grease trap Tank	1	60 KL
3	Collection Tank cum Equalization tank	1	80 KL
4	Aeration tank	1	80 KL
5	Secondary Clarifier	1	40 KL
6	Holding tank	1	80 KL
7	Activated Carbon Filter	1	10.5 m^3/hr
8	Pressure Sand Filter	1	10.5 m^3/hr
9	Disinfection (Chlorine contact tank)	1	80 KL

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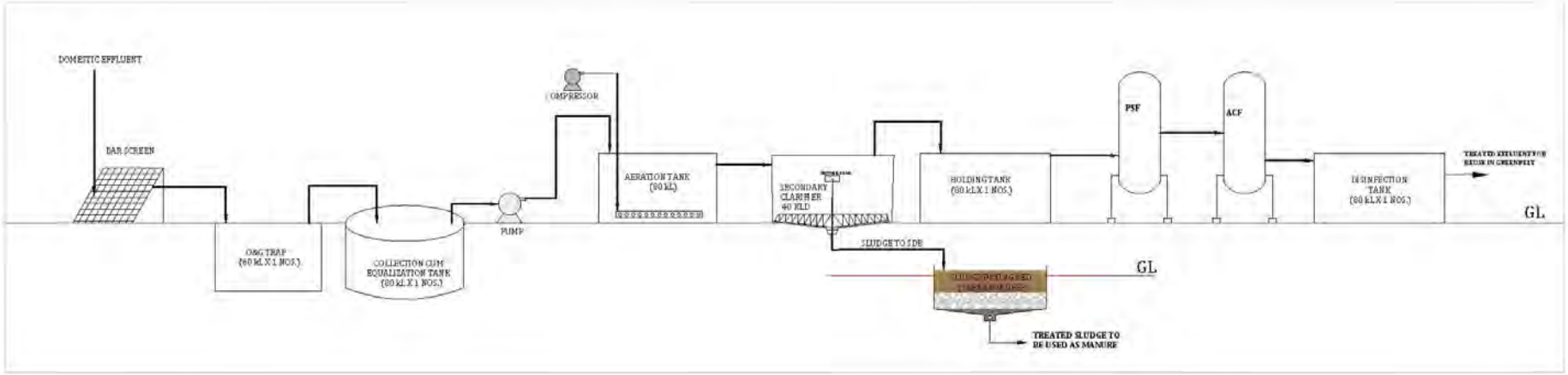


Figure 2.9: Flow Diagram of Sewage Handling Plant

Note: *STP capacity and its design will be carried out in such a way that the effluent quality will be maintained as per GPCB standards*

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The Matrix, thus, establishes the possible "cause-effect" relationship and identifies the environmental factors being impacted and activities responsible for the same.

Table 4.4 Impact Identification/Evaluation Matrix with and without Mitigation Measures

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
Pre - construction phase													
Detailed Topographic survey	Creation of new economic activity Training in new technologies, training in new skills to workers.	SE	N	Skill improvement and local people will get temporary employment	3	1	3	Low	3	1	3	Low	• The local people will be given preference for temporary employment based upon the skills
	Conflict with project of urban, commercial or Industrial development		AB	Delay in project commissioning or total project lost due to resistance from local people. Resistance may be due to land disputes or environmental concerns.	-5	1	-5	Low	-2	1	-2	Low	• The project proponent will engage to local communities and build positive relationship by addressing concerns and showcasing the benefits of soda ash plant. This will help minimize resistance and conflict.
Land Acquirement	Agriculture land acquirement	SE	N	Decreased income due to Loss of agricultural produce on acquired land and effect on local population due to in-bound migration of people	-5	2	-10	High	0	2	0	--	• The project establishment will give direct and indirect employment to many people. Also due to the project infrastructure development will take place. Ultimately, the socio-economic status of the project area will increase positively after project commissioning. • Employment to displaced persons, and opportunity for petty. • Provide housing and basin amenities to migrating workman along with security
		LU		Change in land use as non-agricultural land is converted for industrial purpose	-3	1	-3	Low	-2	1	-2	Low	• Greenbelt will be developed to reduce the effect of land use change and employment to local people.
	Government land acquirement	LU, EB	N	Reduction in fodder due to land acquisition for industrial purpose. It will eventually affect the ecosystem.	-5	2	-10	High	-1	2	-2	Low	• Implement sustainable land use planning to minimize the impact on essential ecosystems. • Promoting agroforestry or establishing fodder banks in nearby areas. This can help compensate for the loss of natural fodder sources.
	Forest land acquisition	EB	N	Loss of native species due to micro tunneling in forest land	-3	2	-6	Medium	-2	1	-2	Low	• The unit has obtained permission from forest department for laying of underground pipeline using best available technology and the unit has already compensated for the future loss of native species to the Compensatory Afforestation Fund Management and Planning Authority (CAMPA).
Site clearing	Removal of top soil layer by heavy	SC	N	Clogging of waterways caused by soil erosion	-3	2	-6	Medium	-1	2	-2	Low	• Soil erosion can be prevented by constructing barriers like temporary concrete block, stone walls

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
	equipment operation			Loss of fertile soil due to removal of top soil layer									• Excavated soil will be used in back filling &development of greenbelt area.
		AP		Low vision due to degradation of air quality due to dust particle	-2	2	-4	Low	-1	2	-2	Low	• Use of dust suppression agents, water sprinkling to avoid the dust emission
		EB		Loss of floral species and habitats in project area. Loss/displacement of faunal species and habitats dependent on floral species getting lost. Reduction of aquatic biota. Disturbance of habitats by noise and vibration.	-5	2	-10	High	-3	2	-6	Medium	• Avoid site clearing activities in flowering season. • Minimize cutting of plantation and grasses, transplantation of uprooted trees. • Development of greenbelt in project area.
		Noise		Irritation and stress due to operation of heavy machineries.	-2	2	-4	Low	-1	2	-2	Low	• Short term impact because site clearing activity will be carried out for few months and it could be mitigated by providing ear muffs and ear plug to workers. • Creating barriers around the project site.
		SE		Local people skilled, unskilled will get temporary employment	3	2	6	Medium	3	2	6	Medium	--
	Burning of waste, refuse and cleared vegetation	AP & AQ	N	Health impact due to reduced air quality	-3	2	-6	Medium	-1	2	-2	Low	• Implement controlled burning practices that minimize the release of harmful pollutants. Burning of waste in open will not be done. • Use designated areas for controlled burns, and ensure they are far from residential and sensitive areas. • Alternative waste disposal methods, such as composting or using specialized waste disposal facilities will be promoted.
Site preparation	Alteration of surface run- off and interflow.	HG & GEO	AB	Flooding on nearby land due to diversion of 1st order stream	-5	2	-10	High	-1	2	-2	Low	• The unit has already done hydrogeology assessment studies, in which the design of diverted channels with proper dimensions, slopes, and cross-sections to efficiently carry water without causing excessive erosion or flooding is given, which will be followed at the time of pre-construction activities.
	Change in Topography	LU	N	May impact local ecosystem and aesthetics	-4	2	-8	Medium	-1	2	-2	Low	• Construction activities will be controlled in such a way that minimizes impact on surrounding ecosystem through barriers. • The unit will develop thicker greenbelt all around the periphery to restore the natural vegetation, as it can help stabilize slopes and prevent erosion.
Construction Phase													

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
Transportation of construction material and storage of material/waste material	Vehicular emissions – smoke, Dust particles, gaseous and PM	AP	N	Degraded air quality, respiratory and health issues	-3	3	-9	High	-2	3	-6	Medium	• The unit will purchase the construction material from nearby market to reduce the vehicular emission and transportation cost.
		EB		Affect the roadside flora	-3	3	-9	High	-1	3	-3	Medium	
	Fugitive emission due to transportation of raw materials & Waste material	AP		Living creatures may suffer from blurred vision and respiratory problems caused due to fugitive emission	-2	3	-6	Medium	-1	3	-3	Medium	• To avoid the fugitive emission during transportation of construction material, cover the materials with wet jute, tarpaulin sheets etc. • Good practice for loading and unloading of materials • Storage in pre-designated area • Compaction of Kuchha roads
Civil works such as earth moving and building of structures including temporary structures (Storage of raw materials)	Building structure on selected location	Geo	Ab	Area falls in seismic zone 5 (High risk Zone) any seismic activity in the area could pose a significant threat to the structural integrity of the project and may result in potential risks to the well-being of individuals in the vicinity.	-5	2	-10	High	-2	2	-4	Medium	• Reinforced concrete or structural steel will be used to enhance the ductility and strength of the building. • High-quality construction materials will be used to ensure the durability and integrity of the structure. • Earthquake disaster management plan is prepared by the unit and it will be followed.
	Excavation and landscape, land filling	HG	N	The natural drains may get disturbed and cause water logging during rainy season	-4	2	-8	Medium	-1	2	-2	Low	• Care should be taken during landscaping to protect natural drainages or give them proper diversion. It reduces run off ground water pollution and water logging.
	Dust emission and emission from DG set and construction activities	AP, EB	N	Living beings may suffer from irritation and blurred vision	-2	3	-6	Medium	-1	3	-3	Low	• Barriers will be provided to avoid the dispersion of dust into surrounding environment. • Time to time dust suppressants like water sprinkle will be used.
	Noise pollution due to operation of heavy equipment	Noise	N	Irritation and stress due to unwanted Noise	-2	3	-6	Medium	-1	3	-3	Medium	• Regular maintenance of transportation vehicles. • Provide ear plug and ear muffs to workers. • Good construction practices and suitable enclosure/ barrier. • Avoid high noise generating activities, vehicular movement and operation of machineries during night time
	Disposal of construction waste	SC	N	Contamination of soil and degradation of soil quality if improperly disposed	-2	3	-6	Medium	0	3	0	--	• Maximum use of construction waste for back filing, leveling will decreases the burden on natural resources and the minimum disposal` of C&D waste will also minimize the risk of soil contamination
	Generation of sewerage	WP	N	Can contaminate nearby Vengdi river and Arabian sea and effect on crops	-3	3	-9	High	-1	3	-3	Medium	• Proper water supply, medical and sanitation facilities for work force • Provision of the mobile toilet van for workers during construction phase • Run off from construction sites to be

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
													properly channelized
	Accidents occur during construction activity	RH	AB	Fall hazard, electric hazard may be caused during construction activities	-4	3	-12	High	-2	3	-6	Medium	• Skilled person will be taken to carry out the risky construction activities • Training will be provided to the workers working at the construction site to avoid the accidental hazard • Use of safety belts during construction activities • It must be ensuring that work permit has to be adopted for abnormal operations. • Personal protective equipment's will be provided.
	Use of resources such as water	WP	N	Depletion of resources	-3	3	-9	High	-1	3	-3	Medium	• Optimum use of fresh water, electricity and fuel • Rain water harvesting will be adopted
	Establishment of industrial building	SE	N	Decreased income due to loss of agriculture produce on acquired land and effect on local population due to in-bound migration of people	-3	1	-3	Low	0	1	0	--	• Employment to displaced persons, and opportunity for petty • Provide housing and basic amenities to migrating workman along with security
	Temporary Employment, unplanned induced growth and real estate development	SE	N	Economic development, improved living standards, Extending help to local self-government and other agencies for planned growth.	3	3	9	High	3	3	9	High	• Local manpower will be employed for temporary as well as permanent employment during construction and operation phase
Construction of micro tunneling	Excavation and vegetation clearance	Geo		Coastal erosion risk and impact on infrastructure stability due to change in sand dune morphology	-4	3	-12	High	-1	3	-3	Low	• The unit has taken approval from GSZMA for lying of intake as well as outfall pipe. • For sand dune stretch the effluent disposal pipeline will be laid through tunneling. There will be no disturbance to stable sand dunes along the coast, as pipeline will be laid underground through micro tunneling method.
		EB		Threat to biodiversity due to change in sand dune morphology	-4	4	-16	High	-1	4	-4	Low	• As the study on biodiversity and wild life, No notified protected area within study area, presence of critically endangered plant species Commiphora wightii in buffer area, conservation plan suggested for schedule 1 Flora & Fauna & approved by forest department and No impart wetland or bird areas are located within project vicinity.
Operation Phase													
Transportation of raw material, Fuel and finished products	Air emission due to transportation of raw materials	AP	N	Global warming caused due to the emission of carbon-dioxide, Acid rain, Health effects due to air pollution	-3	5	-15	High	-2	5	-10	High	• To avoid the fugitive emission during transportation of construction material, cover the materials with wet jute, tarpaulin sheets etc. • Green fuel will be influenced.

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
		EB	N	Flora, fauna get affected due to deposition of dust on leaves from air pollution	-2	5	-10	High	-1	5	-5	Medium	• Vehicles with PUC shall be allowed for transportation activity • Regular maintenance of vehicles will be ensured.
	Increased Traffic Volume	Noise		Congestion on local roads and highways, especially during peak hours. Noise pollution due to traffic	-2	5	-10	High	-1	5	-5	Medium	• Line source modelling for prediction of ground level concentration due to vehicular emission is done and the incremental concentration is found within the standard limit. • Road widening of the approach road is going on which will ultimately improve the LOS • Major transportation activity to be minimized during night time
	Movement of Energy reserves	--	N	Resource utilization such as fossil fuels	-1	5	-5	Medium	-1	5	-5	Medium	• The unit will promote the renewable energy in near future and will rely on green source of energy
Unloading, crushing and storage of crushed coal/unloading and storage of oil	Fugitive emission during crushing and grinding process	SC	N	Soil contamination, degradation in soil quality	-2	5	-10	High	0	5	0	--	• Implement dust suppression systems (water sprays or chemical dust suppressants) • Enclose crushing and grinding equipment • Install ventilation systems to capture and control airborne dust
		WP	N	Nearby surface water (Arabian sea and Vengdi river) contamination due to fugitive emission from crushing of raw material.	-1	5	-5	Medium	0	5	0	--	
		AP	N	Air quality degradation due to crushing of raw material	-3	5	-15	High	-1	5	-5	Medium	
	Operation of crusher and grinder	Noise	N	Irritation and stress due to unwanted Noise from loading/unloading and other activities.	-3	5	-15	High	-1	5	-5	Medium	• Install noise barriers around the equipment • Use noise-reducing technologies or equipment • Implement regular maintenance to minimize equipment noise
Storage and transfer of raw material (loading & unloading) and products within premises	Spillage of hazardous raw material from transfer, handling and storage	RH, SC	AB	Deteriorate soil quality i.e. fertility decreases and soil erosion, workers may affect severely if have skin contact/eye contact	-3	2	-6	Medium	-2	2	-4	Low	• Trained workers will be preferred for transportation of hazardous substances, • Dyke wall will be provided. • TREM card will be provided to the driver during the transportation of Hazardous raw materials/products • Preventive maintenances of pumps, flange & pipes will be done regularly.
Operation of power source and generator of facility	Burning of fuel in boiler (Imported Coal: 13,14,000 TPA, Lignite :19,71,000 TPA, Pet coke: 9,12,500 TPA)	AP & AQ	N	Asthma, Dizziness, shortness of breath can be caused by fly ash due to its small size, it has high potential to get airborne and pollute the environment	-4	5	-20	Critical	-1	5	-5	Medium	• The unit will install flue gas desulphurization CFBC Boiler. Hence, SO_2 will be reduced at the generation level itself. Additionally, the unit will provide Individual ESP with each Boiler of 150 TPH and stack of 130 m is proposed, which is sufficient to arrest the air pollutants generated from fuel burning. • The unit will develop 33 % of green belt along periphery to help in attenuating the pollutants emitted by the plant. • AAQ & stack emission should be regularly monitored to ensure that AAQ standards and
		SC	N	Deposition of dust particles on nearby soil and sea	-4	5	-20	Critical	-2	5	-10	High	
		LU	N	Due to dispersion of	-2	5	-10	High	-1	5	-5	Medium	

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
				air pollutants in the atmosphere, nearby agriculture land hence changes the density of green patches.									suggested limits on stack emission loads would be met honestly all the time. • The unit will provide enough APCM to control Air pollution from industry.
	Operation of 2/3 Nos. of D G set of 5 MVA	Noise	N	Irritation and stress due to unwanted Noise	-3	5	-15	High	-1	5	-5	Medium	Adoption of good engineering practices like: • Enclosures for D G set • Acoustic housing/enclosures, preventive maintenance • Providing Ear muffs and ear plugs to workers.
Operation of 6 Lime kilns	Burning of fuel in kiln (Coke - 1,30,000 TPA, Briquette- 1,55,000 TPA, Anthracite - 1,10,000 TPA)	AP & AQ	N	Asthma, Dizziness, shortness of breath can be caused by fly ash due to its small size, it has high potential to get airborne and pollute the environment	-3	5	-15	High	-1	5	-5	Medium	• The unit will install individual Scrubber and Dust Collector system with each kiln to abate the air pollution. Also, 68 m stack will be provided for better dispersion of air pollutants. flue gas desulphurization CFBC Boiler. So, SO2 will be reduced at the generation level • The unit will develop 33 % of green belt along periphery to help in attenuating the pollutants emitted by the plant. • AAQ & stack emission should be regularly monitored to ensure that AAQ standards and suggested limits on stack emission loads would be met honestly all the time.
Operation of cooling systems	Abstraction of water from sea	WP	N	Impact on nearshore aquatic ecosystem. Dying of fishes due to intake infrastructure and pumping systems	-4	5	-20	Critical	-1	5	-5	Medium	• The fabrication yard must be situated at a safe distance from the shore, and the transportation of pipes and machinery should be through a pre-decided corridor for efficient and controlled movement. • Upon completion of marine construction activities, intertidal, sub tidal, and near-shore areas should be restored to their original contours to preserve the ecological balance. This will be short-term and restored. • To prevent large organisms from entering the intake system, suitable screens and bars should be installed at the intake. • Periodic removal of bio-fouler such as barnacles at and inside the pipe openings. • Seawater intake and effluent disposal locations should be adequately protected and identified with a marker buoy
Waste management (Fly ash, sludge from water treatment plants, cooling tower, boiler, ETP etc.)	Fly ash handling, transportation and disposal	SC, WP	N	If improperly discharged, may contaminate soil and nearby sea.	-2	4	-8	Medium	-1	4	-4	Medium	• The fly ash generated from the desulphurization plant will be transported pneumatically to the silos in a closed-loop system to prevent the occurrence of fugitive emissions • The silo vent will be connected to an air pollution control system to efficiently release airborne fines • Subsequently, the fly ash will be supplied to the nearby Cement manufacturing/Brick manufacturing plants
		AP	N	Fugitive emission from fly ash handling may lead to blurred vision and lung problems.	-2	4	-8	Medium	-1	4	-4	Medium	

