BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

WESTERN ZONE BENCH, PUNE

AT PUNE

ORIGINAL APPLICATION NO. 54 OF 2024 (WZ)

KULDIP KHIMJI SODHA … APPLICANT

V/s

UNION OF INDIA & OTHERS … RESPONDENTS

INDEX

12.	**R-9**	Copy of the letter dated 24th December 2021	-	507
13.	**R-10**	Copy of the letter dated 21st April 2022	508	525
14.	**R-11**	Copy of the letter dated 17th December 2022	-	526
15.	**R-12**	Copy of the letter dated 30th December 2022	-	527
16.	**R-13**	Copy of the letter dated 16th January 2023	-	528
17.	**R-14**	Copy of the report dated 3rd February 2024	529	631
18.	**R-15**	Copy of the letters addressed to the Respondent No.3	-	632
19.	**R-16**	Copy of the application dated 26th April 2024	633	639
20.	**R-17**	Copy of the NOCAP dated 2nd March 2025	640	641
21.	**R-18 Colly**	Copy of the recent visit report dated 07/04/2025 and reply dated 26/06/2025	642	658
		Last Page		**658**

PUNE

DATE : 08/08/2025

Advocate for Respondent No.8

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WESTERN ZONE BENCH, PUNE

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ORIGINAL APPLICATION NO. 54 OF 2024 (WZ)

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V/s

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REPLY ON BEHALF OF RESPONDENT No.8 TO THE REPORT DATED 29-04-2025 OF THE RESPONDENT No.9

MAY IT PLEASE THE HON'BLE TRIBUNAL

THE RESPONDENT NO.8 MOST RESPECTFULLY SUBMITS THAT :-

1. At the outset, the Respondent No.8 in the present proceedings denies everything that is contrary what is stated therein and/or inconsistent therewith as if the same is set out in extenso and traversed. The Respondent No.8 submits that, nothing not expressly admitted herein ought to be taken as admitted by the Respondent No.8 or be deemed to have been admitted by the Respondent No.8 for want of specific traverse. The Respondent No.8 states that for the purpose of gravity, the Respondent No.8 is

not denied each and every allegation, statement and contention of the Applicant and Respondent No.9 which is ex-facia contrary to the contention of Respondent No.8 and its stand in the present case except to the extent that such allegation, statement or contention necessitate, cogent, warrant or reply.

2. The Respondent No.8 submits that the Respondent No.8 has already filed its reply to the Original Application on 28th October 2024 **(Pg No.165)** and additional reply on 5th November 2024 **(Pg No.330).** The Respondent No.8 adopts, reiterates, confirms the statements and averments made in the said replies. Also, the Respondent No.8 is submitting certain additional submissions, which have been missed in the said replies. The present reply may kindly be treated as a composite reply.

PRELIMINARY OBJECTION

3. The Respondent No.8 submits that the present Application has been filed by the Applicant, which in its description of Parties states that, it is located at Bhuj in the State of Gujarat. The present case pertains to the area of Panandhro and is located at a distance of 135 KMs from the Applicant herein. The Applicant in the entire Original Application has failed to make out a case that how it is aggrieved by the operation of the Respondent No.8. The Applicant

is neither an aggrieved party nor residing within the vicinity of the Respondent No.8 and thus, the issue of locus of Applicant is to be decided by this Hon'ble Tribunal. The Hon'ble Supreme Court in the Judgement of *'Uday Welfare Trust Vs. State of U.P.'* has clearly held that, this Hon'ble Tribunal has to consider the bonafide of the litigant approaching the Hon'ble Tribunal as the question of operation of Industry and employment of numerous employees is depending on the order of this Hon'ble Tribunal. Hereto annexed herewith and marked as **ANNEXURE 'R-1'** is the copy of the Judgment of the Hon'ble Supreme Court in the Judgement of *'Uday Welfare Trust Vs. State of U.P.'*

ADDITIONAL SUBMISSIONS

4. The Respondent No.8, is a unit of Gujarat State Electricity Corporation Limited (GSECL), has been operating in a strategically sensitive and remote region near the India–Pakistan border. Despite being a non-profit making unit due to high maintenance and operational costs, the station has continuously remained operational to serve the national interest by ensuring uninterrupted power supply and extending basic infrastructure support to defence establishments in the region.

5. The Respondent No.8, further submits that the plant plays a pivotal role in the local economy, providing direct and indirect employment to over 5000 individuals. Any disruption or forced closure of the plant would lead to economic destabilization of the local area, severely impacting livelihoods, regional development, and existing public infrastructure dependencies only on the basis of the present application of the Applicant, which is no way concern with the region.
6. GSECL, a well-reputed government organization, has been contributing to the development of the power sector in Gujarat and India since its inception. The corporation reiterates its commitment to full compliance with all environmental laws, standards, and CGWA/NGT guidelines. The current issue arises from procedural delays rather than any wilful violation, and the management is fully aligned toward resolving all outstanding regulatory matters proactively. In light of the strategic relevance, socio-economic impact, public utility nature of the project, and the bonafide intent of the organization, it is humbly requested that the Hon’ble Tribunal may consider these aspects at the time of adjudication of the present application.

7. The Respondent No.8 submits that at present only one unit of 75 MW is in working condition, the Respondent No.8 has hired approved vendor of the Respondent No.9 to assert the water condition and the vender submitted the report and the vendor stated the water is saline water, **(EC > 5000 Micro-Siemens/cm)** The Respondent No.8 has complied all the respondent-3(GPCB) guidelines and environmental issues.
8. The Respondent No.8 submits that the unit is situated at **Bharat-Pak Border**. The unit is having impact on various field of life of local villagers/human being like ,
9. **(a) Social impact**: KLTPS is practising need based CSR activities for betterment of living standard of villagers. KLTPS is planting trees, developing a Miyawaki park for betterment of environment leads enough rain in monsoon (KLTPS has planted 700 nos of tree on occasion of World Environment Day-2025 which was published in local newspapers, Planted 820 Nos of tree in plant with the help of staff and their family on 17.07.2025 the same has published in local newspaper.), KLTPS has placed a work order for Miyawaki park of 5000 tress in KLTPS Plant. KLTPS is always provides immediate fire tanker service to cope up any emergency till Bhuj/Koteshwar/Nearby villages. KLTPS is to be Provided

medical facility, Ambulance in emergency to nearby villagers at free of cost. Providing accommodation & food packets in cyclone, Earth quake (plant situated at very high risk Seismic Zone-V, Earth quake Fault line) to local villagers in co-ordination & instruction of Mamalatdar, Dayapar.

(b) Economical impact: Provided employment to people of Lakhpat taluka resulted into high living standard & education of local villagers. Overall directly and indirectly benefitted around 5000 villagers. Resulted into Development of Hotels, Shopping centre due to colony staff as a big consumer.

(c) Strategic impact: Sensitive border of Bharat –Pakistan is made live by providing employment, CSR activities and prevent migration of local villagers. Having security staff to look after plant & colony as well as create image of watch dog to terrorist. Unit runs during recent Bharat –Pak war **(Operation Sindoor)** in black out condition to feed power to Grid for betterment of public life and nation as Electricity is an essential element of human being without which can’t imagine a life .

SUBMISSIONS WITH RESPECT TO THE REPORT OF THE RESPONDENT No.9

10. The Respondent No.8 is abstracting approximately 12600 m^3/day of groundwater from the Panandhro area for essential thermal power generation activities. (Initially, KLTPS had a water draw of 27,240 m^3/day. However, following the retirement of two 70 MW units on January 1, 2020, the daily water requirement was reduced to 12,600 m^3/day. Currently, unit no. 4 of 75 MW unit has been under forced shutdown since July 5, 2023, leaving only a single unit (unit no. 3) is in operation.) The Panandhro area, as per the Central Ground Water Board (CGWB) classification on the CGWA portal, is currently mapped as a Safe category, and not declared as a saline zone. However, actual hydrogeological and physico-chemical analyses of the groundwater abstracted indicate that it is saline in nature, contrary to the classification of the Respondent No.9. Despite repeated representation, no field investigation or reassessment has been undertaken by Respondent No.9 authorities to declare the region as ‘Saline’, which could have altered the regulatory provisions under which the groundwater use is examined. Copy of the lab results showing the water to be saline

are annexed hereto and marked as **ANNEXURE – R-2 colly**. Copies of the representation addressed to the authorities are annexed hereto and marked as **ANNEXURE – R-3 colly**. The Respondent No.8 has provided 3 Nos of Piezo meter to assess impact of abstraction of saline ground water (Pressure measurement) and installed flow meter at each and every borewell to measure exact quantity of abstraction of saline ground water from Borewells.

11. The Respondent No.9 has suggested Environmental Damage Compensation (EDC) of ₹223 Crore on the Respondent No.8, treating the abstraction as illegal. The same is without any calculation to that effect. Further, the factual aspects of actual number of bore wells and there utility has not been taken into consideration. The Respondent further submits that the Respondent is not utilizing the total number of available bore wells and that whatever bore wells are utilized 7 to 8 in number, there utilization is post 2020 and that to the saline water is abstracted. However, it is respectfully submitted that, the Respondent No.8 had submitted an application within the timelines prescribed under the Office Memorandum dated 12th March 2024, issued by the Respondent

No.9, which clearly stipulates that EDC shall not be levied for cases where applications are made within the stipulated cut-off. The provisions of this Memorandum clearly contradicts the case of the Respondent No.9. Copy of the Office Memorandum dated 12th March 2024 is annexed hereto and marked as **ANNEXURE – R-4**.

12. **First time application for CGWA NOC:** The Respondent No.8 applied online for obtaining NOC from Respondent No.9 on 11th July 2017 vide **Application No.21-4/2628/GJ/IND/2017**. Copy of the said application is annexed hereto and marked as **ANNEXURE – R-5**. The Application was rejected because payment was to be made to CGWB Faridabad instead of CGWB Ahmedabad. However payment had made by GSECL to CGWB Faridabad through DD No. 654342 vide letter No.6340 dated 27th September 2017 but Respondent No.9 rejected the application on 9th September 2017(Of course CGWB Ahmedabad could have transacted the same amount internally to CGWB Faridabad as under ease of doing business) **.** The Respondent No.8 submits that the first application was made before the due date i.e. 13th July 2017 as per the public notice issued by Respondent No.9 dated 31st May 2017. Copy of the public notice dated 31st May 2017 is annexed hereto and marked as **ANNEXURE – R-6**.

13. **Second application for CGWA NOC and Show cause notice:** Thereafter, the Respondent No.8 has re- applied online on 5th December 2017 vide application **No.21-4/3255/GJ/IND/2017** and TOL No.7694. Copy of the application dated 5th December 2017 is annexed hereto and marked as **ANNEXURE – R-7**. The Respondent No.8 has thereafter followed up with CGWB vide letter Nos. 3932/11.4.2018, 1313/27.2.2019 & 2824/7.7.2020. Copies of the said letters are annexed hereto and marked as **ANNEXURE – R-8 colly**.