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
	Industrial / Domestic Wastewater generation	SC	N	If improperly discharged, may contaminate soil.	-2	5	-10	High	0	5	0	--	• ETP will be provided for treatment of industrial wastewater and STP will be provided for domestic wastewater. The effluent will be discharged into deep sea. Hence this will not impose any threat to the soil. Also, the unit has obtained the permission from GCZMA for effluent outfall of 15,80,000 m^3/day to Arabian sea
		WP	AB	Can contaminate nearby Arabian sea if wastewater discharged into sea without treatment.	-2	5	-10	High	-1	5	-5	Medium	• The predicted max. water temperature in a small area around the diffuser (33°C) which is lower than the threshold of 35°C. • An incremental increase of SS in a limited area around the diffuser is unlikely to negatively influence the biota even in the vicinity of the diffuser. • Fine SS particles would remain in suspension for a longer duration and impart a milky hue around the diffuser, as SS in the effluent is non-toxic this will not impact the water quality. • The fabrication yard must be situated at a safe distance from the shore, and the transportation of pipes and machinery should be through a pre-decided corridor for efficient and controlled movement. • Upon completion of marine construction activities, intertidal, subtidal, and near-shore areas should be restored to their original contours to preserve the ecological balance. This will be short-term and restored. • To prevent large organisms from entering the intake system, suitable screens and bars should be installed at the intake. • Periodic removal of bio-fouler such as barnacles at and inside the pipe openings. • Seawater intake and effluent disposal locations should be adequately protected and identified with a marker buoy
		EB	AB	• Wastewater discharge can result in physical changes to the seafloor and coastal habitats, affecting the distribution and abundance of marine species. Certain species may be more sensitive to changes in	-4	5	-20	critical	-1	5	-5	Medium	• Ensure no damage or disturbance is caused to these species and their habitats by project activities or people involved in project. • Take up conservation, protection and propagation measures for these species in the study area • Periodically monitor these areas for their status as part of comprehensive biodiversity monitoring plan • The unit has received the approval from Forest department for Conservation plan of 13 Schedule I species. The unit has incurred 1.36 Crores towards conservation of Schedule-1 species

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
				their environment, leading to a loss of biodiversity. • If the discharged wastewater contains harmful substances, there is a risk of bioaccumulation in seafood. Consuming contaminated seafood can pose health risks to humans.									
Maintenance – cleaning	Generation of used oil from oil change, lubrication, etc.	SC	N	May impact soil and ground water due to leaching from improper handling and storage.	-1	3	-3	Low	0	3	0	--	• The used oil generated approx. 12 Kl from the lubrication of plant and machineries will be properly Collected, stored and used within premises as a lubricant / sold to registered recycler • In case of soil contamination, remediation measures such as excavation and removal will be performed.
Requirement of manpower	Employment generation directly to 1200 people and many indirectly	SE	N	Living of standard increase due to employment given by the industry	4	5	20	High	4	5	20	critical	• Skilled and non-skilled people will be employed as per their education/qualification • Local manpower will be employed for temporary as well as permanent employment during operation phase.
After Commissioning of project	CER activities such as infrastructure development for Healthcare and Education, Development Initiatives for Fishing Communities, development of renewable energy source in nearby villages etc.	SE	N	Community development, Increase in literacy rate, Carbon footprint will be decreased due to using renewable energy as energy source	5	2	10	High	5	2	10	High	• Infrastructure development Such as primary healthcare units and the fulfilment of the basic amenities in PHCs including mobile medical van and Provide Bala- Rasayana to Malnutrition Children in Aanganwadi and PHC of nearby Villages under CER activities. • Fodder /Animal husbandry • Infrastructure development for quality of education, which will ultimately upgrade schools in nearby villages • Promoting environment friendly and nature-based solutions to enhance productivity of farming • Development Initiatives for Fishing Communities • Installation of renewable energy sources in nearby villages as CER activities
	Increase in	SE	N	Economic	4	5	20	High	4	5	20	High	• Economic development due to indirect

Activities	Aspect	Affected Environmental Attributes	N/ AB	Impact	Significance Assessment with mitigation				Significance Assessment with mitigation				Mitigation Measures
					Consequence (C)	Likelihood (P)	C × P	Significance	Consequence (C)	Likelihood (P)	C × P	Significance	
	supply chain and market			development, improved living standards									employments are also found to be generated to provide day-to-day needs and services to the work force and industrial activity. Indirect employment will also be increased due to transportation of raw materials & finished products • Provide periodical health checkup facility to the employees and nearby village
Post Operation Phase													
Demolition of structure, plant and machinery	Dust emission	AP	N	Blurred Vision and Respiratory problems, Air pollution	-3	1	-3	Low	-1	1	-1	Negligible	• Cover the project site area with tarpaulin sheets to control the dispersion of dust into the surrounding. • Use of dust suppression agents, water sprinkling to avoid the dust emission
		EB	N	Decrease plant productive due to deposition of dust particles	-3	1	-3	Low	-2	1	-2	Low	
	Noise pollution due to operation of heavy equipment	Noise	N	Irritation and stress due to unwanted Noise	-2	1	-2	Low	-1	1	-1	Negligible	• Provide ear plug and ear muffs to workers. • Noisy activities will be done in day time.
	Generation of demolition waste	SC	N	Safety/ accidental hazard, increase in land fill waste, metal waste	-3	1	-3	Low	-2	1	-2	Low	• Demolition waste shall be disposed off as per standard.

-TRUE COPY-

Final Environmental Impact and Risk Assessment Study for "Greenfield Chemical Complex" of GHCL Ltd.

(Light Soda Ash Plant of Capacity 3000 TPD, Dense Soda Ash 1500 TPD, Sodium Bicarbonate 600 TPD with Solid Fuel based Captive Co-generation Power Plant (120 MW capacity), Seawater Intake and Effluent Disposal System)

Village Bada, Taluka Mandvi, District Kutch, Gujarat"

Sponsor:
GHCL Limited,
GHCL House,
Opp. Punjabi Samaj Seva Hall, Navrangpura
Ahmedabad

Schedule: 4(e), Category A
TOR Letter: IA-J-11011/293/2021-IA-II(I)
Baseline Period: December 2019 – February 2020

Council of Scientific and Industrial Research (CSIR)
National Environmental Engineering Research Institute (NEERI)
Nehru Marg, Nagpur 440 020 (Maharashtra)

November 2022

Final Environmental Impact and Risk Assessment Study for "Greenfield Chemical Complex" of GHCL Ltd.

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National Environmental Engineering Research Institute (NEERI)
Nehru Marg, Nagpur 440 020
(QCI/NABET Accreditation letter no. NABET/EIA/2124/RA0227)

November 2022

GHCL Limited

UNDERTAKING for M/s. GHCL Limited.

I, **Shri NN Radia –** Chief Operating Officer (COO) of **M/s. GHCL Limited** located at Village Bada, Taluka Mandvi, District Kutch, Gujarat **do hereby give undertaking** with reference to MoEF & CC O.M. No. J-11013/41/2006-IA.II.(I) dated 05th October 2011, that the data and information given in the Environmental Impact Assessment (EIA) report are factually correct and we will responsible for any discrepancy in the EIA report.

We also undertake that content including information & data of the EIA report is own by us and data or information not taken from any other EIA report.

The above stated fact is true to the best of my knowledge.

Date: 17.11.2022
Place: Ahmedabad

For M/s. GHCL Limited
Shri NN Radia –
Chief Operating Officer (COO)

GHCL House, Swastik Society, Opp. Punjabi Hall, Navrangpura, Ahmedabad, Gujarat-380009, India Ph. : +91-079-26434100
CIN : L24100GJ1983PLC006513, E-mail : ghclinfo@ghcl.co.in, Website : www.ghcl.co.in

Head Office : GHCL House, B - 38, Institutional Area, Sector - 1, Noida, Uttar Pradesh - 201301, India. Ph. : +91-120-2535335, 3350000, Fax : +91-120-2535209

National Environmental Engineering Research Institute (NEERI)

I, Dr. R.J. Krupadam, **Senior Principal Scientist, National Environmental Engineering Research Institute (NEERI)** located at Nehru Marg, Nagpur, Maharashtra 440020, **do hereby give undertaking** with reference to MoEF&CC O.M. No. J-11013/41/2006-IA. II. (I) dated 04th August 2009, that we have prepared EIA report M/s. GHCL Limited. located at **Village Bada, Taluka Mandvi, District Kutch, Gujarat** as per Terms of Reference (ToR) prescribed wide letter no.: **No. IA-J-11011/293/2021-IA-II(I)** dated **10th August 2021**. The stated ToR have been complied with and the data mentioned in the EIA report are factually correct. CSIR-NEERI is a NABET accredited for materials manufacturing sector such as chlor-alkali. This undertaking is subjected NABET clearance on this project.

The above stated fact is true to the best of my knowledge.

Date: 29.11.2022
Place: Nagpur

For, M/s. **National Environmental Engineering Research Institute (NEERI)**

Dr. R.J. Krupadam
Senior Principal Scientist &
Project Leader

डॉ. आर. जे. कृपादम
एम.एससी.(टेक), पी.एच.डी., एफ.आर.एस.सी.
वरिष्ठ प्रधान वैज्ञानिक एवं प्राध्यापक
समन्वयक, ए.सी.एस.आई.आर.
सी.एस.आई.आर.-राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान(नीरी)
नेहरू मार्ग, नागपुर-440 020 (भारत)

Declaration by Experts Contributing to the *Environmental Impact and Risk Assessment & Risk Assessment Study for Greenfield Chemical Complex of GHCL Ltd. At Village Bada, Taluka Mandvi, District Kutch, Gujarat.*

I, hereby, certify that I was a part of the EIA team in the following capacity that developed the above EIA.

EIA coordinator : **Dr R. J. Krupadam**

Signature & Date : 11.8.2021

Period of involvement : **April 2019 – July 2021**

Contact information : **Senior Principal Scientist,**
CSIR-NEERI, Nehru Marg, Nagpur 440020
Ph: +91 712 2249884, Fax: +91 712 2249896

EIA Co-coordinator : Dr. M. Suresh Kumar

Functional Area Experts/TM :

Sr. No.	Functional Areas	Name of the Expert/s	Involvements (period and task**)	Signature and Date
1	Air pollution Monitoring Prevention and Control (AP)/Air Quality Modeling and Prediction (AQ)	Dr. T.V.B.P.S. Rama Krishna	Air Quality AQ	
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3	Noise & Vibration (NV)	Dr. G.L. Bodhe Mr. Guddu Kumar (TM)	Noise Monitoring Prediction of Impacts and EMP	
4	Socio-economic Aspects (SE)	Dr. G.K. Khadse Mr. Sanjay Bodhale	Socio-economic Status Quality of Life	
5	Soil Conservation (SC)and Hydrogeology (Hg)	Dr. R.J. Krupadam Ms. Pravin Naoghare (TM)	Soil Conservation Soil Quality	
6	Land-use & Land cover (LULC)	Dr. Ritesh Vijay	Remote Sensing & GIS for LU/LC	
7	Risk Assessment & Hazard Management (RH)	Dr. R. J. Krupadam Dr. Santosh Ghuge	Risk Assessment Hazard Management	

Declaration by the Head of the accredited consultant organization

I, Dr. Sadhana S. Rayalu, hereby, confirm that the above-mentioned experts prepared the "Environmental Impact and Risk Assessment study for Greenfield Chemical Complex of GHCL Ltd., at Village Bada, Taluka Mandvi, District Kutch, Gujarat State. I also confirm that the consultant organization shall be fully accountable for any mis-leading information mentioned in this statement.

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4.4.4. Sand dunes

During our field survey, we observed presence of sand dunes along the Arabian Sea coast. Presence of sand dunes in the study area suggests high energy wave dominated sea coast. The sand dunes are also present south of the proposed project site boundary. These sand dunes are formed due to deposition of fine to medium, well sorted sand particles. Sediments of the dunes consist of windblown deposits of fine to very fine sand and silt. Majority of the part of the sand dunes are having dense vegetation in the form of *Prosopis juliflora, Acacia nilotica, Acacia leucophloea, Salvadora persica, Caparis decidua, Ipomoea pes-caprae, Suaeda nudiflora etc. with* salt tolerant grasses such as *Cenchrus biflora, Cenchrus Ciliaris, Urochondra setulosus*, *Dactylocteniums indicum, Cynodon dactylon, Aleurops lagopoides* etc.

Presence of dense vegetation suggests stabilized status of sand dunes. The North-South width of the sand dunes varies from 500 mtrs to 200 mtrs The North-South sand dune height profile studied suggest that the height of the dunes varies from 4 mtrs on fore shore area and landward side to 13 mtrs in the central area. The East-West sand dune height profiling suggests that it varies from 5-13 mtrs with undulating deposits. We also observed directs and indirect signs of variety of animals starting from reptiles, birds and mammal species.

4.5. Floral Diversity and Vegetation Type in Core & Buffer Area

We evaluated biodiversity and abundance parameters of vegetation/plant species in the core area and in the buffer area of the project site.

4.5.1. Vegetation Type & Community in Core Area & Buffer Area:

Core area: The proposed project site falls in the arid-semi arid climatic condition. Our field survey and literature review suggest that the vegetation types and community in the project area is that of semi arid-arid regions. It is represented by sparse thorny scrub vegetation. The major part of the project

ANNEXURE-I

NIO/SP-25-2019

(SSP3268)

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Studies on sand dune mapping and morphological changes of the river mouth at the proposed Greenfield Chemical Complex at District Kutch, Gujarat

Sponsored by: GHCL, Limited Ahmedabad

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Final report

August 2020

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1. Introduction

M/s. GHCL, Ahmedabad, is a diversified company with the business area in heavy chemicals, textiles, and consumer products. The major business is from Soda Ash and Sodium bicarbonate manufacturing at Sutrapda, District Gir Somnath, Gujarat. It is one of the leading producers of Soda ash in the country since 1988.

Soda ash and Sodium bicarbonate is having huge demand and has application in the consumer industry. To meet the growing demand, GHCL proposes to set up a Greenfield chemical Complex near Village Bada, District, Kutch, Gujarat.

The Greenfield chemical complex will comprise of Light and Dense Soda ash manufacturing plants, Sodium bicarbonate manufacturing plant, Captive co-generation power plant, seawater intake, and effluent disposal system and associated infrastructure. In future company at the same complex may go in for Caustic soda and by-products like Chlorine, Hypo, Hydrogen, etc.

The Soda ash manufacturing being an exothermic process, requires a huge quantity of seawater for cooling and sweet water for process requirement. The proposed project site is in proximity to Arabian sea-coast off village Bada.

GHCL engaged CSIR - National Institute Oceanography (NIO), Goa for carrying out the morphological studies of the dunes near project location through which seawater intake and effluent disposal are planned.

CSIR- NIO as a Premier research institute of Oceanography in the Indian Ocean region has carried out many projects of this kind in the past. NIO has got the best talents of the world on various aspects of fundamental as well as applied oceanography fields. The objectives of the project after the discussion in the meeting are as follows.

2. Objectives and study area

a) To map and analyse the morphological changes of the seasonal river 'Vengadi' discharge mouth close to the proposed project site towards southwest for ten years at three seasons based on the archived satellite data.

b) Mapping of the sand dunes if any at the proposed site.

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c) To find out and recommend the suitable passage for seawater intake and effluent outfall pipeline corridor at the proposed location.

d) Observation of Suspended Sediment Concentration (SSC) at the recommended seawater intake points identified by CSIR –NIO, RC, Mumbai.

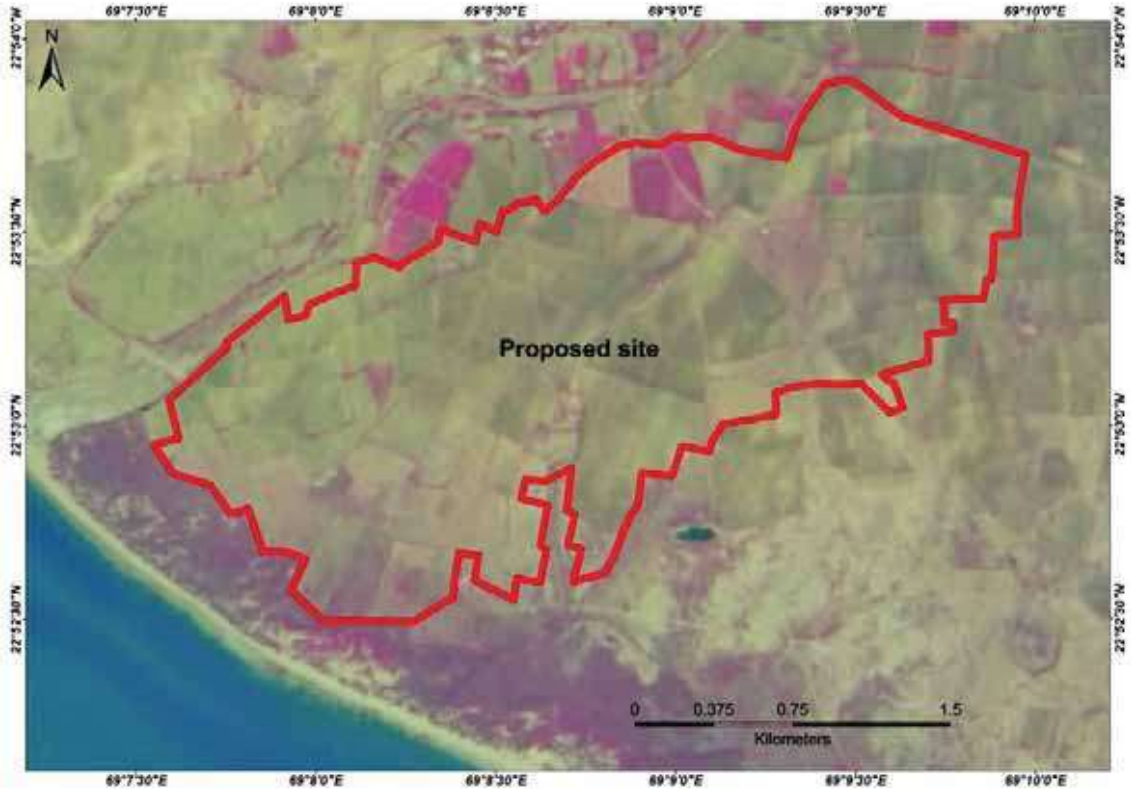


Figure 2.1 Study area

3. Data and Methodology

3.1. Morphological changes of the river mouth and sand dune analysis

The seasonal river Vengadi discharge mouth lies towards the southwest of the proposed complex and sand dune towards the south of the project boundary(Figure 2.1). Archived satellite imagery (Table 3.1) was used for the study area to address morphological changes of the river mouth in the study region. The latest satellite image on 30-09-2018 was used for mapping the present extent of a sand dune. That extent was used further for detailed analysis to find out the suitable passage for intake and outfall pipeline corridor. All data products were

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4.3. Objective 3 - To find out the suitable passage for intake and outfall pipeline corridor

The sand dunes and area adjoining GHCL boundary are considered for the study. As per the environment regulations, sand dunes can not be altered or dressed or flattened. Hence, the optimum solution to lay the intake and outfall pipelines are explored without disturbing the dunes with any of the alternate ways such as tunnelling etc. The selection of suitable corridor for the proposed pipelines over the dunes involved many criteria such as project site, the elevation of the dune(Fig 4.3.1), width of the dune, proximity to the landfall, intake and outfall points, etc. All the said parameters were used to finalise the efficient and optimum pipeline corridor in the dune area. Initially, the entire dune elevation was analysed through the contour map and elevation values provided by GHCL. The dune is having three patches with a maximum height to the tune of 18.5 m which is seen the map in dark brown as isolated patches(Figure 4.3.1). This high elevation regions are highly stabilised and have more stability. The dune has a gradual decrease of the height from the maximum elevation points and shows the gentle slope. Based on the GHCL boundary and dune characteristics, many landfall locations were selected under three categories. The transects are named T01, T02, T1toT8 and their respective landfall points(Table 4.1) are named as L0(1), L0, L1, L2, L3, L4, L5, L6, L7& L8 (Figure 4.3.2). LN is the point explored for the possibility close to Vengadi mouth but discorded due to shallow dune height. The landfall points were decided based on the following:

1. Elevation of dune area which is above 12 m which are supposed to be stable
2. High elevation of dune area with longer dune width
3. Closest landfall points to intake and outfall points in the sea

Regional Center, CSIR-NIO, Mumbai has suggested two intake and two outfall points in the Bada coast. The locations of these offshore points were also considered for arriving the landfall points and subsequent closest corridor for pipelines. Figure 4.3.3 shows the coastal bathymetry used for the study and location of intake, outfall and landfall points. Figure 4.3.4 shows the distance between the suggested landfall points (L1 and L2) and the proposed intake and outfall points (L5 and L6) for the final solutions of the proposed site. It also shows the distance of LFP and OF points from the river mouth.

Sand dune areas are declared as ecologically sensitive regions as per MOEF&CC notification and no development is permitted (MOEF&CC CRZ notification 2019). The whole exercise

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was to find out the natural passage where it can be used as a pipeline corridor. But, throughout the 6.8 km length dune, no natural passage was observed. Dune height was always observed above 1.5 m in the complete stretch. The observed vegetation indicates that the dunes are stable and more than 8000 years old. It is also observed that the dunes of different age formation at the backshore. Hence, the entire dune stretch at the vicinity of the proposed project site will be falling under the CRZ.

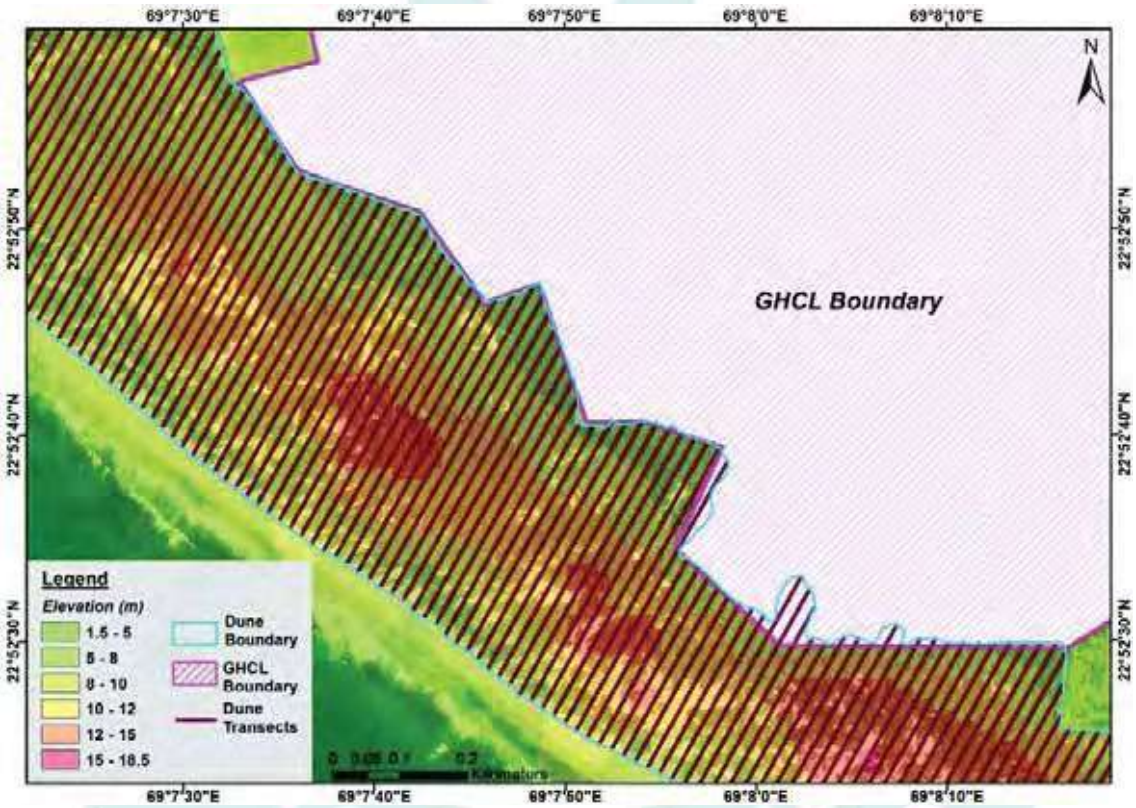


Figure 4.3.1 Elevation of the dune along with the project site boundary

As the sand dunes are within CRZ and no dressing or altering is allowed as per notification, it is suggested to lay the pipelines without disturbing the dune stretch through tunnelling or any other compatible method, etc. Based on the dune characteristics, vicinity of the project site, intake and outfall points, the stability of the coast, ten transects and corresponding landfall points were analysed individually. Based on the detailed analysis, L5 & L6 may be the better landfall points for the suggested intake points as they are at the closest vicinity to the intake points. Dune width and height is analysed for all the proposed transects (*Figure 4.3.6)* L1, L2 and L0 are comparatively better landfall points for the pipeline corridor from the plot

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boundary by considering the dune characteristics. They are lesser by distance to outfall points also. The distance to the outfall locations varies as per the sites of these landfall points. By considering the shortest distance from the coast to intake and outfall points, L5 &L6 is recommended as the first preference for intake point, which is around 1005 m away. But, the L1&L2 is considered as the better preference due to dune characteristics , but little longer by distance to outfall points (2371 and 2865 m). L0 and LO(1) are shorter by distance to outfall locations than L1 &L2 and almost having similar dune characteristics. L0 and LO(1) transects are little higher in dune slope than L1&L2 (*Figure 4.3.5*). However, in this case, the tunneling option at two different places in the dune stretch is enforced so that the distance in pipeline laying in the sea is reduced. The corresponding transects T5 &T6 and T01,T02,T1&T2 may be explored for the tunneling or any other better option. All the recommended options may be exercised after a detailed investigation with geotechnical and tunnelling experts. Depth to the bedrock, tunnelling distance and slope,etc., should be considered in detail. Hence, no damage would happen to surface dunes. It is strictly suggested that the dune stretch should not be disturbed at any cost during the pre and post-project activities.

Vengadi River mouth at the vicinity of the proposed project was also explored as it gives an option of not disturbing the dune complex at all. The stable river mouth was explored for the pipeline laying, and dredging option may be assessed during the pipeline laying time. As evidenced in the past, the pipeline will be covered by the sediments in the near future. As breached in 1988 and 1990, it may be breached, and pipelines may be exposed during a heavy natural disaster. Though the outfall points are closer than the proposed LFPs, because of the mentioned reasons, river mouth point is not considered. The economics of laying longer pipelines and two tunnellings in the dune stretch may be considered, and the optimum decision may be taken. The proposed options are provided by considering only the sensitivity of the environment around the proposed site, and the authorities may view the suggestions and can arrive at the final decision.

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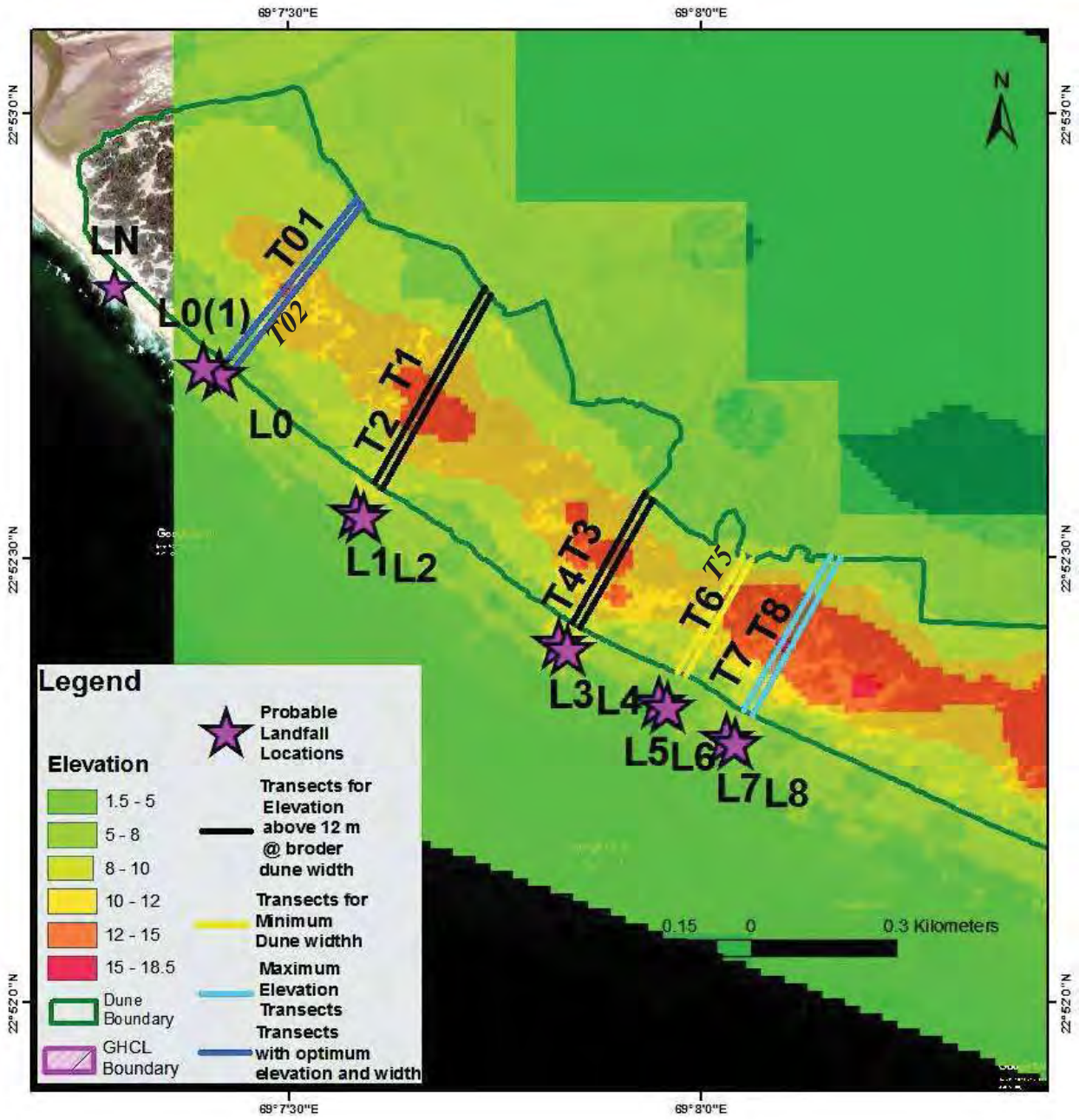


Figure 4.3.2 Landfall points based on dune characteristics

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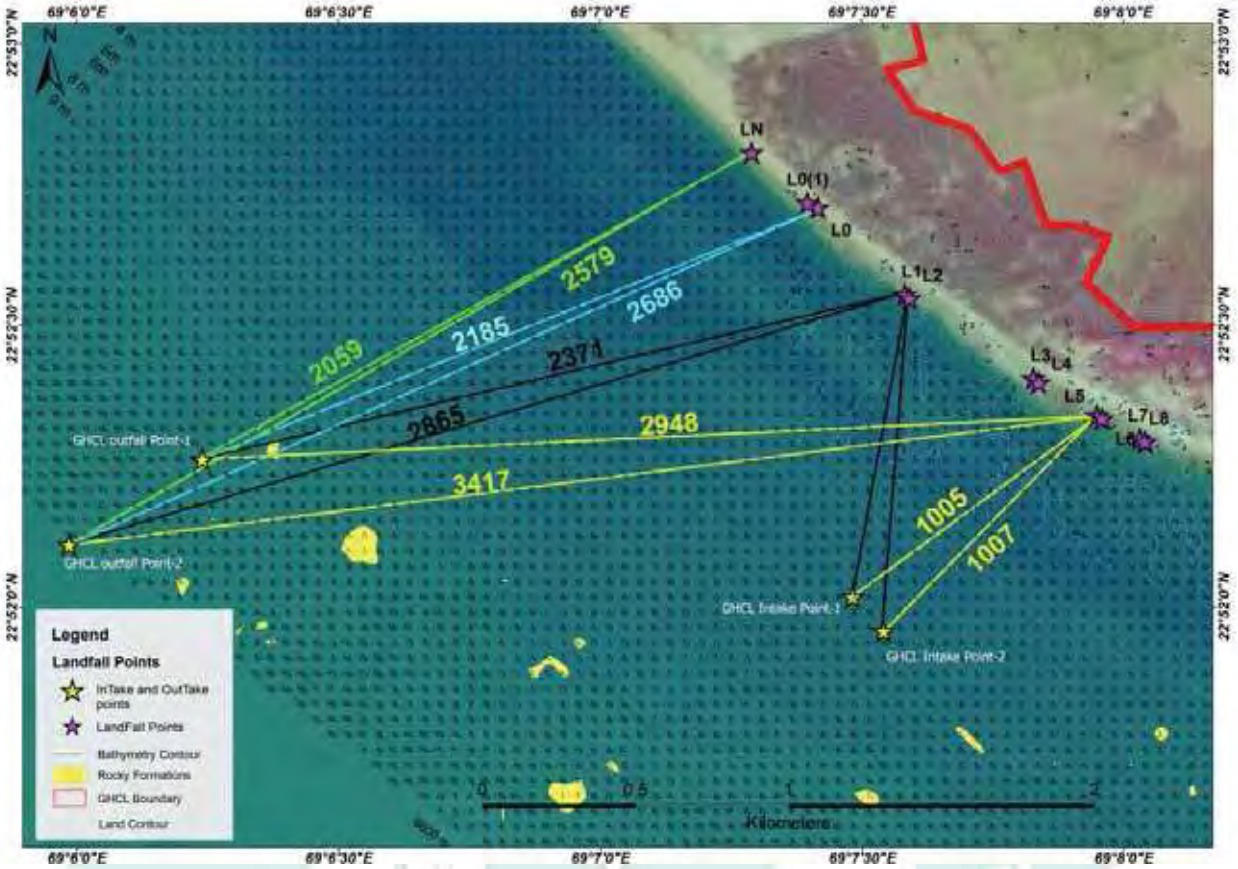


Figure 4.3.3 Coastal bathymetry,landfall, intake,outfall points of the proposed site