14. The Respondent No.9, thereafter raised query vide email dated 19th December 2020 regarding submission of IA Report and Modelling study report etc. with accredited agency accredited by the Respondent No.9. The Respondent No.8, thereafter initiated process of collecting budgetary offer, tenderised, scrutinised and finally placed an order on 21st April 2022. It is pertinent to mention herein that there was a pandemic declared in the country and it was difficult for the Respondent No.8 to operate the plant.

15. The Respondent No.8 submits that in the meanwhile, the Respondent No.9 rejected the application bearing No.3255 on 16th September 2021 with reason that the CCA of period 2018-2023 cl No.7.10 mentions that " applicant shall not withdraw ground water

either during construction and /or operation phase". The Respondent No.8 updated status to CGWB Ahmedabad regarding process of placement of order vide letter No.5079 dated 24th December 2021.Copy of the letter dated 24th December 2021 is annexed hereto and marked as **ANNEXURE – R-9**.

16. The Respondent No.8 thereafter placed an order with M/s. TR Associates Ahmedabad (CGWA Accredited agency) vide WO No. 1446 dated 21st April 2022 to carry out modelling study and submit IA Report. Copy of the letter dated 21st April 2022 is annexed hereto and marked as **ANNEXURE – R-10**. The Respondent No.9 served a show cause notice to Respondent No.8 on 17th December 2022. The Respondent No.8 replied the same vide letter no. 5688 dated 30th December 2022 also vide letter no.210 dated 16th January 2023 to M/s. TR Associate for expedite the matter and the said M/s. TR Associates has submitted final report on dated 3rd February 2024.Copy of the letter dated 17th December 2022 is annexed hereto and marked as **ANNEXURE – R-11**. Copy of the letter dated 30th December 2022 is annexed hereto and marked as **ANNEXURE – R-12**. Copy of the letter dated 16th January 2023 is annexed hereto and marked as **ANNEXURE – R-13**. Copy

of the report dated 3rd February 2024 is annexe hereto and marked as **ANNEXURE – R-14**.

17. The Respondent No.8 submits that as per CCA-AWH- 94499 dated 13.07.2018 to 2023 (Cl no. 7.10 reason to reject second application no. 3255 /5.12.2017 rejected on 16.09.2021**)** where it is mentioned that applicant shall not use/withdraw ground water either during construction and /or operation phase. The Respondent No.8 has written a letter to Respondent No.3 vide letter no. KLTPS/CE (G)/SE(M-1)/Effi./Env./44 G&H/2025/173 dated 26.4.2025 and it is clearly mentioned that during the online CTO application process CCA Renewal application no. 138449 with Form-D dated-25.05.2018 Sr No. 11 where it is mentioned by GSECL KLTPS that water source-Borewell) and was known to Respondent No.3 at the time of issuance of CTO no. AWH-94499 for 2018-2023. The Respondent No.8 has written a letter to Respondent No.3 vide letter no.935 dated 12.7.2025. Copies of letters addressed to the Respondent No.3 are annexed hereto and marked as **ANNEXURE – R-15**.

18. The Respondent No.8 has already mentioned in Form-D (CCA-Renewal application for period 2023-28) that Source of water: Borewell utilized since 1990. Further Respondent No.3 has not

raised any query during visit of the site regarding condition no.7.10 of CCA-2018-2023. Also, CCA-2023-2028 GPCB has removed condition 7.10 and permitted for utilization of bore well water without any representation from GSECL; vide condition no. 3.1 & 3.2.

19. **Third time application for CGWA NOC :** The Respondent No.8 thereafter applied again with the requisite documents (i.e. IA-Report, Modelling study, NABL approved lab report etc.) on 26th April 2024 vide application No.21-4/11810/GJ/IND/2024. Copy of the application dated 26th April 2024 is annexed hereto and marked as **ANNEXURE – R-16**. All the queries raised by the Respondent No.9 have been responded to by the Respondent No.8. The Respondent No.9 has Approved to issue NOC subject to payment of Environmental Compensation (EC) of Rs.223,02,75,000/- and penalty of Rs.1.0 Lac on 2nd March 2025. Screenshot from NOCAP portal is attached herewith -dated 2nd March 2025 is annexed hereto and marked as **ANNEXURE – R-17**.

20. The Respondent No.8 contends that there is lack of clarity and consistency in groundwater policy, particularly in saline areas and

industrial belts. The unit had duly paid water abstraction charges through Water Cess mechanism till the year 2017, in compliance with the Water (Prevention & Control of Pollution) Cess Act, 1977. This evidences the Respondent's bonafide intent and no wilful breach of either the CGWA guidelines or the Water Acts. Post-2017, the procedural delay and ambiguity in the CGWA application and mapping tools contributed to a technical lapse, not an intentional violation. The Respondent No.9 ought to have appreciated that the delay caused is not on account of the Respondent No.8 but the procedural and technical process has caused the same. The Respondent No.9 has also levied compensation for Covid-19 pandemic period, which is incorrect.-Thus, the compensation will have to be discarded.

21. The chronology for events for ready reference is as under –

Date	Event
31.05.2017	Public notice issued by Respondent No.9 regarding application deadlines for CGWA NOC.
11.07.2017	First online application submitted for CGWA NOC by Respondent No.8 (Application No.21-4/2628/GJ/IND/2017).
27.09.2017	Payment made by GSECL to CGWB Faridabad (DD No. 654342 vide letter No.6340).
09.09.2017	First application for NOC rejected due to payment being sent to Faridabad instead of Ahmedabad.
05.12.2017	Second online application submitted for CGWA NOC (Application No.21-4/3255/GJ/IND/2017).

13.07.2018	CCA-AWH-94499 issued for 2018–2023, with Clause 7.10 restricting groundwater use during construction/operation.
11.04.2018, 27.02.2019, 07.07.2020	Follow-up letters sent to CGWB regarding the second application (Letter Nos. 3932, 1313, and 2824).
19.12.2020	Respondent No.9 raises queries via email regarding IA Report and Modelling study.
16.09.2021	Second application rejected due to CCA clause restricting groundwater use.
24.12.2021	Status update sent to CGWB Ahmedabad regarding placement of order for study (Letter No.5079).
21.04.2022	Order placed with M/s. TR Associates for modelling study and IA Report (WO No. 1446).
17.12.2022	Show cause notice served by Respondent No.9 to Respondent No.8.
30.12.2022	Reply to show cause notice sent by Respondent No.8 (Letter No. 5688).
16.01.2023	Letter to M/s. TR Associates for expediting submission of reports (Letter No. 210).
03.02.2024	Final IA Report submitted by M/s. TR Associates.
26.04.2024	Third online application submitted for CGWA NOC (Application No.21-4/11810/GJ/IND/2024) with all requisite documents.
02.03.2025	NOC issued by Respondent No.9 subject to payment of Environmental Compensation and penalty.
12.03.2024	Reference to CGWA Office Memorandum regarding EDC waiver if application made within timeline.
21.08.2013	Online CTO application process (CCA Renewal -71257), noting water source as borewell.
26.04.2025	Letter sent to Respondent No.3 regarding ground water use details (Letter No. KLTPS/CE (G)/SE(M-1)/Effi./Env./44 G&H/2025/173).
12.07.2025	Further letter addressed to Respondent No.3 (Letter No. 935).

OTHER MISCELLEANOUS ISSUES

22. **Kali River issue**: The Respondent No.8 is disposing ash in the form of slurry through pipeline into Ash Dyke-D since 1990 (abandoned mines of Gujarat Mineral Development Corp.)which in turn collected nearby cement factories through their own means. The Respondent No.8 has pit head power plant(Plant near mines) and lignite was transported from mines by conveyor belt. Since 2016 lignite mines exhausted from Panandhro village and the Respondent No.8 had to transport lignite from Mata na Madh and Umarsar (40 KMs away from Respondent No.8). Coal quality was poor particularly % ASH(Percentage of ash) has doubled and it leads to erosion of piping and gradually puncture/rupture of pipeline was observed in 23.04.2022 (night hours). The Respondent No.8 has contract to arrest leakage and attend by replacing pipes and the same has attended in the next morning session i.e. 23.04.2022. The Respondent No.8 has constructed a bund barrier by providing sand embankment to avoid further passing of ash slurry water towards Kali River if any Puncture occurred and further it diverts flow of slurry to Dyke-D through Channel. The Respondent No.3 has caused visit on 1.9.2022 and they have observed no any adverse remark.

23. Khanot Lake: The Respondent No.8 has Constructed wind barrier at Induced draft cooling tower (IDCT) unit-3 to prevent flow of mist towards Khanot Lake. The Lake is not constructed by Govt Body.

24. The Respondent No.8 submits that the authorities have caused recent visits and that they have not observed any violation on the part of the Respondent No.8 in its visit Report dated 07.04.2025. Further, the Respondent has reply its compliances vide letter dated 16.06.2025. Copies of the recent visit report and reply are annexed hereto and marked as **ANNEXURE – R-18 colly**.

25. In view of the above facts, the Respondent most humbly prays that this Hon'ble Tribunal take cognizance of the CGWA Office Memorandum dated 12.03.2024 and the fact that the Respondent No.8 has applied within the prescribed timeline, quash the EDC imposed on the Respondent No.8. The Respondent No.8 further prays that the Hon'ble Tribunal be pleased to recognise the ambiguity between CGWB groundwater classification and actual water quality, and direct the Respondent No.9 to reassess the hydrogeological classification of Panandhro.

Pune

Date: 08.08.2025 **Advocate for Respondent No.8**

NOTARY J.S.GOR LAKHAPAT-KUTCH. GUJARAT Reg.No.592 (GUJARAT) GOVT. OF GUJARAT

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

WESTERN ZONE BENCH, PUNE

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ORIGINAL APPLICATION NO. 54 OF 2024 (WZ)

KULDIP KHIMJI SODHA ... **APPLICANT**

V/s

UNION OF INDIA & OTHERS ... **RESPONDENTS**

AFFIDAVIT

MAY IT PLEASE THE HON'BLE TRIBUNAL:

I, Mr. Chintan H Naik ,Age: 40 Yrs. Adult, Occupation : service, having office at Civil Department, KLTPS, Panandhro, District Kutch, State of Gujarat, do hereby state on solemn affirmation as under: -

I am the Executive Engineer of the Respondent No.8 and am responsible for day to day administration of my business. As such, I have gone through the Reply to the Report of the Respondent No.9 thereto being filed today. I find that the contents therein are true and correct to the best of my knowledge and belief and which may be treated as part and parcel of the present affidavit.