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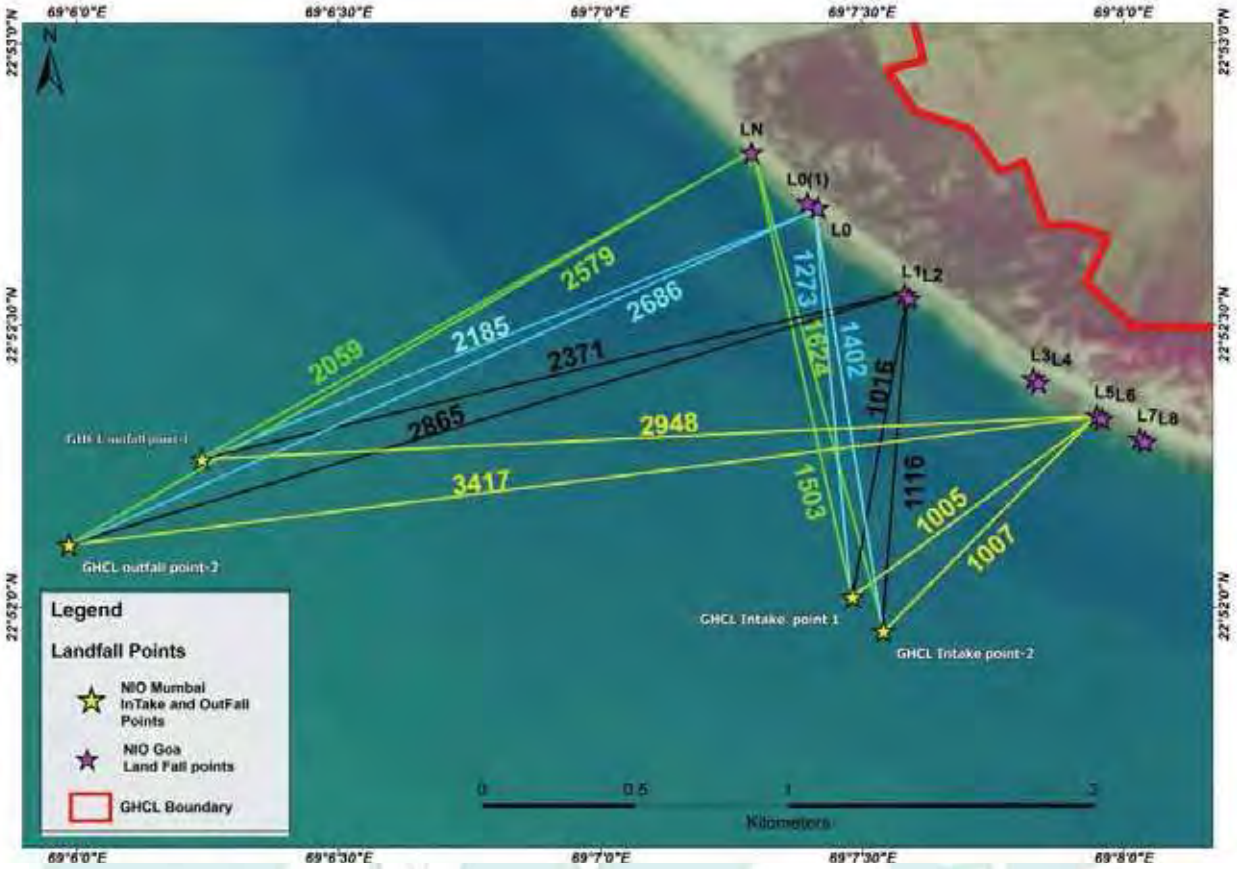


Figure 4.3.4 Distance between intake and outfall points and the suggested landfall points for the proposed site

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Table 4.1 Details of transects in the dune area for the proposed pipeline corridor

Transect	Transect Length / Dune Width (m)	Associated Landfall Point	Co-ordinates at Landfall Point	Reference boundary	Maximum Height along the Transect (m)
TN1 TransID-321	449	LN	69° 7' 19.00"E 22° 52' 49.06"N	69° 7' 33.12"E 22° 52' 56.77"N	8
T01 TransID-314	425	L0(1)	69° 7' 25.53"E 22° 52' 43.52"N	69° 7' 34.96"E 22° 52' 54.31"N	12.5
T02 TransID-313	425	L0	69° 7' 26.05"E 22° 52' 42.99"N	69° 7' 35.31"E 22° 52' 53.80"N	12.5
T1 TransID-300	466	L1	69° 7' 36.14" E 22° 52' 35.10" N	69° 7' 44.16"E 22° 52' 48.23"N	12.5
T2 TransID-299	460	L2	69° 7' 36.70" E 22° 52' 34.68" N	69° 7' 44.63"E 22° 52' 47.63"N	12.5
T3 TransID-275	311	L3	69° 7' 50.60" E 22° 52' 25.66" N	69° 7' 55.82"E 22° 52' 34.27"N	12.5
T4 TransID-274	305	L4	69° 7' 51.19" E 22° 52' 25.27" N	69° 7' 56.41"E 22° 52' 33.84"N	12.5
T5 TransID-263	274	L5	69° 7' 58.16" E 22° 52' 22.26" N	69° 8' 02.91"E 22° 52' 30.01"N	12

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T6 TransID-262	*296*	*L6*	*69° 7′ 58.85″ E 22° 52′ 22.09″ N*	*69° 8′ 03.58″E 22° 52′ 29.80″N*	*13.5*
T7 TransID-255	*366*	*L7*	*69° 8′ 03.06″ E 22° 52′ 19.68″ N*	*69° 8′ 9.34″E 22° 52′ 30″N*	*15.5*
T8 TransID-254	*371*	*L8*	*69° 8′ 03.63″ E 22° 52′ 19.44″ N*	*69° 8′ 10.03″E 22° 52′ 30″N*	*15.5*

Tunnelling in the sand dune complex is a tricky exercise as the sand can collapse at any time. Dunes present in this coast are stabilized dunes with vegetation cover on it. Trench at the project site till the hard bedrock may be planned, and the tunnel may run through in the hard rock so that the sand above may not collapse or any other latest method which will restrict the dune collapse. Transects reaching the landfall points are selected in such a way that dune is having sufficient width and height(Figure 4.3.6) so that it does not collapse so easily (Table 4.1). Detailed geotechnical, engineering and economic analysis are recommended at the proposed transects. After analyzing all the possible options of river mouth point and landfall points to the proposed outfall and intake locations, it is suggested that the L0, L0(1), L1&L2 are favourable for the suggested outfall location and L5&L6 for the intake locations respectively (Figure 4.3.5). These transects are seprerated by 20 m and can be further assessed and finalised based on the ground conditions.

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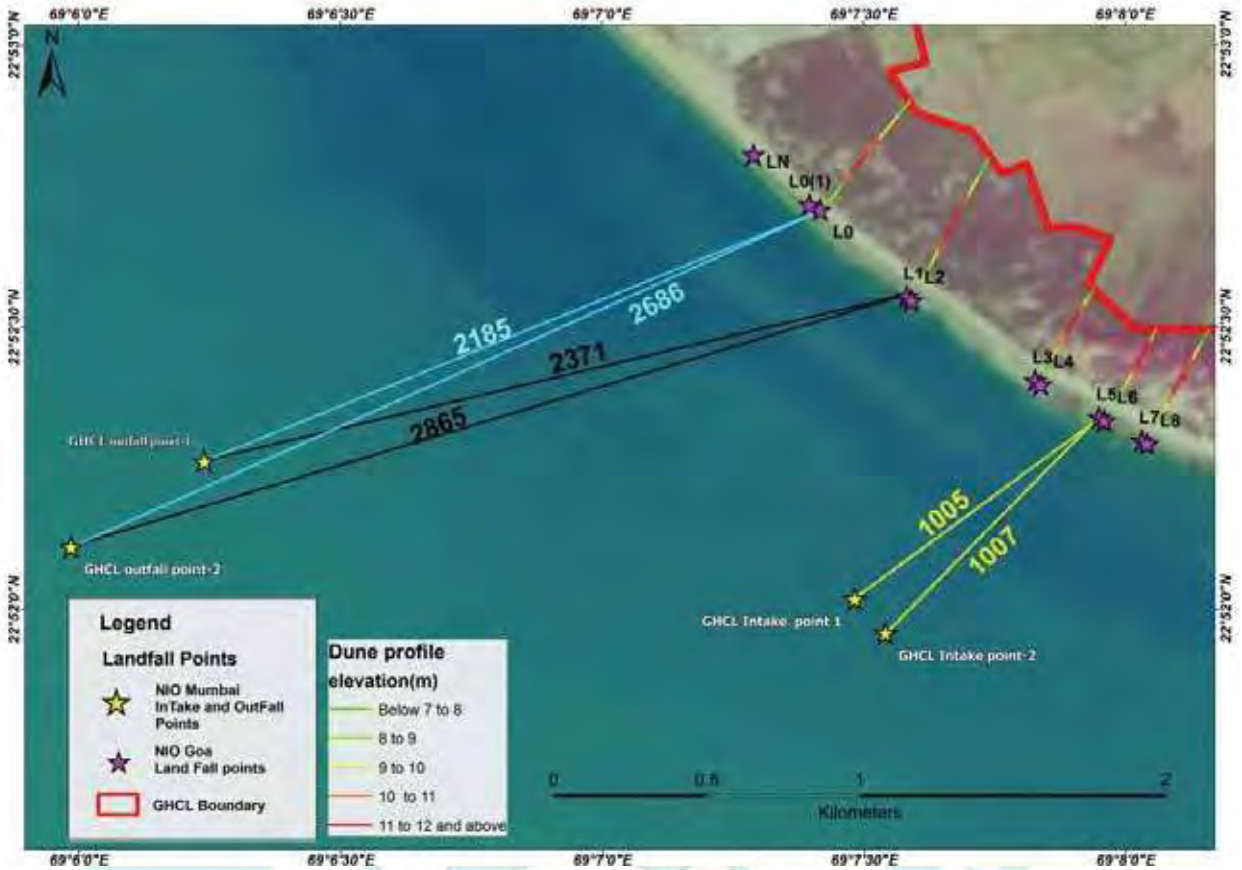


Figure 4.3.5 Dune passage to landfall points and landfall points to suggested Intake and Outfall points passage

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5. Conclusion and recommendations

- The Vengadi river discharge mouth, which was considered for the pipeline corridor, has not undergone significant morphological changes from 2008 to 2018.
- This study exhibits that the river mouth opened up only in the years 1988 and 1990, but the reasons could not be ascertained. After the construction of the tidewater barrier in 2005 across the river, river mouth has not been breached either by river water or by tides.
- Due to this, the river mouth is so stable that there is no inflow or outflow through this mouth observed. Hence, the option of considering this river mouth for laying the buried pipelines may be considered if dredging of the mouth is approved by the concerned authorities during the construction stage. It may refill again, as evidenced in the past. The risk of pipelines exposed may not be ruled out in case of any natural disaster, where appropriate precautionary measures should be taken at the planning stage. In this option, the outfall points are at 2045m and 2568m distance in the sea from the river mouth. But, the problems of bringing the pipelines upto the river mouth need to sort out.

- The economics of laying longer pipelines and two tunnellings in the dune stretch may be considered, and the optimum decision may be taken. As the shorter distance points (L0, L0(1), L1, L2, L5, L6) are available, it is recommended to prefer those points.
- The approximate area of this dune stretch is 302 ha. The dune extends from northwest to southeast for a length of 6.8 km without any break. If there would have been a break, it could have been used as a natural passage. The maximum observed width of the dune was 821 m, and the minimum observed width is 7 m. Dune height extends from 1.5 m to 18.5 m. Three different patches of dune reach up to 18.5 m.

- It is observed through digitization of historic shoreline that no significant erosion has occurred along the entire stretch of the Bada coast. This indicates that this coast has been stable for a long time. The proposed LF points are lying on the stable coast of this region.

- Based on the dune characteristics, vicinity of the project site, intake and outfall points, the stability of the coast, ten transects and corresponding landfall points were

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analysed individually. Based on this, L5 & L6 may be the better landfall points for the suggested intake and L0,L0(1), L1&L2 for outfall points. Intake point is around 1005 &1007 m , outfall is around 2185 & 2686 m from L0 &L0(1), and 2371& 2865 m away from L1&L2 respectively. Dune width is about 275 m from the L5 to the project plot boundary. Dune width is 425m, 425m, 466m and 466m in between the L0(1), L0, L1 &L2 respectively, to the plot boundary. The corresponding transects T01, T02, T1, T2, T5&T6, may be explored in detail for the alternate means of laying the pipeline such as tunnelling, etc.

- The minimum and maximum range of SSC at the intake point was 2.48 mg/l and 27.12 mg/l respectively during 1999-2003. The variations of SSC at intake point is due to various reasons. Values of SSC should be considered while planning the seawater intake and effluent disposal system.
- GHCL may conduct proper EIA study for predicting and mitigating impacts due to project activities and take all necessary environmental approvals from state and central environmental authorities for the project.

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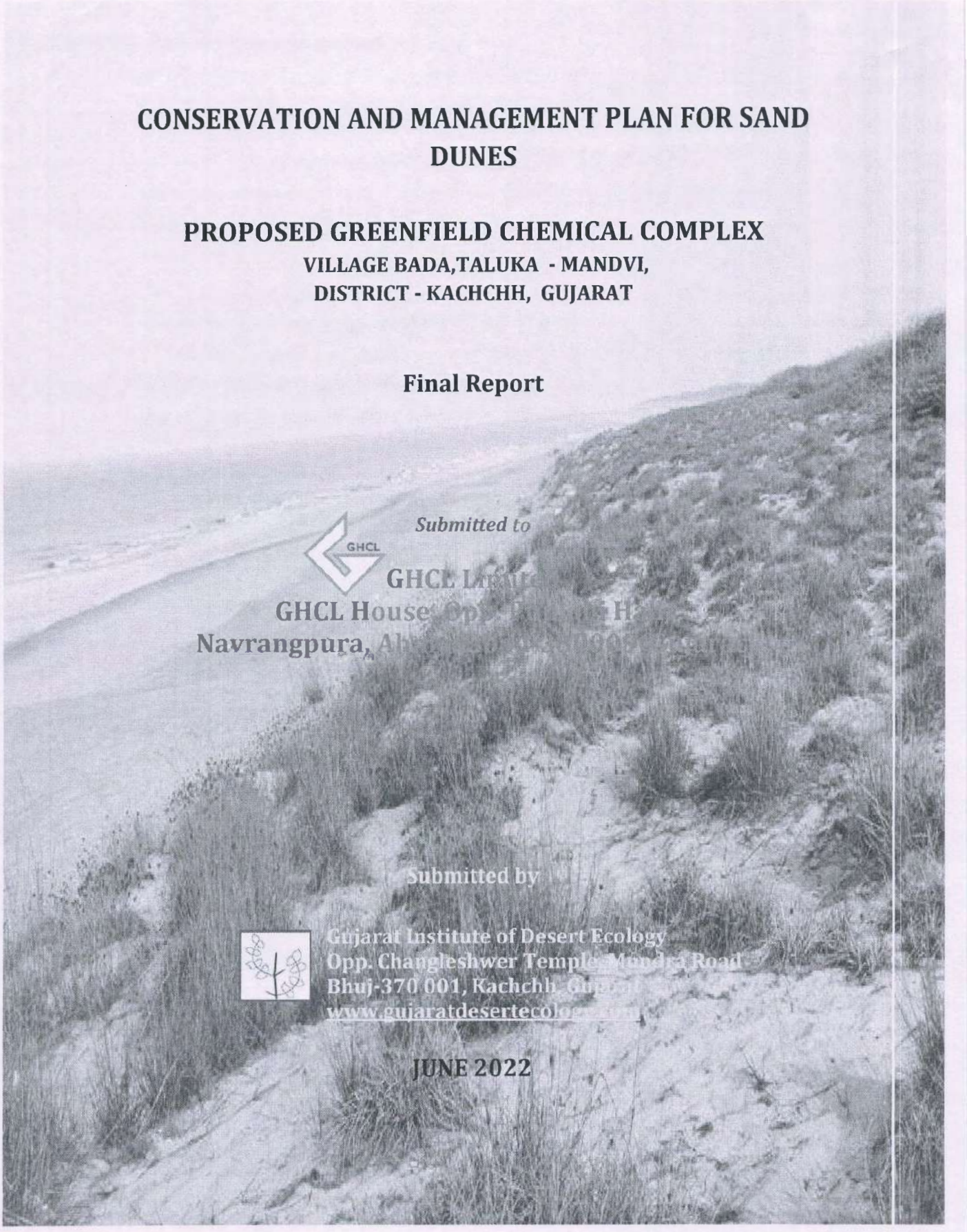
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CONSERVATION AND MANAGEMENT PLAN FOR SAND DUNES

PROPOSED GREENFIELD CHEMICAL COMPLEX

VILLAGE BADA,TALUKA - MANDVI,
DISTRICT - KACHCHH, GUJARAT

Final Report



Submitted to

GHCL

GHCL Limited
GHCL House, Opp. [illegible]
Navrangpura, Ahmedabad-380009

Submitted by

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JUNE 2022

FINDINGS OF THE STUDY

Status of Vegetation on Sand Dunes:

Presence of sand dunes in the study area suggests high energy wave dominated sea coast. These sand dunes are formed due to deposition of fine to medium, well sorted sand particles. Sediments of the dunes consist of windblown deposits of fine to very fine sand and silt.

The survey for sand dune has been done in the 10 km long stretch along the coast (5 km on either side). Around 18-20 different points have been surveyed along the 10 km stretch. Most of the sand dunes are covered with 70-80% dense grass vegetation while 20-30% sand area is covered with sparse vegetation. The density of *Prospis juliflora* increases away from the sea.