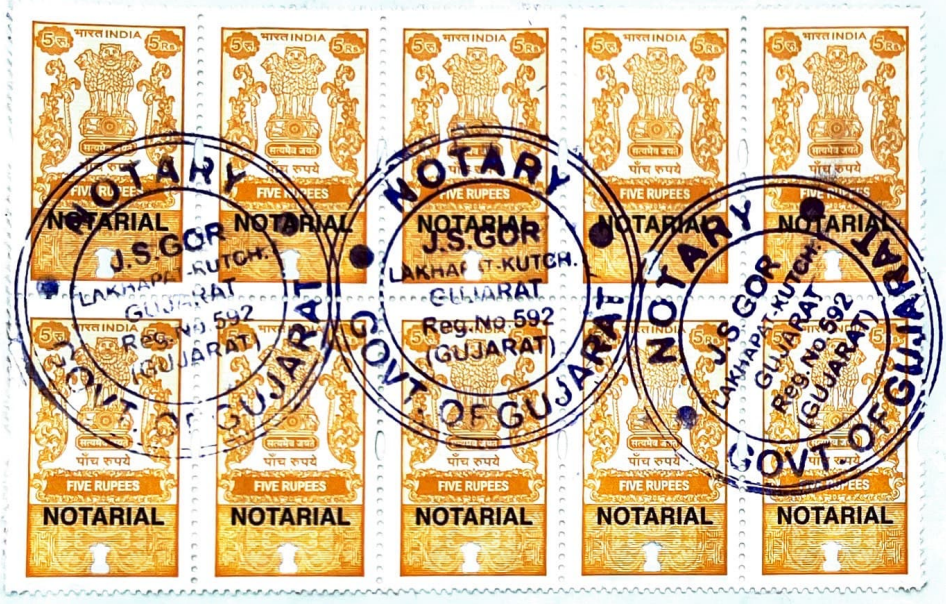
WHATEVER STATED ABOVE is true and correct to the best of my knowledge and belief. In witness whereof I have signed hereunder at _____ on 5 day of August 2025.

8 AUG 2025

Chintan HarshadGhai Naik

DEPONENT

24.3.2012



Solemnly Affirmed on oath by
Shri
Who is identified before me by
Shri
Whom I Personally Know.

No.
Date

J. S. Gor
Advocate-Notary

8 AUG 2025

ANNEXURE-R-1

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 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 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, 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."

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) 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 (IPIRTI), 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.

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 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 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:

> "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 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, 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, 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 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…"

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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ANNEXURE-R-2

Colly

TEST REPORT

Report No: TRA-07/0831/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0831/24
			Ground Water (Borewell-4)
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.	**Nature of Sample**	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.43	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.2	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.80	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4782**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3	mg/L	3.17	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.73	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9620	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	36	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

# indicates these parameters are subcontracted to NABL/MoEF Laboratory.
NS= Not Specified, BDL=Below Detectable Limit, DL= Detectable Limit
**Indicate these limit is not covered in under NABL Scope

Analyzed By: Krushna Mehta Sign: Krushna Mehta Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0832/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0832/24
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.		Ground Water (Borewell No 37)
		Nature of Sample	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.48	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.6	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	12.43	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	3373**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	1.87	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.77	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (24th Ed) 3500 Cu C	0.005	1.3
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	8332	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	33	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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NS= Not Specified, BDL=Below Detectable Limit, DL= Detectable Limit
**Indicate these limit is not covered in under NABL Scope

Analyzed By: Tanvi Bhatt Sign: T.D. Bhatt Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0833/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0833/24
			Ground Water (Borewell No-38)
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.	**Nature of Sample**	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.59	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.7	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.18	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4782**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	1.01	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.70	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9788	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	28	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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Analyzed By: Griva Patel Sign: Griva Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0834/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0834/24
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.		Ground Water (Borewell No-39)
		Nature of Sample	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.39	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	24.9	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.63	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	5185**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	3.40	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.56	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9952	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	38	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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Analyzed By: Krushna Mehta Sign: Krushna Mehta Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0835/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0835/24
			Ground Water (Borewell No- 40)
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.	**Nature of Sample**	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.59	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.5	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.86	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4682**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	1.72	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.64	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9660	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	51	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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Analyzed By: Tanvi Bhatt Sign: Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0836/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0836/24
			Ground Water (Borewell No-43)
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.	**Nature of Sample**	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.68	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.9	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.43	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	3876**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	1.46	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.62	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9680	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	19	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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Analyzed By: Griva Patel Sign: Griva P. Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0837/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0837/24
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.		Ground Water (Borewell No-47)
		Nature of Sample	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.50	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	24.7	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	12.05	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4480**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	4.47	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.55	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	0.52	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	8196	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	32	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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Analyzed By: Krushna Mehta Sign: Krushna Mehta Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0838/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0838/24
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.		Ground Water (Borewell No- 49)
		Nature of Sample	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.53	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.8	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.30	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4631**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3	mg/L	4.65	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.56	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	0.62	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9724	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	40	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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Analyzed By: Tanvi Bhatt Sign: Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

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TEST REPORT

Report No: TRA-07/0839/24 **Reporting Date: 03.08.2024**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	07/0839/24
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.		Ground Water (Borewell No-51)
		Nature of Sample	Water sample
		Quantity	2L
		Date of Sampling / Sampling Period	--
Sample Received Date	30.07.2024	**Sampling Method**	N.A.
Analysis Starts on	31.07.2024	**Sample Drawn By**	Client
Analysis Completion On	03.08.2024	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	Results	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.44	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.9	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (24th Ed)2120 B	5	15
4.	EC	mS/cm	14.65	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4228**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3^-	mg/L	3.99	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.56	APHA (24th Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 P D	--	--
9.	Copper	mg/L	0.51	APHA (24th Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (24th Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9672	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	30	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

# indicates these parameters are subcontracted to NABL/MoEF Laboratory.
NS= Not Specified, BDL=Below Detectable Limit, DL= Detectable Limit
**Indicate these limit is not covered in under NABL Scope

Analyzed By: Griva Patel Sign: Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager

Terms & Conditions:

- Analysis is subjected to the conditions received at the laboratory
- Report cannot be used as evidence anywhere without prior permission of laboratory

END OF TEST REPORT

TRUE COPY ADVOCATE

A-401, S.G. Business Hub, Between Sola Bhagwat & Gota Over Bridge, Near Umiya Campus, S.G. Highway, Ahmedabad-380060. P : +91 98253 71099, +91 97241 49800 | E : adm.trassociates@gmail.com

VINOD L. CHAVDA
Member of Parliament
(Kutch Lok Shabha)

सत्यमेव जयते

Plot No. 18, Behind K. D. Auto, Collage Road,
Bhuj - Kutch. (Gujarat) Pin. 370 001
Ph. : 02832 - 225466/67

Bungalow No : 4, Mahadev Road,
New Delhi - 110 001
Ph. : 011 - 2309 3992

ANNEXURE-R-3-Colly

પ્રતિ,
શ્રી કનુભાઈ દેસાઈ,
માન. મંત્રીશ્રી ઉર્જા અને પેટ્રોકેમીકલ્સ વિભાગ,
ગુજરાત રાજય,
ગાંધીનગર

વિષય : કચ્છ લિગ્નાઈટ થર્મલ પાવર સ્ટેશન નવા એકમ આપવા તેમજ # 4 યુનિટ ચાલુ કરવા બાબતે.

માન. સાહેબશ્રી,

જય ભારત સાથે જણાવવાનું કે, ઉપરોક્ત વિષય ના અનુસંધાનમાં આપ સાહેબશ્રી ને જણાવવાનું કે, કચ્છ જિલ્લાના લખપત તાલુકાનાં પાન્ધ્રો ખાતે કચ્છ લિગ્નાઈટ થર્મલ પાવર સ્ટેશન એ.જી.એસ.ઈ.સી.એલ. નું હાલ ૧ યુનિટ કાર્યરત છે. જે છેવાડાનો આ વિસ્તાર આંતરરાષ્ટ્રીય સીમા માં આવે છે. આ વિસ્તારમાં નાના મોટા વેપારીઓ તેમજ આજુબાજુ ના ૧૨ ગામોના લોકોના પરિવાર માંથી આ એકમ ખાતે રોજગારી મેળવે છે. આ વિસ્તારમાં આવેલી સંસ્થાની વસાહત ખાતે અંદાજે ૪૫૦ પરિવારો વસવાટ કરે છે. આ પાવર પ્લાન્ટ અગાઉ નંબર ૧ અને ૨ યુનિટ બંધ કરાતા સ્થાનિક રોજગારીમાં બહુ મોટો ફટકો પડેલ. જેની અસર હજુ વર્તાય છે. જી.એસ.ઈ.સી.એલ. નું એકમ યુનિટ ૪ ચાલુ કરવા માટે મંજુરી આપવી જેથી આ યુનિટ પણ વહેલી તકે કાર્યરત થાય એ જરૂરી છે.

નજીકના સમયમાં જી.એમ.ડી.સી. દ્વારા પાન્ધ્રો - ૨ લિગ્નાઈટ માઈન્સ અને પુનરાજપર માઈન્સ શરૂ કરવા જઈ રહ્યા છે. એ ખાણ આ પાવર પ્લાન્ટ ની નજીક છે. તો આવા નવા યુનિટ સ્થાપીને એક મોટું રોજગારી નું સાધન ઊભું કરી શકાય તેમ છે. યુનિટ ૧ અને ૨ સ્ક્રેપ થઈ ગયેલ છે. એ જગ્યાએ નવા બીજા બે યુનિટ સ્થાપવામાં આવે તો ઓછા ખર્ચે આ યુનિટ કાર્યરત થઈ શકે તેમ છે અને એક રોજગારી આપે એમ છે.

ઉપરોક્ત બાબતે ઘટિત થવા મારો વિનમ્ર અનુરોધ છે.

લી.

(વિનોદ એલ. ચાવડા)

E-mail : vinod5467@gmail.com

VINOD L. CHAVDA

Member of Parliament

(Kutch Lok Sabha)

Satyameva Jayate

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To,

Shri Kanubhai Desai,

Hon'ble Minister of Energy and Petrochemicals Department,

Government of Gujarat,Gandhinagar

Subject: Regarding a new unit for the Kutch Lignite Thermal Power Station and starting Unit # 4.

Hon'ble Sir,

With Jai Bharat, I would like to inform you that, in reference to the above subject, a unit of the Kutch Lignite Thermal Power Station AGSECL is currently operational at Pandhro in Lakhpat Taluka of Kutch district. This remote area is located on the international border. In this area, small and large traders and families from 12 surrounding villages are employed at this unit. Approximately 450 families reside in the institution's colony located in this area. When power plant units 1 and 2 were shut down earlier, local employment was hit very hard. The effects of which are still being felt. It is necessary to grant permission to start the G.S.E.C.L. Unit 4 so that this unit can also be operational as soon as possible.

In the near future, G.M.D.C. is going to start the Pandhro - 2 Lignite Mines and Punrajpar Mines. These mines are close to this power plant. So, by establishing such a new unit, a great source of employment can be created. Units 1 and 2 have been scrapped. If two

new units are established in their place, these units can become operational at a low cost and provide employment.

I humbly request your intervention in the above matter.

B.

(Vinod L. Chavda)

E-mail: vinod5467@gmail.com

File no: CGWA-21/6/2020-CGWA-111

Government of India

ANNEXURE-R-4

Ministry of Jal Shakti

Central Ground Water Authority

******

Date: 12.03.2024

Office Memorandum

Subject: Issues relating to relaxation of charges etc on Ground Water Abstraction.

The matter relating to imposing Environmental Compensation (EC) charges as per the provisions of Guidelines dated 24.09.2020 on existing projects applying late for NOC, including those applying late for renewal of existing NOC was under consideration of the Central Ground Water Authority (CGWA). In this connection, it is observed that imposition of hefty EC is becoming a discouraging factor for several Project Proponents for applying for NOC, especially those falling under MSME category who have smaller investment and limited working capital. Further, the projects, which, although had obtained NOC from CGWA earlier, but did not apply for renewal in time, are also being imposed EC. Such projects are also hesitant in coming forward for renewal of their NOC. Therefore, it is felt that relaxation of EC for a specific period may help in bringing maximum projects into ambit of ground water regulation regime. Further, as per the feedback received from commerce and industries, there are some other provisions of the Guidelines, which require re-examination and relaxation, such as imposition of EC on saline groundwater extraction without proper NOC and collection of heavy charges for change in Log-in ID.

2. The matter has been examined. In order to ensure balance between Ease of Doing Business initiative of Government of India as well as environmental concerns due to over-exploitation of groundwater, it is felt appropriate to provide some relief to the commercial and industrial establishments of certain category abstracting ground water, so as to encourage more and more projects to come forward for obtaining NOC from CGWA and thus become a part of ground water regulation regime. Further, it is imperative that such relief is offered only for a limited period so as to have seamless implementation of guidelines for groundwater extraction.

3 . In view of the above, it has been decided with the approval of the Competent Authority to issue instructions on the following:

A. Relief in Environmental Compensation for Existing Projects without Proper NOC on Late/ Delayed Submission of Application (Fresh/ Renewal).

B. Relief in Environmental Compensation towards Saline Groundwater Extraction.

C. Relief in Charges for Change in Log-in Id for Logging in into NOCAP Portal/ Any other Item/ Correction.

4. The detailed instructions on the aforesaid issues are provided in the Annexure for giving wide-publicity to all stake holders.

5. This will take immediate effect.

12/03/2024

(Chairman, CGWA)

To

All Concerned and Stake Holders

Annexure

Issues relating to relaxation of charges etc on Ground Water Abstraction.

I. **Definitions**

i. **CCA:** Consolidated Consent and Authorization issued by respective State Pollution Control Board
ii. **CTO:** Consent to Operate
iii. **Charges for Change in user ID and any other item/ correction:**As prescribed in Table 16.2 of guidelines dated 24.09.2020
iv. **Deficiency Memo**: Communication to PP of deficiencies in submitted application (About incomplete documents/ about Advance Charges/ Clarifications etc.)
v. **Date of Commencement of Project:** The date provided by the Project Proponent in the application on which the project became operational after receiving CTO/ CCA.
vi. **Environmental Compensation Calculation**: As per rates and deterrent factor prescribed in Tables 15.1 to 15.2 read with CGWA Public Notice No. 10/2022 dated 03.11.2022.
vii. **Environmental Compensation Imposition**: As per Para 15.0 and Para 11(vii) of guidelines dated 24.09.2020.
viii. **Existing MSME**:MSME projects (refer definition I(xi)), whose date of commencement (Refer definition I(iv)) is prior to announcement of scheme.
ix. **KLD:** Kilo Litre per Day
x. **Log-in ID**: Registered Log-in Id for submission of application/ renewal thereof and tracking of application status.
xi. **MSME**: Micro, Small and Medium Enterprises as classified vide Ministry of MSME Notification SO 1702(E), dated 01.06.2020

(https://msme.gov.in/sites/default/files/MSME_gazette_of_india.pdf)

All industrial, infrastructure and mining projects having valid UdyamRegistration/ UdyogAdhaar certificate from MSME, verifiable from Udyam Registration website (https://udyamregistration.gov.in).

xii. **NOCAP**: Web portal of CGWA for No Objection Certificate Application & Processing
xiii. **PP**: Project Proponent, i.e Applicant
xiv. **Saline Groundwater**: As defined in CGWA guidelinesforSaline Groundwater Extractionuploadedon NOCAP Portal. These guidelines can be accessed through the link Saline guidelines_approved.pdf (cgwa-noc.gov.in)

II. **Implementation Committee**

An **Implementation Committee(IC)** shall be constituted at CGWA, New Delhi under the chairmanship of Member (CGWA), which will be responsible for overall implementation of these instructions, including proper maintenance of portal and grievance redressal.

Part A. Relief in Environmental Compensation for Existing Projects without Proper NOC on Late/ Delayed Submission of Application (Fresh/ Renewal)

i. Existing MSMEs extracting groundwater up to 100 KLD (excludingthe projects of Packaged Drinking Water/ Packaged Natural Mineral Water/ Mineral Water and Aerated/ Carbonated/ Alcoholic Beverages) will be eligible for availing benefits of the scheme.
ii. The scheme will also cover MSME projects extracting groundwater up to 100 KLD (excluding those as mentioned above) whose application was rejected earlier for any reason(s).
iii. Both fresh, as well as renewal applications from the beneficiary category as defined at (i) above, shall be covered under the scheme.
iv. The scheme is applicable only to the projects existing prior to announcement of scheme.Projects commencing after the announcement of scheme, but applying late for NOC shall not be covered under this scheme.
v. Date of commencement as given in the NOC application shall be considered for deciding existence of project prior to date of announcement of scheme, subject to the date given is in conformity with other documents, including CTO/CCA.
vi. The scheme will remain in force **for a period of one year** from the date of announcement and relaxation from EC will be provided in 4 slabs based on how early the NOC application is filed after the announcement of the Scheme. During this period, the PPs interested in availing the benefit of the Scheme, shall file their application for NOC on the NOCAP portal of CGWA providing all necessary documents and details as required in regular course. Details of relief from EC to be provided under the Scheme are provided in the following paras.

a. **80% relief** in Environmental Compensation (**EC**) shall be given to applications submitted within 3 months (falling within 1st trimester)from the date of announcement scheme. For example, if Project Proponent applies within 3 months from date of announcement of scheme and normal EC is calculated as Rs 1 Lakh as per the provisions of the Guidelines dated 24.09.2020, the PP shall be eligible for relief to the tune of 80% in EC and the amount of EC to be paid will beRs 20,000/- only.

b. **60% relief** in EC shall be given to applications submitted after 3 months but within 6 months (falling within 2nd trimester) from the date of announcement scheme.
c. **40% relief** in EC shall be given to applications submitted after 6 months but within 9 months (falling within 3rd trimester) from the date of announcement scheme.
d. **20% relief** in EC shall be given to applications submitted after 9 months but within 12 months (falling within 4th trimester) from the date of announcement scheme.

vii. Start-date and end-date of each trimester shall be completion of month as per date of announcement of scheme. For example, if the date of announcement of scheme 15.03.2024, end-date for trimesters shall be 14.06.2024, 14.09.2024, 14.12.2024 and 14.03.2025 respectively.
viii. The scheme shall be closed after one year and no relief shall be extended thereafter.
ix. Applications of eligible beneficiary category, i.e. existing MSMEs extracting groundwater up to 100 KLD, pending with CGWA at the time of announcement of scheme and where EC is applicable, shall also be eligible for relief of 80% in EC.
x. If the PP fails to pay the amount within 30 days of approval of NOC and/or communication of charges, then it will forfeitthe benefit of relief/ it will not be eligible to avail the benefit of relief.
xi. Benefit of scheme shall not be available to those projects which have case(s) of illegal extractionof ground water pending against them before any Court/ Tribunal/ Authority.

Part B. Relief in Environmental Compensation towards Saline Groundwater Extraction.

i. Implementation of Public Notice dated 21.06.2023 regarding EC on saline groundwater extraction without valid NOCshall be kept suspended **for one year** with effect from the date of announcement of this scheme. That is, no EC will be levied on applications for saline water extraction submitted during one year with effect from the date of announcement of this scheme.
ii. Benefit of relief shall be extended to all existing projects extracting saline groundwater.
iii. Existing applications shall also get benefit of the scheme.

Part C. Relief in Charges for Change in Log-in Id for Logging in into NOCAP Portal/ Any other Item/ Correction

i. Rs 1000/- will be charged for change in Log-in Id for one year from the date of announcement of this scheme.
ii. Rs 500/- will be charged for any other item/ correction for one year from the date of announcement of this scheme.
iii. This relief is being extended across all categories.

III. **Miscellaneous Provisions**

i. Necessary documents are to be submitted at the time of submission of application. List of documents to avail benefit of Part-A and Part-B is provided below.PPs are advised to go through the list of documents carefully before applying. If any deficiency is found in the application, a Deficiency Memo will be issued to PP. If the PP fails to cure the deficiencies mentioned in Deficiency Memo issued to him within 30 days from the date of issuance of such Memo, his application shall be summarily rejected without providing any benefit of the scheme.
ii. The quantum of groundwater extraction on which basis benefit is availed under Part-A of scheme, shall not be increased later without valid reason.
iii. If at any stage, it is found that the PP has provided false information as regard to MSME status and/or quantum of extraction or quality report for availing benefit of scheme under Part-A and Part-B, the PP shall be liable to penal provisions under extant rules along with recovery of full Environmental Compensation till the date borewell(s) are sealed after such information comes to the notice of CGWA/ any Authorized Officer.
iv. In case the PP encounters technical glitches in NOCAP Portal during advance payment/ submission of application, resulting in application submission moving into the next trimester, it can register grievance with CGWA, submitting the screenshots of such technical glitch. The screenshot should be clear and legible, showing entire web page including the date of error, as well as address bar. The Implementation Committee will scrutinize the issue and decide the case as per merit. Decision of IC, which shall be made only after providing an opportunity to be heard to the PP, shall be final and binding on PP. The decisions of IC shall be in the form of speaking orders.
v. The procedure mentioned at IV(iv) above shall be applicable *mutatis mutandis* for the cases where the PP makes genuine attempts to pay the EC charges (to be paid within 30 days from the date of communication of such charges to him by CGWA) but fails to do so due to technical glitches in the portal.
vi. The PP can register other grievance(s) too, if any, with CGWA. The grievance shall be referred to the IC for resolution and redressal. Decision of IC shall be final and binding on PP.