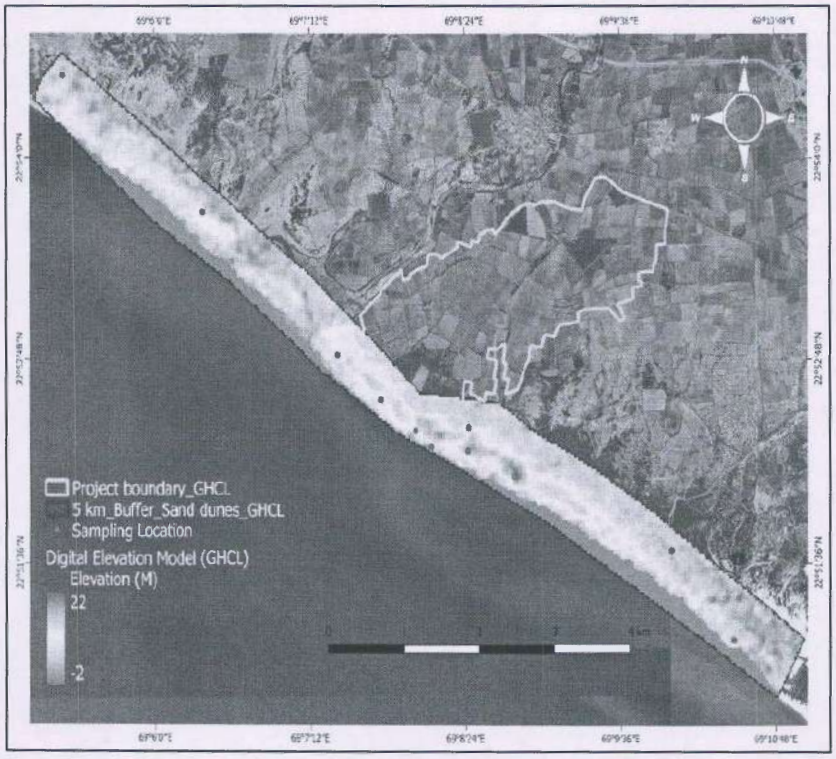


Figure 2. Digital Elevation Models of the Study Area and Sampling Location Around the Study Area

SAND DUNE CONSERVATION MEASURES

Conservation and management of natural ecosystem and habitat are the prime importance in recent time for ecological balance, natural flow of ecosystem services, conservation of biodiversity and our sustainable development. Sand dune are one among the threatened ecosystem which are critical in view of the recent developmental activities along the coastal areas all over the world.

Though the sand dune present in vicinity of the proposed project is very much stable sand dune system due to its vegetation cover except some cliff areas and minimum human interference or activities are observed in the area (due to the narrowness of the beach, lack of approachable roads, etc.). However, in the event of coastal development activities, increasing anthropogenic pressure and ongoing climate change, impact on the sand dune couldn't be neglected in future. Therefore, priority should be given for sand dune conservation and management measures may involve access way construction, signage and a community awareness program. It is applicable to the nearby coastal areas of GHCL Project area.

Therefore, some suitable measure and implementable action to be undertaken for conservation and management of the natural sand dune in the area which are as follows:

1. ***Erosion Control***

The sand dune may face erosion threats due to high wind and tidal action prevailing in the area. The erosion of sand dune is likely in cliff areas facing towards the coastline due the lack of substantial vegetation. The coastal dunes are relying primarily on maintaining a uniform protective cover of suitable vegetation. Therefore, plantation of the cliff area is required with suitable native species of grasses, herbs and shrub which naturally grows on sand.

To provide sufficient plant cover to protect fragile dunes against wind erosion, species that are native to the coastal dunes are adapted to survive the hostile environment of drifting sand, strong winds, salt spray and infertile soils. The plantation activity may be promoted by using CBO (Community Based Organisation) or Forest Department They provides long term stability.

2. *Sand Dune Restoration*

Tropical storms are primarily responsible for the damage in many parts of the coastal dune ecosystem. Restoring vegetation on coastal dunes is important because vegetation helps stabilize dunes and provides essential habitat and food for many species of wildlife naturally dependent on sand dune. Therefore, key species of plants needs to be planted with coordinated efforts to restore degraded sites within the sand dune area.

3. *Stabilising Sand Dune Through Re-vegetation (Sand Dune with Sparse or without Vegetation Cover)*

Re-vegetation is a general term that includes stabilising a land surface with plants that need not be native. In coastal dune management the emphasis should be on regeneration; re-establishing a range of indigenous plants that would occur normally in the local environment. This is applicable in the areas or patches of sand dune where there is no vegetation or sparse vegetation. For this there is no need for removing existing vegetation from the dunes.

A healthy dune ecosystem will display a range of plant communities and locally indigenous species that reflect the geographical distribution of species along the coast, zonation within the dune system and the age of the dunes. These communities provide habitats for a diverse range of native fauna, providing them with resources such as food, breeding sites and protection from predators.

For the re-vegetation suitable seed collection is prime important and this can be done through selecting the target plants, establish their locations, understand their fruiting times and the logistics of gathering their seed. Collect local progeny from naturally occurring remnant vegetation as close as possible to the project site. To obtain good genetic quality for each species by collecting from healthy, vigorous plants. Further, it should be ensuring that plants and populations are not over exploited, and collect small amounts of seed from a large number of individual plants that are well separated from each other.

4. *Plantation of Native Sand Dune Adopted Vegetation (Psammophytes):*

Sand dunes are maintained with the help of sand dune vegetation as wind traps, sand binders of dune stabilizers. Dunes can be stabilized using indigenous grasses and

other plants which can help by "reducing the velocity of waves and absorbing their energy". These plants take root and begin to form a strong, thick barrier which anchors the sand dune and helps keep sand in place. Planting takes an extensive amount of work to complete. First, indigenous plant seeds must be obtained, then site preparation, planting, fertilization, and mulching are required. Following the planting process, irrigation needs to be done in order to maintain required moisture level. Installing dune stabilization vegetation and structures is not the end of the process. The dune must be continuously maintained. Beach grasses are pioneer plants in stabilization of coastal sand dunes. They create an environment more attractive to other species of flora and thus encourages colonization by fauna subsequently changes the dune characteristic features. However, as the plants become established, the dune becomes more stable.

5. Fire Control and Management

Naturally occurring fires are not considered to be a regular feature of the coastal dune environment. It is recognised that active fire management may be required to reduce the risk of wildfire to life and property that has been built in the dune environment.

Though, the present sand dune area has no any sign of fire in present time, however, increasing human population in the event of plant establishment chance of fire cannot be neglected. Therefore, care should be taken to manage fire or fire management system needs to be installed, if fire occurs in future so that vegetation to be managed to conserve the dune environment.

6. Control of Invasive Species

Presently, most of the sand dune area has been covered by the *Prosopis juliflora*. Though, it acts as a sand stabiliser in the area, however, further, invasion of *P. juliflora* to be checked and focus to be given for the plantation or re-vegetation of native species for sand dune conservation.

7. Minimise Anthropogenic Activity in Coastal Ecosystem

Increased human activity such as recreational tourism, fishing, and coastal developmental activity, mainly the economic activities may degrade the dune stability and its ecosystem quality. Though, the major parts of the dune are covered

by the *P. juliflora* and minimum anthropogenic activities noticed during the survey, however, the rapid pace of developmental activities are undergoing in the entire coastal areas of Kachchh including the Mandvi coast, may degrade the ecosystem in future. Therefore, minimum human interference to be allowed in the dune and its sandy coast and focus to be given for awareness among various stakeholders about importance of dune ecosystem and conservation of sand dune.

8. Removal of Beach Debris

Removal of beach debris/waste from such area is an appropriate management practice to promote dunes in the project area. Accumulation of beach debris and other waste by wave action or by dumping leads to damage of dune vegetation and in course of time may affect further dune formations. Beach cleaning occurs in those locations with high levels of recreational use, especially near urbanizations. In addition to its adverse impact on the foreshore flora and fauna, it can exacerbate erosion. The only requirement in most cases is to cease the activity and allow dune vegetation to re-establish.

9. Conservation Education and Awareness Programme

It is normally observed that people have lack of knowledge and awareness about the importance of sand dune ecosystem for the environment and for the human being. Therefore, focus should be given in organizing activities, sign board and other awareness programme on the conservation of sand dune and its dependent fauna.

10. Monitoring and Evaluation

Regular monitoring and evaluation of the sand dune ecosystem and its floral and faunal composition is pre-requisite to manage the sand dune in future and in the event of establishing Greenfield complex by the M/S GHCL Ltd. through expert agencies.

Fund Allocation for Implementation of Conservation Plan

The successful conservation and protection of natural ecosystem/habitats is the prime duty of all stakeholders using the natural resources of such areas for their livelihood and economic development activity. The conservation measure suggested for the conservation sand dune present in the buffer area of the proposed project area of the GHCL is given in the previous section. Since, sand dune is a crucial ecosystem for some threatened wildlife species, special focus is required to ensure effective conservation measures to be implemented in future for conservation and restoration of the sand dune.

To implement the above-mentioned conservation measure for the sand dune, budget has been proposed (breakup given in table 4) for each activity to meet the goal of successful conservation of sand dune and its threatened biodiversity. The proposed estimated budget of Rs. 30,00,000/- (Rupees Thirty lakhs only) has been allocated for the upcoming 10 years from the date of inception of the project to implement various conservation actions as suggested in the previous section of the report.

In addition to the fund allocation made for conservation of sand dune in the buffer areas of the GHCL proposed project, environmental/ habitat improvement programmes could be undertaken as part of CSR activities focussing on the conservation of sand dune environment.

Table 4: Proposed budget for implementation for conservation measure

Sl. No.	Specific Conservation and Management Objective	Proposed Expenditure
		Long term (10 years)
1	Sand dune Conservation and Protection	6,00,000.00
2	Habitat Improvement & Plantation	7,00,000.00
3	Research and Monitoring	6,00,000.00
4	Conservation education & Awareness generation	4,00,000.00
	Total	**23,00,000.00**

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सत्यमेव जयते

Ministry of Environment, Forest and Climate Change

National Marine Turtle Action Plan

Government of India
Ministry of Environment, Forest & Climate Change

(2021-2026)



National Marine Turtle Action Plan

Government of India
Ministry of Environment, Forest & Climate Change

(2021-2026)

मंत्री
पर्यावरण, वन एवं जलवायु परिवर्तन,
सूचना एवं प्रसारण और
भारी उद्योग एवं लोक उद्यम
भारत सरकार

MINISTER
ENVIRONMENT, FOREST & CLIMATE CHANGE,
INFORMATION & BROADCASTING AND
HEAVY INDUSTRIES & PUBLIC ENTERPRISES
GOVERNMENT OF INDIA

प्रकाश जावडेकर
Prakash Javadekar



MESSAGE

India is blessed with its rich and varied biodiversity. We have always taken pride in conserving this natural heritage. Our marine biodiversity is no exception to this. Marine Turtles have always captured our imagination and has been conserved since the ages. Marine Turtles are considered to be flagship species in various marine habitats such as coral reefs, sea grass meadows, sandy beaches, etc.

Besides being home to one of the largest congregations of nesting of the Olive Ridley Turtles, five species of marine turtles are found in India. These species found in Indian waters have been listed in the Schedule-I of the Wild Life (Protection) Act, 1972 and therefore, accorded very high protection status. Considering the importance of conservation of marine turtles, the Ministry had included marine turtles as one of the 22 species for taking up focussed conservation programme under the Centrally Sponsored Scheme- Development of Wildlife Habitats.

I am happy to note that the Ministry has now prepared a 'National Marine Turtle Action Plan' through an extensive consultative process with relevant stakeholders. This Action Plan focuses on reducing threats, conserving critical habitat, exchanging scientific data, increasing public awareness and most importantly emphasizes on a participatory approach in conservation of marine turtles and its habitats. The Action Plan will enable the stakeholders to perform their roles in a coordinated manner and take effective measures for the conservation of marine turtles.

I am confident that this 'National Marine Turtle Action Plan' will provide a fresh impetus to work towards conserving these magnificent species and their habitats and provide them with safe havens for their future and for a healthy planet.

With best wishes.

Date: 19.01.2021

(Prakash Javadekar)

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ई–मेल/E-mail: minister-efcc@gov.in

Babul Supriyo
Union Minister of State
Ministry of Environment, Forest & Climate Change
Government of India

बाबुल सुप्रियो
केन्द्रीय राज्य मंत्री
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
भारत सरकार



MESSAGE

Marine turtles play a variety of ecological roleslike controlling prey populations, supporting coastal vegetation through their hatchlings etc.in maintaining healthy marine habitats.They are key indicators of healthy marine habitats.

Numerous direct and indirect pressures arising from various factors adversely impact marine turtle populations and their habitat. This includes man made factors such as pollution, habitat destruction, bycatch, etc. and also includes natural disasters such as tsunamis, cyclones, hurricanes and storms. With a view to conserve marine turtles, associated species and their habitats, the Ministry of Environment, Forest and Climate Change, Government of India has prepared this "National Marine Turtle Action Plan, 2021-2026" with a vision to create a viable and healthy marine ecosystem for marine turtles and associated species through a coordinated and participatory mechanismto ensure long term survival of marine turtles.

The National Marine Turtle Action Plan, 2021-2026 would be implemented at the National and State Government level with the following objectives:

a. Reduce direct and indirect causes of marine turtle mortality;
b. Protect, conserve and rehabilitate marine turtle habitats;
c. Improve understanding of marine turtle ecology and populations through research, monitoring and information exchange;
d. Increase public awareness of the threats to marine turtles and their habitats, and enhance public participation in conservation activities;
e. Enhance national, regional and international cooperation.

I wish all the best for the successful implementation of the "National Marine Turtle Action Plan, 2021-2026".

(Babul Supriyo)

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Important Marine Turtle Habitats in India

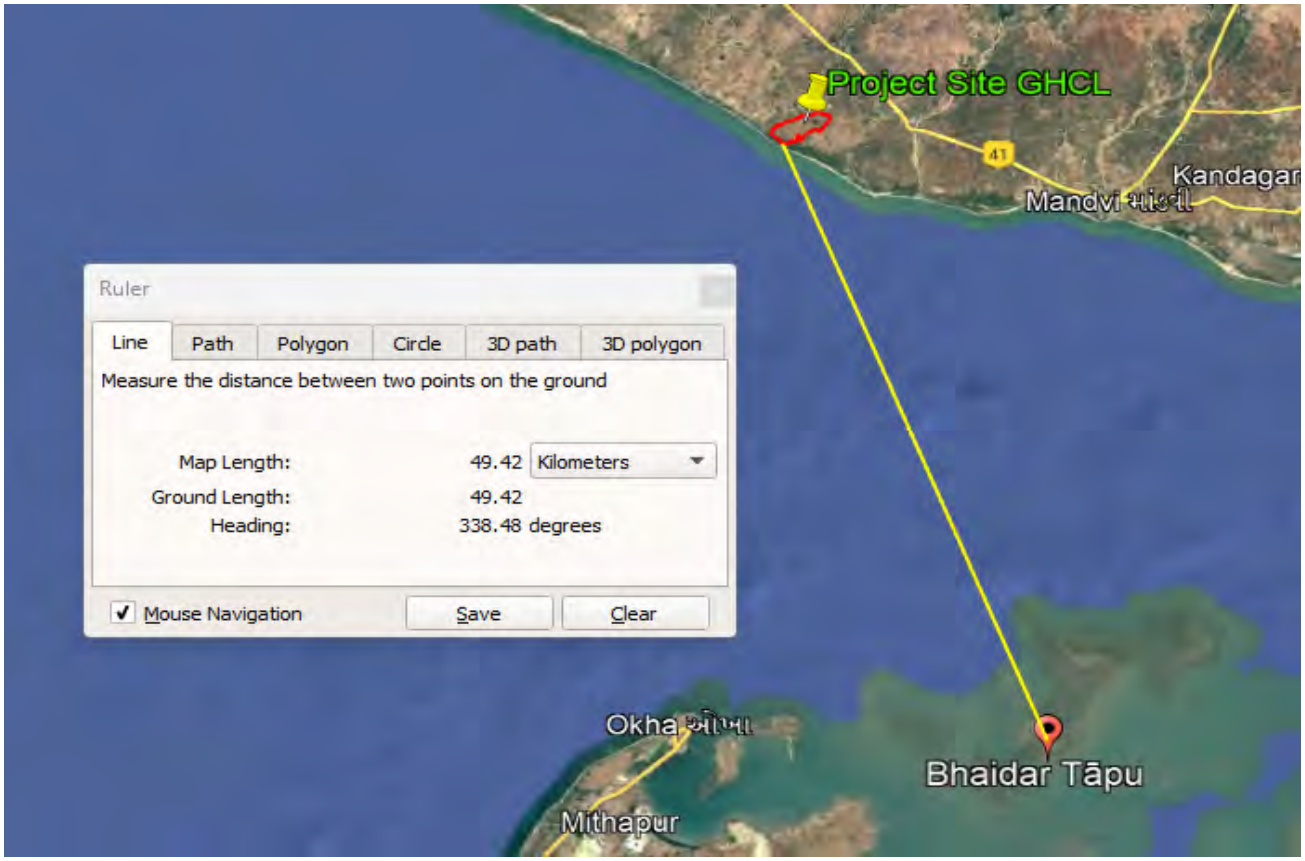
State	Important Turtle Habitats (Catchment District)	Remarks / Clarification	Major Threats
Odisha	Rushikulya river (Kandhamal and Ganjam)	Mass nesting ground of Olive Ridley	Erosion, Nest predation, plastic pollution, light pollution and bycatch
Odisha	Gahirmatha river (Kandhamal and Ganjam)	Mass nesting ground of Olive Ridley	Erosion and Nest predation, bycatch
Odisha	Devi River (Jagatsinghpur, Puri)	Sporadic mass nesting ground of Olive ridley	Nest predation, plastic pollution, light pollution, plantation and bycatch
Andaman & Nicobar Islands	Galathea bay, Indira point, Hingloi, Alexandria, Dagmar, and Renhongbeaches (Great Nicobar Island)	Largest Leatherback turtle nesting ground in India	Nest predation
Andaman & Nicobar Islands	Bahua, Muhincohn and Kiyang beaches (Little Nicobar Island)	Leatherback, Green, Hawksbill and Olive ridley	Nest predation and bycatch
Andaman & Nicobar Islands	West Bay, Jackson Creek beaches (Little Andaman Island)	Leatherback nesting ground, currently largest in the Andaman group	Nest predation and bycatch
Andaman & Nicobar Islands	Cuthbert Bay, (Middle Andamans)	Leatherback, Green, hawksbill, and Olive ridley	Nest predation
Andaman & Nicobar Islands	South Reef Island, (Middle Andamans)	Best hawksbill turtle nesting ground in India	Nest predation
Lakshdweep Islands	Lagoons of Lakshdweep Islands (Agatti, Kadmat, Kavaratti and other islands)	Foraging ground of Green turtle	Erosion, over grazing, conflict with fishermen, nest predation and bycatch
Lakshdweep Islands	SuhelilIsland, (Lakshadweep)	Olive ridley / Hawksbill / Green turtle nesting ground (sympatric habitat for three species)	Erosion and bycatch
Andhra Pradesh	Godavari River Mouth (Sacramentoshoal, East Godavari)	Very high sporadic nesting of Olive ridleys (approx. 500 to 1000/year),	Nest predation, plastic pollution, light pollution, habitat degradation and bycatch
Andhra Pradesh	Kapasukuddi (Bahuda river mouth), Nagavali, Bamsadhara (Srikakulam)	High sporadic nesting of Olive ridleys	Nest predation, plastic pollution, light pollution, habitat degradation and bycatch
Andhra Pradesh	Beaches along Krishna River and Penneru river mouth (Nellore)	Moderate sporadic nesting of Olive Ridley	Nest predation, plastic pollution, light pollution, habitat degradation and bycatch