Documents required for availing Benefit of Part-A of the Scheme

A. **Fresh Applications**

i. CTO/ CCA
ii. MSME Certificate
iii. Non-Availability of Water (**NAW**) Certificate or NAW Affidavit on Rs 50/- Non-judicial Stamp Paper
iv. Affidavit regarding Drinking/ Domestic requirement on Rs 100/- non-judicial stamp paper

B. **Renewal Applications**

i. MSME Certificate

ii. Self-compliance report to be uploaded on NOCAP (**in case of difficulty in uploading** on NOCAP, **PDF** version may be attached as Additional Document with the application)
iii. Compliance documents with geotagged photographs (telemetry included)
iv. Self-compliance Affidavit on Rs100/- non-judicial Stamp Paper
v. Self-inspection report to be uploaded on NOCAP (**in case of difficulty in uploading** on NOCAP, **PDF** version may be attached as Additional Document with the application)
vi. Affidavit regarding Drinking/ Domestic requirement on Rs 100/- non-judicial stamp paper
vii. Justification for increase in quantum, if any, from the previous NOC (including denial of water supply by other agencies providing water earlier). If the PP has already extracted quantum beyond permitted quantum in previous NOC, justification for same may be provided.

Documents required for availing Benefit of Part-B of the Scheme

A. **Fresh Applications**

i. CTO/ CCA
ii. MSME Certificate
iii. Non-Availability of Water (**NAW**) Certificate or NAW Affidavit on Rs 50/- Non-judicial Stamp Paper
iv. Quality Report of Groundwater from borewell(s) in the premises
v. Undertaking/ Affidavit on Rs50/- non-judicial Stamp Paper to the effect that quality report pertains to groundwater from borewells in the premises of project.
vi. Affidavit regarding Drinking/ Domestic requirement on Rs 100/- non-judicial stamp paper

B. **Renewal Applications**

i. MSME Certificate
ii. Self-compliance report to be uploaded on NOCAP (**in case of difficulty in uploading** on NOCAP, **PDF** version may be attached as Additional Document with the application)
iii. Compliance documents with geotagged photographs (telemetry included)
iv. Self-compliance Affidavit on Rs100/- non-judicial Stamp Paper
v. Self-inspection report to be uploaded on NOCAP (**in case of difficulty in uploading** on NOCAP, **PDF** version may be attached as Additional Document with the application)
vi. Quality Report of Groundwater from borewell(s) in the premises
vii. Undertaking/ Affidavit on Rs50/- non-judicial Stamp Paper to the effect that quality report pertains to groundwater from borewells in the premises of project
viii. Affidavit regarding Drinking/ Domestic requirement on Rs 100/- non-judicial stamp paper

ix. Justification for increase in quantum, if any, from the previous NOC (including denial of water supply by other agencies providing water earlier). If the PP has already extracted quantum beyond permitted quantum in previous NOC, justification for same may be provided.

*****

ANNEXURE-R-5

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)

Application for Issue of NOC to Abstract Ground Water (NOCAP)

Welcome : kltps
Previous Login Date Time: 30/10/2024 09:02:47 AM , **IP Address:** 103.160.191.10

Logout

Applicant Home | Apply | Feedback | Change Password | Update PAN | Profile | Grievance | Submitted Application Payment | User Request | Application Pass Book | Upload IAR | Upload Attachment | Payment for Associate

Information

Guidelines
Steps for Filling Online Application

Documents Required

Documents Required for Online Application
- Industrial
- Infrastructure
- Mining

Track Status

Application Status
- Online

Location

Area Type
Segment-B Area Type
Regional office Location
CGWA Headquarters
Know Your Environmental Compensation(EC)
Know Your Penalty
Ground Water Abstraction/Restoration Charges

Reports

Applied for NOC - Online
NOC Issued-Online

Contact Us

Contact

Application Status

Application No :	21-4/2628/GJ/IND/2017
Receive Date :	11/07/2017
Name of Industry :	KACHCHH LIGNITE THERMAL POWER STATION GUJARAT STATE ELECTRICITY CORPORATION LIMITED
Application Processing Fee :	Rs. 1000.00/- (Rupees One Thousand Only) (**Submitted:** No)
Ground Water Abstraction/Restoration Charge :	Ground Water Quality Approved Ground Water Charge Required: Not Define No Record Exists.

☐ **Environment Compensation**

SN	Date From	Date To	Daily Quantum (m3/day)(KLD)	Annual Quantum (m3/Year)(KLY)	Area Type Category	Reason Name	Rate	Amount	Remark
No Record Exists.									

Penalty for non Compliance of NOC conditions

Final Status	Rejected

Current Status

Application Verification

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment	Copy of Application Received On
11/07/2017		**(Evaluation Officer)** Central Ground Water Board West Central Region		09/09/2017	Reject	Processing Fee not Submitted	26/07/2017

Application Processing

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment	Ground Water	Ground Water

							Recom Per Day	Recom Annual
No Record for this Stage.								

NOC Processing

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment
No Record for this Stage.						

NOC Disbursement

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment
No Record for this Stage.						

Go Back

ANNEXURE-R-6

CENTRAL GROUND WATER AUTHORITY

MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT

AND GANGA REJUVENATION

PUBLIC NOTICE

SUB: ATTENTION OF ALL EXISTING GROUND WATER USERS INCLUDING INDUSRIAL / INFRASTRUCTURE AND MINING PROJECTS.

Kind attention of all existing ground water users including Industrial / Infrastructure and Mining Projects is invited to the Public Notice dated 31.03.2017, under which the users have been directed to submit their applications for No Objection Certificate (NOC) to Central Ground Water Authority (CGWA) latest by 31.05.2017.

All the above mentioned users extracting using ground water without NOC from CGWA are directed to submit their applications for NOC before 13.07.2017 without fail. It is further clarified that any failure to submit applications before this date will render the concerned users responsible for non-compliance of directions of CGWA.

(Akhil Kumar)

CHAIRMAN

Dt. 31..05.2017

SE (Civil) for approaching to CGWA to seek permission for existing as well as new bore well before deadline 21/6

TRUE COPY ADVOCATE

ANNEXURE-R-7

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/3255/GJ/IND/2017

1. General Information:

Water Quality:		Saline/ Brackish
Application Type Category/ Type of Application:		Power generation unit
(i)	Name of Industry:	KACHCHH LIGNITE THERMAL POWER STATION - GUJARAT STATE ELECTRICITY CORPORATION LIMITED
(ii)	Location Details of the Industrial Unit- (Attach Approved Site Plan with Location Map) ($)	
	Address Line 1 :	P.O. S.K. VARMANAGAR - 370601
	Address Line 2 :	
	Address Line 3 :	
	State:	GUJARAT
	District:	KACHCHH
	Sub-District:	LAKHPAT
	Village/Town:	Panandhro
	Latitude:	
	Logitude:	
	Area Type :	Non-Notified
	Area Type Category :	Safe
(iii)	Communication Address	
	Address Line 1:	CHIEF ENGINEER (G), GUJARAT STATE ELECTRICITY CORPORATION LTD.,
	Address Line 2:	KACHCHH LIGNITE THERMAL POWER STATION, PANANDHRO
	Address Line 3:	PO - S.K. VARMANAGAR
	State:	GUJARAT
	District:	KACHCHH
	Sub-District:	LAKHPAT
	Pincode:	370601
	Phone Number with Area Code:	91 2839 262452
	Mobile Number:	91 9925208788
	Fax Number:	91 2839 262431
	E-Mail:	ceklps.gsecl@gebmail.com
(iv)	Salient Features of the Industrial Activity:	
	Electricity Generation	

(v) Land Use Details of the Existing / Proposed Industrial Unit Premises Ownership of the Land :

Land Use Details	Existing (sq meter)	Proposed (sq meter)	Grand Total (sq meter)
Green Belt Area	1870.00		1870.00

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/3255/GJ/IND/2017

1.	**General Information:**		
	Water Quality:		Saline/ Brackish
	Application Type Category/ Type of Application:		Power generation unit
	(i)	**Name of Industry:**	KACHCHH LIGNITE THERMAL POWER STATION - GUJARAT STATE ELECTRICITY CORPORATION LIMITED
	(ii)	**Location Details of the Industrial Unit- (Attach Approved Site Plan with Location Map) ($)**	
		Address Line 1 :	P.O. S.K. VARMANAGAR - 370601
		Address Line 2 :	
		Address Line 3 :	
		State:	GUJARAT
		District:	KACHCHH
		Sub-District:	LAKHPAT
		Village/Town:	Panandhro
		Latitude:	
		Logitude:	
		Area Type :	Non-Notified
		Area Type Category :	Safe
	(iii)	**Communication Address**	
		Address Line 1:	CHIEF ENGINEER (G), GUJARAT STATE ELECTRICITY CORPORATION LTD.,
		Address Line 2:	KACHCHH LIGNITE THERMAL POWER STATION, PANANDHRO
		Address Line 3:	PO - S.K. VARMANAGAR
		State:	GUJARAT
		District:	KACHCHH
		Sub-District:	LAKHPAT
		Pincode:	370601
		Phone Number with Area Code:	91 2839 262452
		Mobile Number:	91 9925208788
		Fax Number:	91 2839 262431
		E-Mail:	ceklips.gsecl@gebmail.com
	(iv)	**Salient Features of the Industrial Activity:**	
		Electricity Generation	
	(v)	**Land Use Details of the Existing / Proposed Industrial Unit Premises Ownership of the Land :**	

Land Use Details	Existing (sq meter)	Proposed (sq meter)	Grand Total (sq meter)
Green Belt Area	1870.00		1870.00

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/3255/GJ/IND/2017

	Open Land	2062116.00		2062116.00
	Road/ Paved Area	63550.00		63550.00
	Rooftop area of building/ sheds	107460.00		107460.00
	Total	2234996.00		2234996.00

(vi)	Drainage in the Area (River/ Nala etc) :	NIL
(vii)	Source of Availability of Surface Water for Infrastructure Use (Submit Water Availability / Non Availability Certificate):($)	NIL
(viii)	Average Annual Rainfall in the Area (in mm):	155.00
(ix)	Townships / Villages (Within 2km Radius of the Industrial Unit):	Khanot Village
(x)	Whether Ground Water Utilization for:	Existing Industry
	Date of Commencement Industry:	29/03/1990
	Date of Expansion :	

2. Details of Water Requirement (Fresh and Recycled Water Usage):
(Please Enclose Water Balance Flow Chart of Activities and Requirement of Water at each Stage) ($)

(i) Total Water Requirement (a+b+c+d) (m3/day)

	Existing	Proposed	Total
Water Requirement Details (Fresh Water) (m3/day)			
(a) Ground Water Requirement (m3/day):	27240.00	0.00	27240.00
(b) Surface Water Available (Canal, River, Ponds etc.) (m3/day):	0.00	0.00	0.00
(c) Water Supply from Any Agency (m3/day):	0.00	0.00	0.00
Total Fresh Water Requirement (a+b+c)(m3/day):	**27240.00**	**0.00**	**27240.00**
(d) Recycled Water Usage (m3/day):	0.00	0.00	0.00
Total Water Requirement : (a+b+c+d)(m3/day)	**27240.00**	**0.00**	**27240.00**

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : **21-4/3255/GJ/IND/2017**

(ii) Breakup of Water Requirement and Usage:

Activity	Existing Requirement (m3/day)	Proposed Requirement (m3/day)	Total Requirement (m3/day)	No. of Operational Days in a Year	Annual Requirement (m3/year)
Industrial Activity	27240.00	0.00	27240.00	365	9942600.00
Residential / Domestic	0.00	0.00	0.00	0	0.00
Greenbelt Development /Environment Maintenance	0.00	0.00	0.00	0	0.00
Other Use	0.00	0.00	0.00	0	0.00
Grand Total	27240.00	0.00	27240.00		9942600.00

(iii) Breakup of Recycled Water Usage:

		(m3/day)	(Days)	(m3/year)
(a)	Total Waste Water Generated :	13500.00	365	4927500.00
(b)	Quantity of Treated Water Available	0.00		
i).	Reuse in Industrial Activity:	0.00	365	0.00
ii).	Reuse in Green Belt Development:	0.00	0	0.00
iii).	Other Uses:	0.00	0	0.00
(c)	Total Treated Water Utilized:	0.00		0.00
Net Ground Water Requirement:		27240.00 (m3/day)		

3. (a). Groundwater Abstraction Structure- Existing:

Number of Existing Structures: 29

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether Fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
1	Borewell / 1990	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
2	Borewell / 1990	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
3	Borewell / 1990	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
4	Borewell / 1990	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : **21-4/3255/GJ/IND/2017**

5	Borewell / 1995	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
6	Borewell / 1995	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
7	Borewell / 1995	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
8	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
9	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
10	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
11	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
12	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
13	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
14	Borewell / 2015	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
15	Borewell / 1990	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
16	Borewell / 1990	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
17	Borewell / 1990	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
18	Borewell / 1990	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
19	Borewell / 1990	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
20	Borewell / 1995	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
21	Borewell / 1995	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : **21-4/3255/GJ/IND/2017**

22	Borewell / 1995	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
23	Borewell / 1995	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
24	Borewell / 1995	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
25	Borewell / 2015	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
26	Borewell / 2015	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
27	Borewell / 2015	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
28	Borewell / 2015	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
29	Borewell / 2015	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -

(b). **Groundwater Abstraction Structure- Proposed:**

Number of Proposed Structures: 11

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
1	Borewell / 2017	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
2	Borewell / 2017	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
3	Borewell / 2017	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
4	Borewell / 2018	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -
5	Borewell / 2018	180.00 / 250	75.00	80.00	20 / 365	Submersible Pump	52.00	No	No / -

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : **21-4/3255/GJ/IND/2017**

6	Borewell / 2017	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
7	Borewell / 2017	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
8	Borewell / 2017	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
9	Borewell / 2018	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
10	Borewell / 2018	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -
11	Borewell / 2018	180.00 / 250	75.00	40.00	20 / 365	Submersible Pump	25.00	No	No / -

4. **Groundwater Availability (Please Enclose a Comprehensive Report / Note on Groundwater Condition in and Around the Area) Applicable to Industries Consuming Greater Than 500 m3/day : ($)**

Comprehensive report on ground water condition is attached herewith

5. **Details of Rrainwater Harvesting and Artificial Recharge Measures Proposed / Implemented. If Ground Water Recharge outside the Industrial Unit Premises, then provide NOC from the Concern Authority / Agency if Already implemented, details may be furnished. (Attach Rainwater Harvesting /Artificial Recharge Proposal).($)**

Not done

6. **Consent to Operate / Estibilish / Approval Letter from Statutory Bodies viz Ministry of Environment & Forests (MoEF) or State Pollution Control Board(SPCB) or State Level Expert Appraisal Committee(SEAC) or State Level Environment Impact Assessment Authority(SLEIAA):($)**

Attached Consent/ Approval of Government Agency(Previous: Referral Letter)

Letter Number

S.No	Consent /Approval of Govornment Agency	Attachment Name	File Name
1	State Pollution Control Board	GPCB Referral Letter	GPCB visit ltr-20 06 17 (2).pdf

7. **Have You Applied Earlier for Groundwater Clearance from CGWA / State Government Agency:**

If Yes, so Details thereof with Status:

Application Number: 21-4/2628/GJ/IND/2017
Status-Rejected

INDUSTRIAL USE- Self Declaration

☑ It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.
It is to Certify that the Data and Information Furnished Above are True to the Best of My Knowledge and Belief and I am Aware that if Any Part of the Data / Information Submitted is Found to be False or Misleading at Any Stage the Application will be Rejected Out Rightly.

1. Application Proforma is Subject to Modification from Time to Time.

2. Application should be submitted to Regional Office.

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/3255/GJ/IND/2017

Regional Director,Central Ground Water Board West Central Region, Swami Narayan College, Building, Shah Alam Tolnaka, AHMADABAD, GUJARAT, 380022

3. Incomplete Application will be Summarily Rejected.

Submitted Application will not be Processed till the Print Out of the Signed Complete Application is Submitted to Regional Office.

4. Applicant has to Submit Processing Fee of Rs. 1000.00/- (Rupees One Thousand Only) through NON TAX RECEIPT PORTAL (https://bharatkosh.gov.in). A receipt will be generated. Please fill in the Transaction Ref No. and Date from the receipt, in print out of application and attach receipt along with hard copy of application.

Bharatkosh Details:-

Transaction Ref Number:-	
Dated:-	

Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.

Attached Files:

1). **Site Plan with Location Map (Previous: Site Plan) : (Refer: 1** (ii))

S.No	Attachment Name	File Name
1	Site Plan	site plan.pdf

2). **Certified Revenue Sketch : (Refer: 1 (ii))**

S.No	Attachment Name	File Name
1	Revenue Sketch	revenue map.pdf

3). **Documents of Ownership / Lease : (Refer: 1 (v))**

S.No	Attachment Name	File Name
1	Permission Letter of GMDC	letter of gmdc for consent of bore well-2.pdf
2	Dhareshi borewell land	Dhareshi bore well land.pdf

4). **Source Water Availability/Non-availability Certificate(Previous: Source of Availability of Surface Water) : (Refer: 1 (vii))**

No Attachment Found!

5). **Water Balance Flow Chart (Previous: Enclose Flow Chart of Activity and Requirement of Water): (Refer: 2)**

No Attachment Found!

6). **Hydrogeological Report(Previous: Groundwater Availability Report) : (Refer: 4)**

S.No	Attachment Name	File Name
1	Water Report	water report of bore well.pdf

7). **Rain Water Harvesting/Artificial Recharge proposal(Previous: Details of Rainwater Harvesting / Artificial Recharge Measures) : (Refer: 5)**

S.No	Attachment Name	File Name
1	Rainwater harvesting Letter	rh_etp.pdf

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : **21-4/3255/GJ/IND/2017**

8). **Authorization Letter (Previous: Authorization) :**

No Attachment Found!

10). **Ground Water Quality Report(Previous: Non-Polluting Effluent) :**

S.No	Attachment Name	File Name
1	Effluent Letter	rh_etp.pdf

11). **Extra Attachment :**

S.No	Attachment Name	File Name
1	Chllan Copy	1000rptNTRPGAR7Challan.pdf
2	Payment Receipt	1000rptNTRPGAR6Receipt.pdf

12). **Scanned Industrial Application :**

No Attachment Found!

Date :

Place :

Name & Signature of the applicant

(With official seal)

Associated User : kltps

Submitted By User : kltps

Submission Date : 05/12/2017

* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

ANNEXURE-R-8 Colly

GUJARAT STATE ELECTRICITY CORPORATION LIMITED
KACHCHH LIGNITE THERMAL POWER STATION
PANANDHRO, PO: S.K. VARMANAGAR, TALUKA LAKHPAT, KACHCHH, GUJARAT (INDIA)
Phone: 91-2839-262452 / 264423. Fax: 91-2839-262431 / 264434.
Email: cekltps@gebmail.com. Website: www.gsecl.in
CIN: U40100GJ1993SGC019988

GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/ 3932 DATE:-10.04.2018

11 APR 2018

To,

**The Regional Director,
Central Ground Water Board,
West Central Region,
Swami Narayan College Building,
Shah Alam Tolnaka
Ahmadabad - 380022**

Sub: -Permission for approval of abstract ground water for KLTPS, Panandhro.

Ref:- 1. Online application No. 21-4/3755/GJ/IND/2017 Dt. 05.12.2017

2. TOL No. GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/7694 dt. 11.12.2017

Sir,

In connection to above, this office have applied an online application to abstract ground water for industrial use under ref no.(1). Further, the hard copy of the same is submitted vide this office letter under reference (2) along with the system generated electronic receipt i.e. Bharatkosh India Receipt of Rs. 1000/- as application fee.[Transaction Ref. No 2311170001213 dt. 23.11.2017]

The application was prepared on 05.12.2017 and the hard copies for the same was forwarded on 11.12.2017 from this office but till date the permission have not been issued from your office. KLTPS GSECL is a power generation unit having installed capacity of 290 MW power plant, it is requested to grant and issue permission for abstracting ground water for industrial use.

Your early action in the matter is highly anticipated.

Chief Engineer [Gen.]
GSECL-KLTPS

O/C

EE(C)PHH
Follow up for high ____ regularly
12/4/18
SE(C)

10/04/18
DE(C)

10/4/18
SE(C)

12/4/18
SE(C)

GSECL

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK VermaNagar, Taluka Lakhpat, DistKutch - 370601Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434e-mail: cekltps@gebmail.com Website: www.gsecl.in
CIN: U40100GJ1993SGC019988

150 YEARS OF CELEBRATING THE MAHATMA

GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/ 1313 DATE:- . 02.2019

27 FEB 2019

To,

The Regional Director,
Central Ground Water Board,
West Central Region,
Swami Narayan College Building,
Shah Alam Tolnaka
Ahmadabad - 380022

Sub: -Permission for approval of abstract ground water for KLTPS, Panandhro.

Ref:- 1. Online application No. 21-4/3255/GJ/IND/2017 Dt. 05.12.2017
2. TOL No. GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/7694 dt. 11.12.2017
3. TOL No. GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/3932 dt. 11.04.18

Dear Sir,

In connection to above, this office have applied an online application to abstract the ground water for industrial use as per ref(1). The hard copy along with all the relevant documents was also submitted to your office vide letter as per ref(2).