Important Marine Turtle Habitats in India

Puducherry	Nallavadu,Pannithittu, Narambi and Moorthikuppam villages (Puducherry) and beaches around Arasalar River (Karaikal)	High sporadic nesting of Olive Ridley	Nest predation, by-catch, erosion, habitat degradation, plantation, plastic and light pollution
Tamil Nadu	Gulf of Mannar Biosphere Reserve (Thoothukkudi and Ramanathapuram)	Foraging ground of green and Olive ridley, good seagrass beds	Nest predation, plastic pollution, habitat degradation, poaching, bycatch
Tamil Nadu	Chennai coast, (northern Tamil Nadu)	Sporadic nesting ground of Olive ridley turtles with conservation programmes from 1973	Nest predation, by-catch, plastic pollution, light pollution, egg poaching, habitat degradation
Gujarat	Western Saurashtra coast, Gujarat (Junagadh, Jamnagar and Porbandar)	Green and -Olive ridley turtle nesting grounds	Nest predation, by-catch, plastic pollution, habitat degradation
Maharashtra	Sindhudurg Coasts (Raigad and Ratnagiri)	Sporadic nesting of Olive ridley and Green	Nest predation, bycatch, plastic pollution, habitat degradation
Goa	Galgibaga beach (South Goa)	Sporadic nesting of Olive Ridley	Nest predation, by-catch, plastic pollution, lighting, tourism, habitat degradation



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Project Site GHCL
41
Kandagar
Mandvi માંડવી
Ruler
Line
Path
Polygon
Circle
3D path
3D polygon
Measure the distance between two points on the ground
Map Length:
49.42
Kilometers
Ground Length:
49.42
Heading:
338.48 degrees
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Okha ઓખા
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ANNEXURE R/22
[Colly]

26. For the reasons stated above, this appeal succeeds. The impugned orders of the courts below are set aside as also the contract awarded to the 4th respondent by the respondent State as per its order dated 19-9-2002. The appeal is allowed.

(2004) 11 Supreme Court Cases 497

(BEFORE SHIVARAJ V. PATIL AND B.N. SRIKRISHNA, JJ.)

SRI RAM SAHA . . Appellant;

Versus

STATE OF W.B. AND OTHERS . . Respondents.

Civil Appeal No. 5110 of 1999†, decided on October 14, 2004

A. **Tenancy and Land Laws — W.B. Land Reforms Act, 1955 (10 of 1956) — Ss. 4-B, 4-C and 4-A — Applicability — Requirement of Collector's permission under S. 4-B read with S. 4-C, held, not applicable to felling of trees by owners of non-forest private plantations (orchards in the present case) for replacing them by new saplings having greater yield potential — Further held, S. 4-A not applicable to areas other than the three sub-divisions specified therein — Therefore, in the present case, High Court was not justified in imposing further restrictions and conditions on the appellant for felling trees in his private non-forest garden land — Legislative intent taken into consideration to determine the applicability of the provisions — Plain-meaning rule applied — Principles of interpretation and limitations on application of purposive interpretation discussed**

B. **Statute Law — Extent of — Geographical area for applicability specified by legislature — Court by ignoring it and applying to an area not so covered would be assuming legislative function which is impermissible — Constitutional Law — Separation of powers**

The appellant owned certain land classified as "*bagan*" (garden) in record-of-rights. He decided to uproot worm-affected and non fruit-bearing old trees and plant high-breed saplings in their place. After he had cut two or three trees, the police and the Block Land Reforms Officer prevented him from further felling of trees. The said officers relied on *T.N. Godavarman Thirumulkpad case*, (1997) 2 SCC 267. The appellant filed a writ petition before the High Court challenging the action of the officers and seeking certain directions. A Division Bench disposed of the writ petition. Reading Sections 4-A, 4-B and 4-C of the West Bengal Land Reforms Act, 1955 (for short "the Act") together, the Division Bench held that Section 4-B projected a bar against felling of trees. That felling of a number of trees at a time might in particular circumstances amount to changing the nature and character of land or the mode of use thereof and thereby attract provisions of Sections 4-B and 4-C. That even in non-forest private plantation felling of trees would attract Section 4-B and in that case felling could not be done without obtaining the permission of the Collector under Section 4-C. Therefore, the Division Bench held the appellant to be entitled to cut one out of ten (or one out of five, if total number of trees was less than ten) trees in two

† From the Judgment and Order dated 18-12-1998 of the Calcutta High Court in WP No. 16280(W) of 1998

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years and replace that one by a new sapling. It further directed that one month's prior notice together with necessary undertaking for planting the new sapling was to be given to the Collector for that purpose. The Division Bench authorised the Collector to inspect the land and to take action in case the High Court's order or the provisions of Section 4 were violated. The appellant then filed the present appeal.

Before the Supreme Court, the appellant contended that in the absence of any provision in the Act or any other legislation requiring the appellant to take permission to fell trees in his garden land, which admittedly was not a forest land, the High Court was not right in imposing the restrictions and conditions to fell the trees.

Allowing the appeal in part, the Supreme Court

Held :

Section 4-A of the Act is confined to the three subdivisions of Darjeeling district only. Therefore, an attempt to extend the scope and application of Section 4-A to the area beyond the said three subdivisions would amount to courts assuming legislative functions which is impermissible particularly when there is no ambiguity or uncertainty as to the area to which Section 4-A applies. The said provision could not be read so as to extend its application to other areas which the legislature consciously did not intend to do. (Paras 16 and 24)

From Section 4-B it is clear that a raiyat could not diminish the area of the land or change its character and could not convert the land for any purpose other than the purpose for which it was settled without the previous order in writing of the Collector. Felling of trees was not covered by that section. The first proviso shows that even a raiyat could plant and grow trees in any land held by him within the ceiling area if such land was not cultivated by a *bargadar*. (Para 17)

In view of the Explanation to Section 4-C(1), permission of the Collector was required under Section 4-C for the purpose of change of area, character or use of land and not for felling of trees in private plantation. From Sections 4-C(2) and (5), it is clear that for any contravention of the provisions of the Act, the Act itself has provisions to take care of such contravention Thus, even combined reading of Sections 4-B and 4-C of the Act does not show that the permission of the Collector was required to fell trees in non-forest private plantation area/garden. (Para 18)

It is well-settled principle of interpretation that a statute is to be interpreted on its plain reading; in the absence of any doubt or difficulty arising out of such reading of a statute defeating or frustrating the object and purpose of an enactment, it must be read and understood by its plain reading. However, in case of any difficulty or doubt arising in interpreting a provision of an enactment, courts will interpret such a provision keeping in mind the objects sought to be achieved and the purpose intended to be served by such a provision so as to advance the cause for which the enactment was brought into force. If two interpretations are possible, the one which promotes or favours the object of the Act and purpose it serves, is to be preferred. At any rate, in the guise of purposive interpretation, the courts cannot rewrite a statute. A purposive interpretation may permit a reading of the provision consistent with the purpose and object of the Act but the courts cannot legislate and enact the provision either creating or taking away substantial rights by stretching or straining a piece of legislation. (Para 19)

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CST v. *Parson Tools and Plants*, (1975) 4 SCC 22 : 1975 SCC (Tax) 185; *Sankar Ram & Co.* v. *Kasi Naicker*, (2003) 11 SCC 699, *relied on*

Prem Nath L. Ganesh Dass v. *Prem Nath L. Ram Nath*, AIR 1963 Punj 62 : 64 Punj LR 975, *referred to*

The High Court was not right in reading something more in Sections 4-B and 4-C in regard to the felling of trees in the absence of any such legislative intention expressed in these provisions. The Court could not have added something more to these sections. (Para 24)

Since the ban imposed in *T.N. Godavarman Thirumulkpad*, (1997) 2 SCC 267 in the matter of felling of trees did not extend to non-forest private plantation and there was no State enactment dealing with the felling of trees in non-forest private plantation, the High Court was not right and justified in reading in the provisions of Sections 4-B and 4-C that a permission of the authorities was required for felling of trees even in non-forest private plantation/orchard. The High Court was also not correct in imposing further restrictions and conditions on the appellant for felling trees in his private non-forest garden land.

(Paras 25, 11 and 15)

T.N. Godavarman Thirumulkpad v. *Union of India*, (1997) 2 SCC 267 : AIR 1997 SC 1228, *distinguished*

Therefore, it is held that no permission was required under Section 4-B read with Section 4-C of the Act by the owners of the orchards to fell the old trees for replacing them by new saplings having greater potential of yield.

(Paras 27 and 1)

Mohd. Mustafijur Rahman v. *State of W.B.*, MAT No. 3681 of 1997, *impliedly approved on this point*

Cutting of Trees at Mankundu, Re, (1998) 2 Cal LJ 119, *impliedly overruled*

Biswanath Kumar v. *State of W.B.*, (1996) 2 CHN 407, *considered*

11-M/TZ/30716/S

Advocates who appeared in this case :

Ram Dulal Manna, Raj Kr. Gupta, Sheo Kr. Gupta, Bhanu Pratap Gupta and A.N. Bardaiyar, Advocates, for the Appellant;

Tara Chandra Sharma, Ms Neelam Sharma, Rajeev Sharma and Tarun Sharma, Advocates, for the Respondents.

Chronological list of cases cited ***on page(s)***

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2. (1998) 2 Cal LJ 119, *Cutting of Trees at Mankundu, Re* 504*g*, 505*a-b*
3. (1997) 2 SCC 267 : AIR 1997 SC 1228, *T.N. Godavarman Thirumulkpad* v. *Union of India* 500*b*, 500*e-f*, 502*d-e*, 503*h*, 504*e-f*, 504*f g*, 505*a*, 505*b*, 505*e*, 505*e f*, 509*f g*
4. MAT No. 3681 of 1997, *Mohd. Mustafijur Rahman* v. *State of W.B.* 504*e*, 505*a*, 505*a*
5. (1996) 2 CHN 407, *Biswanath Kumar* v. *State of W.B.* 505*b c*, 506*a*
6. (1975) 4 SCC 22 : 1975 SCC (Tax) 185, *CST* v. *Parson Tools and Plants* 508*e f*
7. AIR 1963 Punj 62 : 64 Punj LR 975, *Prem Nath L. Ganesh Dass* v. *Prem Nath L. Ram Nath* 509*a*

The Judgment of the Court was delivered by

SHIVARAJ V. PATIL, J. The short question that arises for consideration in this appeal is "whether any permission is required under Section 4-B read with Section 4-C of the West Bengal Land Reforms Act, 1955 (for short 'the

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Act') by the owners of the orchards to fell the old trees for replacing them by new saplings having greater potential of yield".

2. The appellant is the owner of certain land classified as "*bagan*" (garden) in the record-of-rights. Since old trees in the land had been affected with uncontrollable worms and had lost their fruit-bearing ability, the appellant decided to uproot them with an intention to renovate the garden by planting high-breed saplings. After he cut two to three trees, the local police personnel and the Block Land Reforms Officer prevented the appellant from further felling, citing the judgment of the Supreme Court in *T.N. Godavarman Thirumulkpad* v. *Union of India*[1]. The appellant, in these circumstances, approached the High Court by filing Writ Petition No. 16280 of 1997 challenging the action of the officers and seeking certain directions. A learned Single Judge of the High Court referred the writ petition to the Division Bench (Green Bench). By the impugned judgment, the Division Bench of the High Court disposed of the writ petition permitting the appellant to fell trees standing in his garden but subject to certain conditions and restrictions. Hence, this appeal is filed by the appellant questioning the validity and correctness of the impugned judgment contending that to fell the trees within his garden land, the appellant was not required to seek any permission under Section 4-B read with Section 4-C of the Act.

3. The learned counsel for the appellant in his arguments reiterated the submissions that were made before the High Court. He contended that in the absence of any provision in the Act or any other legislation requiring the appellant to take permission to fell trees in his garden land, admittedly it being not a forest land, the High Court was not right and justified in imposing certain restrictions and conditions to fell the trees. He also brought to our notice the decisions of the High Court dealing with similar issue. He added that the decision of the Supreme Court in *T.N. Godavarman Thirumulkpad*[1] could not be applied to the facts of the case because the observations made and directions given in that case relate and confine to forest lands.

4. In opposition, the learned counsel for the respondents made submissions supporting the impugned judgment.

5. In order to appreciate the respective contentions, it is useful to refer to the relevant provisions of the Act:

> "4-A. *Certain restrictions on rights of raiyats in Sadar, Kalimpong and Kurseong subdivisions of Darjeeling district.*—(1) *In the Sadar subdivision, Kalimpong subdivision and Kurseong subdivision of the district of Darjeeling, the Collector of the district may, from time to time, give directions regarding the form of cultivation to be adopted by a raiyat in respect of his plot of land or prohibiting a raiyat from cutting more than one tree from his plot of land except with the previous permission in writing of the Collector* or such other officer as may be authorised by the State Government in this behalf:

1 (1997) 2 SCC 267 : AIR 1997 SC 1228

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Provided that in giving directions as aforesaid, the Collector shall follow such procedure as may be prescribed.

(2) For contravention of any of the directions given under sub-section (1), the Collector may, after giving the defaulting raiyat an opportunity to show cause against the action proposed to be taken, impose upon him, by order, a fine not exceeding one thousand rupees which, if not duly paid, shall be recoverable as a public demand.

(3) An appeal, if presented within thirty days from the date of the order appealed against, shall lie to the Commissioner against any order passed by the Collector under sub-section (2) and the decision of the Commissioner shall be final.

4-B. *Maintenance and preservation of land.* Every raiyat holding any land shall maintain and preserve such land in such manner *that its area is not diminished or its character is not changed or the land is not converted for any purpose other than the purpose for which it was settled or previously held except with the previous order in writing of the Collector under Section 4-C*:

Provided *that any raiyat may plant and grow trees on any land held by him within the ceiling area applicable to him and to his family without any previous order under Section 4-C*, if such land is not cultivated by bargadar:

Provided further that without prejudice to the provisions of Chapter II-B of the Act, the provisions of this section shall not apply to the diminution in area or the change of character of any land or the conversion of any land for any purpose other than the purpose for which it was settled or previously held, if such diminution or change of character or conversion was made in accordance with the provisions of any law for the time being in force.

4-C. *Permission for change of area, character or use of land.*—(1) *A raiyat holding any land may apply to the Collector for change of area or character of such land or for conversion of the same for any purpose other than the purpose for which it was settled or was being previously used or for alteration in the mode of use of such land.*

Explanation. For the purposes of this sub-section, mode of use of land may be residential, commercial, industrial, agriculture plantation of tea, pisciculture, forestry, sericulture, horticulture, public utilities or other use of land.

(2) On receipt of such application, the Collector may, after making such inquiry as may be prescribed and after giving the applicant or the persons interested in such land or affected in any way an opportunity of being heard, by order in writing either reject the application or direct such change, conversion or alteration, as the case may be, on such terms and conditions as may be prescribed.

(3) Every order under sub-section (2) directing change, conversion or alteration shall specify the date from which such change, conversion or alteration shall take effect.

(4) A copy of the order passed by the Collector directing change, conversion or alteration, if any, under sub-section (2), or in an appeal therefrom shall be forwarded to the Revenue Officer referred to in Section 50 or Section 51, as the case may be, and such Revenue Officer shall

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incorporate in the record-of-rights changes effected by such order and revise the record-of-rights in accordance with such order.

(5) *If the Collector is satisfied that any land is being converted for any purpose other than the purpose for which it was settled or was being previously held, or attempts are being made to effect alteration in the mode of use of such land or change of the area or character of such land, he may, by order, restrain the raiyat from such act.*" (emphasis supplied)

6. By the impugned judgment, although the appellant is permitted to fell trees standing in his garden land, as already stated above, certain conditions and restrictions were imposed. In the impugned judgment, it is stated that the appellant is entitled to cut one out of ten trees in two years and replace that one with a new sapling. In case, the number of trees is less than ten, permission was granted to cut one out of five but subject to condition that to cut one tree, the appellant was required to replace with a new sapling. It was further directed that the appellant will not take recourse to felling of trees without giving one month's notice to the Collector stating therein all necessary particulars and an undertaking to the effect that the new saplings would be planted within one month of felling the tree. The Collector was also empowered to inspect the land, if so desired, and to take appropriate action in case either the impugned order or the provisions of Section 4 are not complied with. In the impugned judgment, the Division Bench also observed that the State Government should consider enacting a comprehensive law as early as possible on the felling of trees in non-forest areas keeping in view the environmental concerns of the day.