The application was received by your office on dt. 18.12.17 as per the online application status. At present, the online status of the application is shown as " **REFERBACK"** and action was taken on dt. 11.12.2018 i.e. almost one year after the submission of application. Further, during checking the online status of application it is not found anywhere that why the application is 'REFERBACK".

Since, our company is power generation company, water is an essential need for us to generate power, hence, you are requested to convey the quarries (if any) to this office. So, that revised application can be re-submitted.

Your early reply regarding the present status of application is much awaited for getting the approval of ground water abstraction at the earliest.

27/2

Chief Engineer [Gen.]

GSECL-KLTPS

27/2

O/C

25.02.19
D.E.C.(I) & E.E.C.(I)

27/2
S.E.C.(I)

GUJARAT STATE ELECTRICITY CORPORATION LIMITED
Kutch Lignite Thermal Power Station, PO: SK VermaNagar, Tal:Lakhpat, Dist: Kutch-370601Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434e-mail: acekltps@gebmail.com Website: www.gsecl.in
CIN: U40100GJ1993SGC019988

No. GSECL/KLTPS/ACE(G)/CIVIL/CGWB-AMD/ 2824 DATE:- . 07.2020

7 JUL 2020

By RPAD

To,
The Regional Director,
Central Ground Water Board,
West Central Region,
Swami Narayan College Building,
Shah Alam Tolnaka
Ahmadabad - 380022

Sub: Permission for approval of abstract ground water for KLTPS, Panandhro.
Ref : 1. Online application No. 21-4/3255/GJ/IND/2017 Dt. 05.12.2017
2. TOL No. GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/7694 dt. 11.12.2017
3. TOL No. GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/3932 dt. 11.04.18
4. TOL No. GSECL/KLTPS/CEG/CIVIL/CGWB-AMD/1313 dt. 27.02.19

Dear Sir,
In connection to above, this office have applied an online application to abstract the ground water for industrial use as per ref. (1). The hard copy along with all the relevant documents was also submitted to your office vide letter as per ref. (2).

The application was received by your office on dt. 18.12.17 as per the online application status. At present, the online status of the application is shown as **"REFERBACK"** and action was taken on dt. 11.12.2018 i.e. almost one year after the submission of application. Further, during checking the online status of application it is not found anywhere that why the application is 'REFERBACK". This office have followed up your office vide letter under ref. (3) & (4) to inform the query (if any) to this office but till date no response have been received.

Since, our company is power generation company, water is an essential need for us to generate power; hence, you are requested for needful in the matter for compliance.

Your early reply regarding the present status of application is much awaited for getting the approval of ground water abstraction at the earliest.

Thanking you,

For On & Behalf of GSECL,

[B T Kannar]
Addl. Chief Engineer [G]
GSECL-KLTPS

TRUE COPY
ADVOCATE

ANNEXURE-R-9

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK Varmanagar, Taluka Lakhpat, Dist. Kutch – 370601 Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434e-mail: cekltps@gebmail.com Website: www.gsecl.in
CIN: U40100GJ1993SGC019988

No. GSECL/KLTPS/CE (G)/Civil-PH/CGWB-AMD/2021/ 5079 Date 24 DEC 2021

By RPAD

To,
The Regional Director
Central Ground Water Board,
West Central Region,
Swami Narayan College Building,
Shah Alam Tolnaka,
Ahmadabad – 380022

Sub: NOC for abstraction of ground water for KLTPS, Panandhro.
Ref: Online application no. 21-4/3255/GJ/IND/2017 Dt. 05.12.2017

Dear Sir,

In connection to above, this office had made online application under reference to obtain permission for extraction of ground water. The said application has been rejected stating that not submitted water non-availability certificate.

It is to inform you that this office will submit the said water non-availability certificate on receiving the same from appropriate authority.

Moreover, it is further to bring in your knowledge that this office has already invited the tenders and work order is under placement to obtain Impact Assessment Report. Hence, a fresh application will be made after obtaining the water non-availability certificate and Impact Assessment Report.

This is for your information.

Thanking you.

For & on behalf of GSECL,

23/12/21
Chief Engineer (Gen)
GSECL, KLTPS.

23.12.2021 DE(C)

23/12/2021 EE(C)

TRUE COPY ADVOCATE

GUJARAT STATE ELECTRICITY CORPORATION LIMITED
Kutch Lignite Thermal Power Station, PO SK Verma Nagar , Taluka Lakhpat, Dist Kutch - 370601
e-mail: ceklps.gsecl@gebmail.com Website: www.gsecl.inCIN: U40100GJ1993SGC019988

No.KLTPS/TECH/WO-106822/Effi/WE-46/2021-22/1446 Date: 21 APR 2022
E-Urja PO No:106822

To,
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.

ANNEXURE-R-10

Sub: Work of preparation of area impact assessment report along with modeling study for ground water withdrawal from existing borewells as per Format & guideline of CGWA(Central Ground Water Authority)

Ref :1) This office Tender No: KLTPS-16/2021-22/3491, Dated: 28.08.2021, WE-46
2) Your quotation No. Nil: Tech bid opened on Dtd:30.09.2021; Price bid opened on Dtd: 08.03.2022
3) LOI No: KLTPS/TECH/LOI-106822/BMD/WE-46/2021-22/1296 Date:08.04.2022.

Dear Sir,
With reference to the above, the GSECL is pleased to place the order with you for the **Work of preparation of area impact assessment report along with modeling study for ground water withdrawal from existing borewells as per Format & guideline of CGWA(Central Ground Water Authority).**The terms and conditions are mentioned below:
Any clause conditions of items in your offer against and or acknowledgement letter which is repugnant to or inconsistent with the terms here to shall be void and of no force and effect unless specifically approved in writing and expressly modified by the GSECL you will also be deemed to be fully aware of the GSECL tender and work's contract documents and any ignorance of the any of these conditions will not exempt you from liability to abide by the same.

1. **Scope:**
   The scope of the work consists of **Work of preparation of area impact assessment report along with modeling study for ground water withdrawal from existing borewells as per Format & guideline of CGWA(Central Ground Water Authority)**
2. **Price:**
   The Price for various items are accepted on the basis of unit rates as described in Schedule 'B' attached the quantities mentioned in schedule 'B' are estimated quantities but the work will have to be carried out as per the actual requirement and payment will be made by applying unit rates to actual quantities executed.
   Based on the estimated quantities given in Schedule 'B' the total price for the entire contract will be **Rs.10,50,084.00 (In words(Ten Lakh Fifty Thousands Eighty four paisa only Including GST**
   However the final value of the contract will depend upon the actual quantities executed.
3. **Security Deposit:** Against the entire security deposit i.e. 5% of the order value which is **Rs.52504.00**, the BG of amount i.e.**Rs.52504.00** has been submitted by you vides **MR No.GS115202204205 Dated:18.04.2022** in ref to our LOI ref at (3).
4. **Time Limit:** The time limit for completion of this contract works, if awarded, is 12 (Twelve) months from date of commencement. However the contract will be extended as per GSECL's rules.
5. **Penalty:**
   You have to complete work within stipulated time, otherwise any delay that may take place in supply and / or erection, testing and commissioning activities beyond contractual cutoff date / stipulated period in the order shall be subjected to penalty (not liquidated damages) at the rate of 0.5% of the contract price / order price per week or part thereof subject to a maximum of 10 % of the total contract value / order value (i. e. End cost including taxes & duties) and as per penalty clause of order.
6. Quantity shown in work order is approximate & is liable to change. Payment will be made according to actual quantity of work done only.
7. The conditions mention in the; book of tender & contract for work will bind to you & other conditions will be as per mutual understanding. The decision of under signed will be final in case of dispute.
8. You will have to execute the agreement on stamp paper worth Rs. 300/- and to sign the contract booklet of works. Cost of stamp paper should be borne by you. Any correspondence against this contract will be part of the contract.
9. You will have to execute indemnity bond on stamp paper worth Rs. 300/- and should will be presented along with above contract agreement.
10. Work should be started only after executing the agreement as above before GSECL eligible officer.

11. If your work is not satisfactory & not as per terms of contract GSECL has reserved right to cancel the contract & same will be awarded to the party at your risk & cost.
12. You have to submit material account or otherwise GSECL will account as per GSECL own record.
13. You have to appoint supervisor to supervise the work & carry out the instruction given by GSECL.
14. You have to give co-operation in recording of measurement otherwise GSECL will measure the work done by you & payment will be made accordingly.
15. Income-tax will be recovered at the prevailing rates & necessary certificate will be given to you as per rules.
16. You have to produce copy of labor license before starting the work if applicable.
17. You will have to comply with all labor-low in force.
18. You have to produce PF code no.
19. The monthly payment of wages to all the contract labourers will be paid compulsorily by the contractor through Bank only. A statement for the same/ wages register duly signed shall be presented or produced with PF Challan and ECR statement to the HR Department LWO-GSECL- KLTPS every month in token of timely disbursement of the minimum wages.
20. Schedule-B, Scope of Work & Site conditions, Technical Specification, General Specification, General Guidelines relevant to IS, Terms & conditions, General conditions of contract, General Safety Rules & List of Safety Tools, are applicable as attached herewith. All other terms & conditions of the **Tender No. WE-46** shall be applicable for the purpose of this contract work.

For & on Behalf of GSECL

25.A.22

Chief Engineer(G)
KLTPS, GSECL

GUJARAT STATE ELECTRICITY CORPORATION LTD
KUTCH LIGNITE THERMAL POWER STATION
PO: SKV NAGAR: 370601

510

Schedule-B

Name of work: - Work of preparation of area impact assessment report along with modeling study for ground water withdrawal from existing borewells as per Format & guideline of CGWA(Central Ground Water Authority) for KLTPS.

Sr. No.	Description of work	Qty.	Unit	Rate	Amount
01	Work for preparation of area impact assessment report along with modeling study of ground water withdrawal from existing borewells of KLTPS as per format & amendment in the content issued by Central Ground Water Authority and performa given in Annexure-IV of S.O. 3289(E) notification dated 24/9/20 of Ministry of Jalshakti, CGWA, regarding guideline to regulate and control ground water extraction in India.	01	number	12,60,000.00	12,60,000.00
				Total Estimated Amount Rs.	**12,60,000.00**
				16.66%Below	**2,09,916.00**
				Total order amount	**10,50,084.00**
In words(Ten Lakh Fifty Thousands Eighty four rupees only Including GST					

Only short title of work is mention in Schedule-B. Details of work to be carried out are given in SOW

Terms & conditions:

1. Provision related to TDS on GST @ 2% shall be made applicable if value exceeds contract threshold limit (i.e. at present threshold limit Rs. 2,50,000/-).
2. The quantities shown in Schedule-B are qty for 12 (Twelve) months only. However, payment for the same will be made only on the basis of actual quantity of work carried out.
3. The time limit for completion of this contract works, if awarded, is 12 (Twelve) months from date of commencement. However the contract will be extended as per GSECL's rules.
4. Bill / Invoice are required as per GST rules.
5. Payment will be made as per actual work carried out.
6. Payment will be made after 30 days on submission of bill.
7. TDS (as per GST rules) will be deducted from your bills w.e.f. 01.10.2018 as per government Rules.
8. Time limit: 12 months Validity of this contract 24 months.
9. Penalty: After 12 months penalty propose as per GSECL rules as standard penalty clause is applicable.