7. This Court in *T.N. Godavarman Thirumulkpad*[1] was dealing with forests having regard to the provisions of the Forest Conservation Act, 1980 (for short "the Conservation Act") and to the environmental and ecological aspects of the matter, considering the possible effect due to deforestation. In para 4 of the judgment, it is stated thus: (SCC pp. 269-70)

"*4.* The Forest Conservation Act, 1980 was enacted with a view to check further deforestation which ultimately results in ecological imbalance; and therefore, the provisions made therein for the conservation of forests and for matters connected therewith, must apply to all forests irrespective of the nature of ownership or classification thereof. The word 'forest' must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2(*i*) of the Forest Conservation Act. The term 'forest land', occurring in Section 2, will not only include 'forest' as understood in the dictionary sense, but also any area recorded as forest in the government record irrespective of the ownership. This is how it has to be understood for the purpose of Section 2 of the Act. The provisions enacted in the Forest Conservation Act, 1980 for the conservation of forests and the matters connected therewith must apply clearly to all forests so understood irrespective of the ownership or classification thereof."

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8. Directions given under para 5, to the extent they are relevant for the purpose, are extracted below: (SCC pp. 270-71)

a "*1.* In view of the meaning of the word 'forest' in the Act, it is obvious that prior approval of the Central Government is required for any non-forest activity within the area of any 'forest'. In accordance with Section 2 of the Act, all ongoing activity within any forest in any State throughout the country, without the prior approval of the Central Government, must cease forthwith. ...

b *2.-3.* * * *

4. ... This ban will also not affect felling in any private plantation comprising of trees planted in any area which is not a forest."

9. In the said judgment, certain specific directions are given to the States specified therein. Relevant directions given for the State of Himachal Pradesh and the hill regions of the States of Uttar Pradesh and *West Bengal*, to the
c extent relevant, read as under: (SCC p. 273, para 5)

"*1.* There will be no felling of trees permitted in any forest, public or private. *This ban will not affect felling in any private plantation comprising of trees planted in any area which is not a 'forest'; and which has not been converted from an earlier 'forest'.* ...

d *2.-4.* * * *"

(emphasis supplied)

10. It is clear from the aforesaid judgment of this Court that the observations made and directions given were in relation to forest land. The term "forest land" occurring in Section 2 of the Conservation Act will not only include "forest" as understood in the dictionary sense but also includes
e any land recorded as forest in the government record irrespective of the ownership. It is also stated that the provisions of the Conservation Act for the conservation of forest and the matters connected therewith must apply clearly to all forests so understood irrespective of ownership or the classification thereof. By the directions given in the said judgment, certain bans are imposed including a ban in respect of felling of trees in forest, irrespective of
f the nature of the forest i.e. whether the forest is public forest or private, reserved, protected or otherwise. It is clear from the observations made and directions given in the aforesaid judgment of this Court that though ban was imposed in respect of undesirable activities in the forest irrespective of the nature of the forest and its ownership but such a ban did not affect felling of trees in any private plantation in an area which is not a forest. Thus, it is clear
g that the direction given by this Court is clearly confined to felling of trees in forest land and the said ban was not extended to non-forest private plantation. It is made clear in the judgment that the directions given are to be implemented notwithstanding any order at variance made or which may be made by the Government or any authority, tribunal or court including the High Court. In the impugned judgment, the High Court having referred to
h *T.N. Godavarman Thirumulkpad*[1] of this Court, has stated thus:

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"In other words, the direction of the Supreme Court regarding the application of ban on felling of trees in forests and non-application of the same in non-forest private plantations has to prevail over any other deviating order even if such order has been or is passed by the High Court. It is however to be noticed here that while the Supreme Court expressly recorded in its direction about the non-application of the ban in any non-forest private plantation, the Supreme Court only nullified in clear words the orders at variance which might have been or might be passed by any Government, authority, tribunal or court. The Supreme Court however did not say nor purported to say that any statutory or enacted law regarding non-forest private plantation will not be given effect to."

11. In the impugned judgment, the High Court has clearly stated that ban on felling of trees imposed by this Court was only relating to trees in forest area and not to non-forest private plantation and that any order contrary cannot prevail. Having said so, the High Court went on to say that this Court did not direct that any statutory or enacted law regarding non-forest private plantation will not be given effect to. This legal position cannot be faulted but the High Court committed an error in its application. Admittedly, there is no statutory or enacted law which enabled the State authorities either to take action for felling of trees in private plantation not being forest and in the absence of any requirement of any statutory enactment to take permission for felling of trees in a private plantation, the High Court could not have imposed restrictions and conditions as is ultimately done in the impugned judgment while permitting the appellant to fell the trees.

12. The Division Bench of the same High Court dealing with a similar situation in MAT No. 3681 of 1997 in *Mohd. Mustafijur Rahman* v. *State of W.B.*[2] having due regard to the decision of this Court in *T.N. Godavarman Thirumulkpad*[1] held that the ban on felling of trees would not affect felling in any private plantation comprising trees planted in any area which is not a forest. However, whether the land in that case was a forest land or not was left to be decided by the authorities. That was a case in which learned Single Judge had taken the view that the restrictions with regard to forest imposed in the decision of *T.N. Godavarman Thirumulkpad*[1] did not apply to the case as the lands were recorded as orchard/garden in the record-of-rights. However, in conclusion, the learned Single Judge imposed certain restrictions with regard to removal of trees. In appeal in MAT No. 3681 of 1997, the Division Bench of the High Court passed the order as stated above.

13. Another Division Bench of the same High Court in *Cutting of Trees at Mankundu, Re*[3] passed an order dated 15-7-1998 directing that there should be total ban on felling of *mahua* and *kendu* trees and that apart, no other tree should be cut or felled by anybody without obtaining permission from the local authority concerned or the District Forest Officers. This

2 MAT No. 3681 of 1997
3 (1998) 2 Cal LJ 119

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decision runs contrary to the earlier Division Bench judgment in MAT No. 3681 of 1997[2] referred to above. Unfortunately, the decision of the Division Bench in MAT No. 3681 of 1997[2] and the decision of this Court in *T.N. Godavarman Thirumulkpad*[1] were not brought to the notice of the Division Bench while deciding the case of *Mankandu*[3] on 15-7-1998. In the impugned judgment, the High Court itself has observed that the directions given in *Mankundu*[3] are inconsistent with the directions given by this Court in *T.N. Godavarman Thirumulkpad*[1] particularly where this Court had specifically directed that its order was to operate and had to be implemented notwithstanding any order made or that may be made by any court or Government, etc., which might be at variance and that there was no scope for issuing such directions in respect of non-forest private plantation.

14. In *Biswanath Kumar* v. *State of W.B.*[4] a learned Single Judge of the High Court considered a question whether the owner of an orchard had any right to fell down trees standing there which had become old and had lost their optimum fruit-bearing capacity. In the light of Sections 4-B and 4-C of the Act, it was held that so long as area, user and character of the land were not changed, the provisions of Section 4-B as also the proviso thereto would not be attracted in a given case. However, keeping in mind factors relating to the environment and ecological balance, the learned Single Judge directed that the raiyat will not be entitled to cut down all the trees in the orchard or garden at a time but shall be entitled to cut once every two years and replace the old, uneconomic and/or unproductive tree or trees in the ratio of 1:10 on condition of replacing the same by a new sapling. The learned Judge also gave certain other directions. It may be noted that this judgment was delivered before this Court rendered decision in *T.N. Godavarman Thirumulkpad*[1].

15. It is not in dispute that there is no enactment in the State of West Bengal regarding felling of trees in non-forest area. It is abundantly clear and unambiguous that the ban imposed by this Court in *T.N. Godavarman Thirumulkpad*[1] would apply only to forest land irrespective of the nature or classification or ownership of such forest land and that the ban did not apply to non-forest private plantation. In the impugned judgment, the Division Bench of the High Court also accepts this position. But the Division Bench reading Sections 4-A, 4-B and 4-C and particularly reading Sections 4-B and 4-C together took the view that Section 4-B of the Act definitely projects a bar against felling of trees; it may not be in respect of felling of a single tree; but felling of a number of trees at a time may in particular circumstances amount to changing nature and character of land or the mode of its use and thereby attract provisions of Sections 4-B and 4-C. It was further held by the High Court that for felling of trees in non-forest private plantation, definitely Section 4-B will be attracted and in that case, such a felling cannot be done without obtaining permission of the Collector under Section 4-C. Observations of the High Court in this regard are:

4 (1996) 2 CHN 407

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"The learned Judge in the decision in *Biswanath Kumar* v. *State of W.B.*[4] was of the opinion that anticipated change of the character and user of the lands comprising orchards cannot be a ground for objecting to the felling of the trees belonging to the owners in the absence of any law prohibiting them from doing so. In our opinion, however, the position becomes rather different when Sections 4-B and 4-C are read together. The bar imposed by Section 4-B is against changing the character of land or its conversion for use for a different purpose without the previous permission of the Collector. Cutting of only one tree in an orchard may not by itself change the nature and character of the land or may not amount to conversion of the land for any purpose other than the purpose for which it was settled or was previously held. But felling of a number of trees at a time may in particular circumstances amount to changing the nature and character of the land concerned and thereby attract provisions of Sections 4-B and 4-C. That trees may have some bearing on the nature and character of the land on which they are standing or on the mode of its use is beyond doubt. This gets exemplified by the first proviso to Section 4-B which permits a raiyat to plant and grow trees on his land without the previous order of the Collector if such land is not cultivated by *bargadar*. A land which is used as cultivable land may be converted into a different type by planting quite a number of trees on it thereby replacing cultivation by afforestation. The proviso permits afforestation or planting or growing of trees on the land without any order of the Collector although by doing so the nature and character of the land or its user may be changed. But this is not permitted if the land is under the cultivation of *bargadar* so that the *bargadar's* interest in the matter of growing crops in that land and receiving share thereof may not be jeopardised or affected. This is one aspect of the matter. Similarly if an orchard is cleared of the trees or a number of trees are cut down without taking any measure to protect and preserve the nature and the character of the land, in that event Section 4-B and Section 4-C will be definitely attracted to such felling of trees. It, therefore, cannot be said that there is altogether no statutory provision imposing any restriction on the felling of trees in non-forest private plantation."

16. Section 4-A of the Act imposes certain restrictions on rights of raiyats in Sadar, Kalimpong and Kurseong subdivisions of Darjeeling district. In these subdivisions under Section 4-A(1), the Collector of the District may, from time to time, give directions regarding the form of cultivation to be adopted by a raiyat in respect of his plot of land or prohibit a raiyat from cutting more than one tree from his plot of land except with the previous permission in writing of the Collector or such other officer as may be authorised by the State Government in this behalf. Under sub-section (2) of the said section, the Collector may take action against defaulting raiyat for contravention of any of the directions given under sub-section (1) and may impose fine upon him. Under sub-section (3), an appeal is also provided against an order made under sub-section (2). Thus, from Section 4-A, it is

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clear that its application is confined to the three subdivisions of Darjeeling district only. When by legislation, scope and application of Section 4-A is consciously confined to the said three subdivisions of Darjeeling district, court cannot enlarge or extend its scope to the other lands in the State of West Bengal situated in areas other than these subdivisions. An attempt to extend the scope and application of Section 4-A to the area beyond the said three subdivisions amounts to courts assuming legislative functions which is impermissible particularly when there is no ambiguity or uncertainty as to the area to which Section 4-A applies. The said provision cannot be read so as to extend its application to other areas which the legislature consciously did not intend to do. If the legislature wanted to apply Section 4-A to the entire State of West Bengal, it could have done so. On the other hand, the legislature had expressly confined its application to the three subdivisions of Darjeeling district.

17. Section 4-B speaks of maintenance and preservation of land. Under this section, every raiyat holding any land is obliged to maintain and preserve such land in such manner that its area is not diminished or its character is not changed or the land is not converted for any purpose other than the purpose for which it was settled or previously held except with the previous order in writing of the Collector under Section 4-C. Under the first proviso to the said section, any raiyat may plant and grow trees on any land held by him within the ceiling area applicable to him and to his family without any previous order under Section 4-C, if such land is not cultivated by a *bargadar*. From a plain reading of this section, it is clear that a raiyat cannot diminish area of the land or change its character or cannot convert the land for any purpose other than the purpose for which it was settled without the previous order in writing of the Collector. Felling of trees is not covered by this section. Mere felling of trees cannot be taken as diminishing the area of the land or changing its character or converting it for any purpose other than the purpose for which it was settled. The first proviso shows that even a raiyat can plant and grow trees in any land held by him within the ceiling area if such land is not cultivated by a *bargadar*.

18. Section 4-C deals with the permission for change of area, character or use of land. Under this section, a raiyat holding any land may apply to the Collector for change of area or character of such land or for conversion of the same for any purpose other than the purpose for which it was settled or was being previously used or for alteration in the mode of use of such land. The Explanation to sub-section (1) of Section 4-C says that for the purpose of sub-section (1) of Section 4-C, mode or use of land may be residential, commercial, industrial, agriculture plantation of tea, pisciculture, forestry, sericulture, horticulture, public utilities or other use of land. In this view, permission of the Collector is required under Section 4-C for the purpose of change of area, character or use of land and not for felling of trees in private plantation. Mere felling of trees neither diminishes the area nor changes the character or use of land covered by the Explanation to sub-section (1) of Section 4-C. Under Section 4-C(2), the Collector on receipt of application

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from a raiyat for change of use of land, conversion or alteration, as the case may be, may pass an order. Under sub-section (5) of the said section, the Collector, if satisfied that any land is being converted for any purpose other than the purpose for which it was settled or attempts are being made to effect alteration in the mode of use of such land or change of the area or character of such land, he may, by order restrain the raiyat from such act. Thus, the Collector has to satisfy himself about any contravention in regard to conversion, change of use or change of area or character of land before passing an order to restrain the raiyat from such act. For any contravention of the provisions of the Act, the Act itself has provisions to take care of contravention, if any, under the Act. Thus, even combined reading of Sections 4-B and 4-C of the Act does not show that the permission of the Collector is required to fell trees in non-forest private plantation area/garden.

19. It is well-settled principle of interpretation that a statute is to be interpreted on its plain reading; in the absence of any doubt or difficulty arising out of such reading of a statute defeating or frustrating the object and purpose of an enactment, it must be read and understood by its plain reading. However, in case of any difficulty or doubt arising in interpreting a provision of an enactment, courts will interpret such a provision keeping in mind the objects sought to be achieved and the purpose intended to be served by such a provision so as to advance the cause for which the enactment is brought into force. If two interpretations are possible, the one which promotes or favours the object of the Act and purpose it serves, is to be preferred. At any rate, in the guise of purposive interpretation, the courts cannot rewrite a statute. A purposive interpretation may permit a reading of the provision consistent with the purpose and object of the Act but the courts cannot legislate and enact the provision either creating or taking away substantial rights by stretching or straining a piece of legislation.

20. This Court in *CST* v. *Parson Tools and Plants*[5] has taken the view that if the legislature did not, after due application of mind, incorporate a particular provision, it cannot be imported into it by analogy, observing that: (SCC p. 27, para 15)

> "An enactment being the will of the legislature, the paramount rule of interpretation, which overrides all others, is that a statute is to be expounded 'according to the intent of them that made it'."

21. Further in para 16 of the said judgment, this Court has observed thus: (SCC p. 28)

> "*16.* If the legislature wilfully omits to incorporate something of an analogous law in a subsequent statute, or even if there is a *casus omissus* in a statute, the language of which is otherwise plain and unambiguous, the court is not competent to supply the omission by engrafting on it or introducing in it, under the guise of interpretation, by analogy or implication, something what it thinks to be a general principle of justice and equity. To do so 'would be entrenching upon the preserves of

5 (1975) 4 SCC 22 : 1975 SCC (Tax) 185

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legislature' (at p. 65 in *Prem Nath L. Ganesh Dass* v. *Prem Nath L. Ram Nath*[6] per Tek Chand, J.), the primary function of a court of law being *jus dicere* and not *jus dare*."

22. Further para 23 of the same judgment reads: (SCC p. 29)

"*23.* We have said enough and we may say it again that where the legislature clearly declares its intent in the scheme and language of a statute, it is the duty of the court to give full effect to the same without scanning its wisdom or policy, and without engrafting, adding or implying anything which is not congenial to or consistent with such expressed intent of the lawgiver;"

23. In *Sankar Ram & Co.* v. *Kasi Naicker*[7] this Court in para 7 has stated thus: (SCC pp. 704-05)

"*7.* It is a cardinal rule of construction that normally no word or provision should be considered redundant or superfluous in interpreting the provisions of a statute. In the field of interpretation of statutes, the courts always presume that the legislature inserted every part thereof with a purpose and the legislative intention is that every part of the statute should have effect. It may not be correct to say that a word or words used in a statute are either unnecessary or without any purpose to serve, unless there are compelling reasons to say so looking to the scheme of the statute and having regard to the object and purpose sought to be achieved by it."

24. Thus, in the light of the legal position explained in various decisions, the High Court was not right in expanding the scope and application of Section 4-A so as to apply it to the areas in the State of West Bengal other than the area specified in three subdivisions of Darjeeling district. When the intention of the legislature is clear to confine its application to the limited area, the court could not ignore it. The High Court was also not right in reading something more in Sections 4-B and 4-C in regard to the felling of trees in the absence of any such legislative intention expressed in these provisions. The Court could not have added something more to these sections.

25. The High Court, being clear in its mind that the ban imposed in *T.N. Godavarman Thirumulkpad*[1] in the matter of felling of trees did not extend to non-forest private plantation and there being no State enactment dealing with the felling of trees in non-forest private plantation, in our view, was not right and justified in reading in the provisions of Sections 4-B and 4-C that permission of the authorities is required for felling of trees even in non-forest private plantation/orchard. The High Court was also not correct in imposing further restrictions and conditions on the appellant for felling trees in his private non-forest garden land. The High Court in the impugned judgment itself has observed that the State Government may consider the desirability of having enacted a comprehensive law as early as possible regarding felling of

6 AIR 1963 Punj 62 : 64 Punj LR 975
7 (2003) 11 SCC 699

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the trees in non-forest areas with a view to taking care of environmental necessities of the time. If the provisions of Section 4-B read with Section 4-C of the Act serve such a purpose and if the High Court was clear in that regard, there was no reason to make such an observation. Nothing prevents the State Government to enact law in this regard but in the absence of such a law and till law is enacted in that regard, the High Court was not right in imposing restrictions as is done in this case in regard to felling of trees.

26. The question set out above in the beginning of this judgment is answered in the negative.

27. In the result, the impugned judgment so far as it relates to imposition of restrictions and conditions on the appellant for felling the trees cannot be sustained and they are set aside. To make the position clear, we state that no such permission is required for felling trees in the non-forest private plantation/orchard/*bagan*. The appeal is allowed accordingly in the above terms. No costs.

(2004) 11 Supreme Court Cases 510

(BEFORE N. SANTOSH HEGDE, S.B. SINHA AND A.K. MATHUR, JJ.)

B.C. SESHADRI .. Appellant;

Versus

B.N. SURYANARAYANA RAO .. Respondent.

Criminal Appeal No. ... of 2004[†], decided on August 4, 2004

Negotiable Instruments Act, 1881 — Ss. 147 and 138 — Settlement — Compounding of offence under S. 138 — Claim settled and complainant stating that he had no objection to compounding of matter — Compounding permitted and sentence set aside

Anil Kumar Haritwal v. *Alka Gupta*, (2004) 4 SCC 366 : 2004 SCC (Cri) 1084, *followed*

Appeal allowed D-M/30396/SR

Chronological list of cases cited ***on page(s)***

1. (2004) 4 SCC 366 : 2004 SCC (Cri) 1084, *Anil Kumar Haritwal* v. *Alka Gupta* 511*b c*

ORDER

1. Heard learned counsel for the parties.

2. Leave granted.

3. The appellant before us was convicted by the XIIIth Additional Chief Metropolitan Magistrate, Bangalore for an offence punishable under Section 138 of the Negotiable Instruments Act, 1881 and was sentenced to pay a fine of Rs 20,000 and in default to pay the same, to undergo simple imprisonment for four months.

4. The appeal filed against the said judgment of the trial court was dismissed by the Ist Additional Sessions Judge, Bangalore and a criminal

[†] Arising out of SLP (Crl.) No. 482 of 2003

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(1954) 2 Supreme Court Cases 314

(BEFORE M.C. MAHAJAN, C.J. AND B.K. MUKHERJEA, S.R. DAS, VIVIAN BOSE AND GHULAM HASAN, JJ.)

5J

1954

Sep 29

RANANJAYA SINGH . . Appellant;

Versus

BAIJNATH SINGH AND OTHERS . . Respondents.

Civil Appeal No. 73 of 1954†, decided on September 29, 1954

A. **Election — Corrupt Practices/Electoral Offences — Excess Expenditure — Employing more persons and incurring more expenditure — Assistance by employees of third person if included**

Held, such employment of extra persons must be by the candidate or his agent Where persons who were employees of father of appellant candidate and who were paid by the father, assisted the appellant candidate in his election voluntarily, held, it could not be said that such persons were employed or paid by the appellant candidate Hence, appellant candidate cannot be held guilty of corrupt practice under S. 123(7) of the RP Act, 1951

Representation of the People Act, 1951 S. 123(7) [prior to amendment by Act 58 of 1958] and S. 77 r/w R. 118 and Sch. VI Representation of the People (Conduct of Elections and Election Petitions) Rules, 1951, R. 118

B. **Election — Corrupt Practices/Electoral Offences — Excess Expenditure — Held, a corrupt practice — Such excess expenditure must be incurred or authorised by the candidate or his agent**

Representation of the People (Conduct of Elections and Election Petitions) Rules, 1951 R. 117 Representation of the People Act, 1951 S. 123(7) [prior to amendment by Act 58 of 1958] and S. 77 r/w R. 117 and Sch. V

C. **Election — Corrupt Practices/Electoral Offences — Excess Expenditure — Omission to reveal excess expenditure — Not a corrupt practice if no such expenditure made**

Held :

Not having incurred any expenditure over and above what was shown by him in his return of election expenses the appellant cannot be said to have concealed such expenditure and, therefore, he cannot be held to have been guilty of any minor corrupt practice under S. 124(4) of the Act.

D. **Interpretation of Statutes — Basic Rules — Plain or ordinary meaning — Effect to — Held, spirit of the law cannot be given effect to in opposition to plain language of the statutory provisions — If plain or ordinary construction of statutory provisions results in injustice, complaint must be made to Parliament and not to Supreme Court**

† On appeal by special leave granted by this court on 4-3-1954 against the Judgment and Order dated 11-2-1954 of the Election Tribunal, Allahabad in Election Petition No. 252 of 1952 **[Reversed]**

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The appellant successfully got elected to the Uttar Pradesh Legislative Assembly from Amethi (Central) constituency. The respondent who was one of the unsuccessful candidates filed an election petition calling in question the election of the appellant. The two main grounds of challenge were: (*i*) appellant employed for election more persons than authorised by law; (*ii*) appellant incurred the expenditure in election in excess of the prescribed limit of expenditure.

The Election Tribunal held that the number of all the persons worked for the appellant far exceeded the prescribed number of persons who could be employed in an election and their salary for the period they worked for the appellant in connection with the election, if added to the admitted election expenses, would exceed the maximum expenditure permissible for contesting a single-member constituency. The Tribunal, therefore, held that the appellant was guilty, under both the heads, of corrupt practice as defined in Section 123(7) of the Representation of the People Act, 1951. In the result, the election of the appellant was declared to be void. Hence, this appeal by the appellant.

Allowing the appeal with costs, the Supreme Court

Held :

It is true that Section 77 of the Representation of the People Act, 1951 uses the words "who may be employed for payment" without indicating by whom employed or paid but it must be borne in mind that the gist of a corrupt practice as defined in Section 123(7) of the Act is that the employment of extra persons and the incurring or authorising of excess expenditure must be by the candidate or his agent. The provisions of Rules 117 and 118 of the Representation of the People (Conduct of Elections and Election Petitions) Rules, 1951 are to be read in the light of this definition of a corrupt practice. Indeed, these rules follow the language of Section 123(7) in that they prohibit the employment of persons other than or in addition to those specified in Schedule VI and the incurring or authorising of expenditure in excess of the amount specified in Schedule V and in both cases by a candidate or his agent. Section 77 must, therefore, be read in a manner consonant with Section 123(7) and Rules 117 and 118. There can be no doubt that in the eye of the law the extra persons were in the employment of the father of the appellant and paid by the father and they were neither employed nor paid by the appellant. The case, therefore, does not fall within Section 123(7) of the Act at all and if that be so, it cannot come within Section 124(4) of the Act. (Para 6)

It obviously was a case where a father assisted the son in the matter of the election. These persons were the employees of the father and paid by him for working in the estate. At the request of the father they assisted the son in connection with the election which strictly speaking they were not obliged to do. Was the position in law at all different from the position that the father had given these employees a holiday on full pay and they voluntarily rendered assistance to the appellant in connection with his election? It is not. It is clear that qua the appellant these persons were neither employed nor paid by him. So far as the appellant was concerned they were mere volunteers and the employment of volunteers does not bring the candidate within the mischief of the definition of corrupt practice as given in Section 123(7) of the Act. (Para 6)

A contention was made that such a construction would be against the spirit of the election laws in that candidates who have rich friends or relations would have an unfair advantage over a poor rival. The spirit of the law may well be an

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elusive and unsafe guide and the supposed spirit can certainly not be given effect to in opposition to the plain language of the sections of the Act and the Rules made thereunder. If all that can be said of these statutory provisions is that construed according to the ordinary, grammatical and natural meaning of their language they work injustice by placing the poorer candidates at a disadvantage the appeal must be to Parliament and not to the Supreme Court. (Para 6)

On a consideration of the relevant provisions of the Act and the Rules, it is opined that the appellant cannot in the circumstances of this case be held to be guilty of any corrupt practice under Section 123(7) of the Act as alleged against him. (Para 7)

Joseph Forster Wilson v. *Sir Christopher Furness*, 6 O'Mally & Hardcastle's Report of Election Cases 1 at p. 6., *referred to*

O M/50719/C

Ed.: *For case treatment of the above rulings like followed, distinguished, overruled, etc. in later cases of the Supreme Court and High Courts see* SCC OnLine.

Advocates who appeared in this case :
N.C. Chatterjee and G.N. Kunzru, Senior Advocates (Rameshwar Nath and Rajinder Narain, Advocates, with him), for the Appellant;
M. Veda Vyasa, Senior Advocate (G.C. Mathur, Advocate, with him), for Respondent 1.

The Judgment of the Court was delivered by

S.R. DAS, J. Kunwar Rananjaya Singh, the appellant before us, is the son of Raja Bhagwan Bux Singh of Amethi. He was the successful candidate at an election to the Uttar Pradesh Legislative Assembly from Amethi (Central) constituency the polling in respect of which took place on 31-1-1952 and the result whereof was announced on 6-2-1952 and finally published in the Uttar Pradesh State Gazette on 26-2-1952. The respondent Baijnath Singh who was one of the unsuccessful candidates filed an election petition calling in question the election of the appellant. Three other unsuccessful candidates were also impleaded as respondents.

2. The grounds on which the election was challenged were that the appellant himself, together with his own and his father's servants and other dependants and agents, committed various corrupt practices of bribery, exercise of undue influence, publication of false and defamatory statements and concealment of election expenses as per particulars set forth in the petition and the schedules thereto. He prayed that the election of the appellant be set aside and that he, the said respondent, be declared to have been duly elected. The appellant alone contested the petition. In his written statement he denied each and every one of the charges of corrupt practices levelled against him and he also filed a petition of recrimination challenging the conduct of the said respondent at the election. The said respondent denied the charges imputed to him. Altogether 15 issues were raised, namely, eight on the election petition and 7 on the petition of recrimination. All the 7 issues arising out of the petition of recrimination were found by the tribunal constituted for hearing of the election petition against the appellant and the petition of recrimination was dismissed.

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The appellant has not contested the correctness of those findings before us and nothing further need be said about them.

3. As regards the issues arising on the main election petition the Election Tribunal found in favour of the appellant on Issues 1, 2, 4, 5, 6 and 7 but decided Issue 3 against the appellant. That issue was as follows:

> "3. Did Respondent 1 employ for election more persons than authorised by law?
>
> Did Respondent 1 incur the expenditure shown in the list as "Heads of other concealed expenditures"? Did he exceed the prescribed limit of expenditure for election?"

The above issue related to charges made out in Para 6 of the election petition and the list of particulars set out in Part III of the Schedule thereto. The particulars in that part were grouped under two main heads, each containing several items. The first head referred to persons alleged to have been employed on payment far in excess of the prescribed number and not shown in the return of election expenses. The second head of particulars contained other alleged concealed expenditures.

4. The Election Tribunal held in favour of the appellant on all items of charges under both heads in Part III except Items (*ii*) and (*iii*) of the first head. Item (*ii*) charged that all the paid Ziladars of Amethi estate who were about 20 in number assisted by their peons and orderlies worked for the appellant and Item (*iii*) complained that the Manager and the Assistant Manager of that estate also worked for him. The Tribunal held that the number of all these persons coming within these two categories far exceeded the prescribed number of persons who could be employed in an election and their salary for the period they worked for the appellant in connection with the election, if added to the admitted election expenses, would exceed the maximum expenditure permissible for contesting a single-member constituency. The Tribunal, therefore, held that the appellant was guilty, under both these heads, of corrupt practice as defined in Section 123(7) of the Representation of the People Act, 1951 and was consequently liable to be dealt with under Section 100(2)(*b*) and Section 145 of that Act. These findings as to employment of extra persons on payment and the expenditure of money in excess of the permissible maximum election expenses necessarily led to the further finding that inasmuch as these expenses had not been shown in the appellant's return of election expenses the appellant was also guilty of a minor corrupt practice as defined in Section 124(4) of the Act and was liable to be dealt with under Section 100(2)(*a*) and Section 145 of the Act. In the result, the Tribunal under the general Issue 8 only declared the election of the appellant to be void. Hence this appeal filed by the unseated candidate with the special leave of this Court.

5. Section 77 of the Representation of the People Act, 1951 provides that the maximum scales of election expenses at elections and the numbers and descriptions of persons who may be employed for payment in connection with election shall be as may be prescribed. As regards the maximum expense

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Rule 117* lays down that no expense shall be incurred or authorised by a candidate or his election agent on account of or in respect of the conduct and management of an election in any one constituency in a State in excess of the maximum amount specified in respect of that constituency in Schedule V. The maximum amount specified in that schedule in respect of a single-member constituency in Uttar Pradesh is only Rs 8000. Rule 118 prescribes that no person other than or in addition to those specified in Schedule VI shall be employed for payment by a candidate or his election agent in connection with an election. Schedule VI allows 1 election agent, 1 counting agent, 1 clerk and 1 messenger at all elections. It also allows, in addition to these, 1 clerk and 1 messenger for every 75,000 electors and 1 polling agent and 2 relief agents for each polling booth and 1 messenger at each polling booth. The contravention of the provisions of Section 77 read with Rules 117 and 118 and Schedules V and VI is made a corrupt practice by Section 123(7). Section 123(7) clearly shows that in order to amount to a corrupt practice the excess expenditure must be incurred or authorised *by* a candidate or his agent and the employment of extra persons must likewise be *by* a candidate or his agent.

6. The charge against the appellant was, inter alia, that the Manager, Assistant Manager, 20 Ziladars of Amethi estate and their peons and orderlies had worked for the appellant in connection with the election. The Tribunal took the view—we think quite erroneously—that although the estate belonged to the father of the appellant, nevertheless, as the appellant was the heir apparent and actually looked after the estate on behalf of the old and infirm proprietor, these servants of the estate were "virtually" his "own" servants and could properly be regarded as having been employed for payment by the appellant. The learned Advocate appearing for the respondent frankly and properly conceded that he could not support this part of the finding of the Tribunal. He, however, contended, relying on the language used in Section 77, that if the number of persons who worked for payment in connection with the election exceeded the maximum number specified in Schedule VI, the case fell within the mischief of the relevant sections and the rules, no matter who employed them or who made payments to them. It is true that Section 77 uses the words "who may be employed for payment" without indicating by whom employed or paid but it must be borne in mind that the gist of a corrupt practice as defined in Section 123(7) is that the employment of extra persons and the incurring or authorising of excess expenditure must be *by* the candidate or his agent. The provisions of Rules 117 and 118 are to be read in the light of this definition of a corrupt practice. Indeed, these rules follow the language of Section 123(7) in that they prohibit the employment of persons other than or in addition to those specified in Schedule VI and the incurring or authorising of expenditure in excess of the amount specified in Schedule V and in both cases *by* a candidate or his agent. Section 77 must, therefore, be read in a manner consonant with Section 123(7) and Rules 117 and 118. In this view of the matter the observation

* **Ed.:** Representation of the People (Conduct of Elections and Election Petitions) Rules, 1951, Rule 117

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made by Phillimore, J. in *Joseph Forster Wilson* v. *Sir Christopher Furness*[1] relied on by the appellant and referred to in the judgment of the Tribunal are quite apposite. There can be no doubt that in the eye of the law these extra persons were in the employment of the father of the appellant and paid by the father and they were neither employed nor paid by the appellant. The case, therefore, does not fall within Section 123(7) at all and if that be so, it cannot come within Section 124(4). It obviously was a case where a father assisted the son in the matter of the election. These persons were the employees of the father and paid by him for working in the estate. At the request of the father they assisted the son in connection with the election which strictly speaking they were not obliged to do. Was the position in law at all different from the position that the father had given these employees a holiday on full pay and they voluntarily rendered assistance to the appellant in connection with his election? We think not. It is clear to us that *qua* the appellant these persons were neither employed nor paid by him. So far as the appellant was concerned they were mere volunteers and the learned advocate for the respondent admits that employment of volunteers does not bring the candidate within the mischief of the definition of corrupt practice as given in Section 123(7). The learned advocate, however, contended that such a construction would be against the spirit of the election laws in that candidates who have rich friends or relations would have an unfair advantage over a poor rival. The spirit of the law may well be an elusive and unsafe guide and the supposed spirit can certainly not be given effect to in opposition to the plain language of the sections of the Act and the rules made thereunder. If all that can be said of these statutory provisions is that construed according to the ordinary, grammatical and natural meaning of their language they work injustice by placing the poorer candidates at a disadvantage the appeal must be to Parliament and not to this Court.

7. On a consideration of the relevant provisions of the Act and the rules and the arguments advanced before us we are of opinion that the appellant cannot in the circumstances of this case be held to be guilty of any corrupt practice under Section 123(7) as alleged against him. It follows from this that not having incurred any expenditure over and above what was shown by him in his return of election expenses he cannot be said to have concealed such expenditure and, therefore, he cannot be held to have been guilty of any minor corrupt practice under Section 124(4) of the Act. In the view we have taken, namely, that these extra men were not employed or paid by the appellant, it is unnecessary, for the purpose of this appeal, to discuss the question whether, if one's own servants are also utilised or employed in the conduct of the election, their salary for the period they are so utilised or employed should be regarded as election expenses and shown in the return. On that we prefer not to express any opinion on this occasion. No other point having been raised we allow this appeal with costs.

Appeal allowed

1 6 O'Mally & Hardcastle's Report of Election Cases 1 at p. 6.

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Dear Sir/Ma'am

Please find attached the copy of Reply Affidavit on behalf of Greenfield Chemical Complex, GHCL Ltd, Respondent No. 5 in the abovementioned case.

Thanks & Regards
--
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