For & on Behalf of GSECL
20.4.22
Chief Engineer(G)
KLTPS, GSECL

SCHEDULE-A (WITH SCOPE OF WORK)

1) The contractor has to submit the valid accreditation certificate of accredited individual / institute qualified for impact assessment report and modeling study issued by CGWA (Central Ground Water Authority) OR Associate(with agreement) of valid accreditation certificate of accredited individual / institute qualified for impact assessment report and modeling study issued by CGWA (Central Ground Water Authority) OR valid certificate of accreditation for impact assessment report dealing with existing /proposed withdrawal on ground water regime of NABET / QCI (National Accreditation Board for Education and training) / (Quality Council of India). Contractor must have facility to conduct ground water modeling study and submit relevant documentary proof thereof in tender.
2) Charges mentioned for work at Schedule-B is excluding of eligible GST tax. The contractor must quote the rates inclusive of all the charges for data collection, transportation, accommodation, consumables,

materials, wages, manpower, testing / survey equipments, software any other related service etc. No extr payment will be done for any reason for related work.

3) **Payment**: 80% payment of order value will be made, after submission and acceptance of final area impact assessment report along with modeling study, by KLTPS. Remaining 20% payment of work order will be made after granting approval of NOC from CGWA in regard to application of KLTPS. Payment will be released subject to availability of sufficient fund as per corporation's rules. However, amount of GST and applicable cess will be kept under retention till submission of documentary proof of payment of GST or till reflection of payment of GST pertain to respective bill amount in GST return after due verification.
4) **Time Limit:** The duration of work for submission of report is twelve months from the date of work commencement given by KLTPS. However the same can be extended as per GSECL`s rules.
5) Contractor has to do all related work of impact assessment report along with modeling study which strictly remains as per the amendment in the content/ format issued by Central Ground Water Authority and performa given in Annexure-IV of S.O. 3289(E) notification dated 24/9/20 of Ministry of Jalshakti, CGWA, regarding guideline to regulate and control ground water extraction in India.
6) The content in Format of Impact Assessment Report is applicable as mentioned in condition no. 38 of schedule-A which is framed from the present guideline published by CGWA for the work. The scope of work specified in format is indicative only. As per the hydro geological site condition of KLTPS and its surrounding area, contractor has to decide by his own way and to select in detail the various type and quantum of works to be required and to be done with in & outside premise area. Contractor has to execute the entire work as per their technical know how, expertise, reference and resources in accordance to fulfill CGWA guideline / requirements and complete the area impact assessment report with modeling study such that the report must be acceptable by CGWA for granting of the NOC to KLTPS for extraction of ground water.
7) Contractor shall be solely responsible for the entire technical works / services have been made /rendered by him during work execution and stand guarantee for the report, its technical content, data and test conclusion results.
8) Contractor has to guide us all times to resolve any clarification/query raised by CGWA ,after submission of report to CGWA by KLTPS. Contractor has to attend CGWA office for expediting/ liasioning / follow up meeting/ presentation of report at various stages related to NOC application of KLTPS and to resolve the query to obtain NOC. The contractor has to guide and assist to obtain NOC for ground water extraction from CGWA and to comply CGWA requirement, if required.
9) If CGWA or any other authority does not accept the test results / contents of reports for any reasons, and raise any query / clarification pertain to work / report, contractor has to perform necessary additional rework at site thereof and incorporate all modify data/details in impact assessment report to comply the query in time.
10) Non-availability of the required datas/inputs from KLTPS, which is not essential for KLTPS to be furnished, shall not be an excuse for improper preparation of report /delay in report preparation.
11) KLTPS has applied to CGWA for NOC of ground water extraction (@27240 m3/day-brackish water) through borewells (for industrial use) . Presently borewells for KLTPS are in GMDC mines area and Dharesh area.
12) Actual details of bore wells (approximate depth, diameter, discharge flow, horse power of pump, running hours & location of borewells on plot plan) will be provided to contractor as per available record, prior to the work. Realtime details of Borewell strata chart/lithology/pumping test data/peizometer level data with discharge are not available with KLTPS. If any other datas and details, required for this work, it will be collected by the contractor own arrangement, instrument and cost. Available details regarding borewell water consumption, water balance diagram will be given if required for report work.
13) Any pump test data if required to obtain for report preparation work, contractor has to derive and assess it by himself. Contractor has to himself decide for requirement, location and method of pump test for report. If pump test is required to carryout to ascertain water level and transmissivity of under ground water in aquifier, contractor has to provide all required setup like upstream/downstream observation wells, piping connection ,water level recorder ,pizometer installation, telemetry system, water discharge facility, electricity charges etc. and to conduct entire borewell pump test within/outside premise by his own cost.
14) Contractor has to depute well-qualified supervisor/team having sufficient experience during execution of works. He should be familiar to locality area and shall be available during full duration so as to carry out the area impact assessment report along with modeling study for ground water withdrawal from existing borewells for KLTPS. Contractor has to submit name of supervisor who would be responsible for taking instructions from concern Engineers of KLTPS.
15) KLTPS does not at all time guarantee the running /service of all borewells during the execution of work. If any minor alteration/work required in existing borewell network for report preparation, it should be done by contractor`s own cost.
16) KLTPS will provide electrical point connection of 230 V, 5/15 Amps. for subjected work with necessary approach at bore well sampling site for measuring equipment, within KLTPS premises. However, the contractor shall arrange for necessary extension wiring wherever required. As this work includes study report in 10-15 KM radius of KLTPS, the contractor has to arrange any other related work/service and power supply by his own cost.
17) Contractor has to make necessary arrangements and assistance for site preparation, approach to location. (i.e. flange opening, power supply, minor scaffolding, ladder provision etc.), access to work sites from the nearest approach road to facilitate transportation of man power, machinery and equipment duly considering the existing site conditions. Contractor shall carry out any other work at KLTPS, not specifically listed in work order but essential for preparation of impact assessment report. No extra claims / costs will be paid by

KLTPS. The Contractor has to take complete care during related work and will not damage any other structure within & outside premises.

18) Duration, frequency, location, intervals , sample collection etc will be decided in consultation with & as directed by EIC, KLTPS. Work must be commenced at KLTPS site as per our general shift working hours of 8.00 hours. The assessment/monitoring work shall be carried out in the presence of our EIC of civil section with prior permission. No work will be allowed in night time at site.
19) Contractor may conduct an initial work assessment by taking inspection visit at KLTPS and nearby area, before quoting the tender and rate. Contractor with own responsibility & all liabilities shall inspect the plant site, examine and obtain all information and consider factors which are likely to affect the satisfactory completion of work and cost thereof.
20) Borewell water samples will be analyzed & reported for the quality parameters as per requirement of CGWA in any NABL approved laboratory. The whole work of the contractor at site & office may be cross checked by us if required.
21) Contractor has to carry out the sampling / monitoring / study work by his own instruments, equipments, chemicals and laboratory facilities. All the monitoring equipments and the instruments shall be of standard make, design & specifications.
22) The contractor shall be presumed to have carefully examined the drawings, conditions & specifications of work & to have fully acquainted themselves with all available details of the site conditions, locations, materials, geological & weather characteristics, labour conditions & in general all the necessary information and data etc. pertaining to and need for this work. KLTPS will not pay any extra charges or rate for any reason in case the contractor claims, after acceptance of contract to have misjudged the site condition. Ignorance of the intents and contents of the specification document and site conditions shall not be accepted by KLTPS as basis for any claims for compensation. No claim on this account shall be admitted by KLTPS.
23) KLTPS may during the progress of work, order the removal of part or whole of the work executed, found not in accordance with the specifications/ instructions. No extra claims shall be entertained for re-executing or altering of such work.
24) The contractor shall be responsible for any injury or damage that may be caused to him/his persons or materials during execution of work. Moreover contractor shall be fully responsible for any damage caused to the GSECL's properties, during the execution of the work. The contractor has to carry out all the related works by taking all due cares of safety, security norms, with all risks with the co operation of various departments of KLTPS. Contractor has to strictly observe the general safety rules, as mentioned herewith, while execution of the job work. All safety measures applicable to this work shall be strictly observed to prevent any accident. All necessary safety equipments shall be arranged by the contractor at his own cost.
25) All information provided or the results obtained after sampling and analysis shall be used for the present work only and shall not be used for any other purpose without the prior permission of Addi Chief Engineer, GSECL, KLTPS.
26) If required, GSECL, KLTPS will provide residential accommodation on chargeable basis in hostel/semi VIP guest house/VIP guest house/single residency, if available, for persons visiting the site for the work.
27) The contractor shall submit the bills in quadruplicate to the Addi Chief Engineer, GSECL, KLTPS along with HR related documents like gate pass, PF challan, ECR statement, bank statement of wages & attendance/wages register etc. (as mentioned in general condition of contract, sr. no. C, "Submission of Statutory documents to ensure the compliances"). Eligible GST as per norms will be paid extra on production of documentary evidence of payment of GST tax against GSECL, KLTPS for the work order.
28) The GSECL, KLTPS reserves the right to reject any or all tenders without assigning any reasons thereof and is not bound to accept the lowest quoted tender for the order, if technically not acceptable. Sublet or transfer of contractor will not be allowed, without prior approval of the GSECL-KLTPS.
29) The contractor has to sign the terms and conditions of contract, scope of work, Schedule A,B,C, general safety rules and all other documents & papers of the tender and submit along with the tender in original, including all other papers asked to be submitted.
30) **Penalty**: The work shall be completed within the completion period as mentioned in the order, failing which penalty at the rate of 0.5 % per week (or part thereof) plus GST and cess as applicable subject to maximum of 10 % plus GST and cess as applicable of value of unexecuted work shall be imposed. This excludes delay in the completion of the work due to unforeseen reasons beyond the control and without fault and negligence of the bidder including (but not restricted to) act of God or public anomie action of Government in its sovereign capacity, floods, epidemics, strikes, lockouts, fires and accidents. In the event of any of the aforesaid contingencies, GSECL may be promptly kept informed by the consultant by Fax/email followed by confirmation in writing with documentary proof within fifteen days of commencement and cessation of Force Majeure circumstances. Under such circumstances reasonable extension of time shall be granted by GSECL. Application for such extension must be made before the due date of completion of work.
31) If work is more than three days at site, Contractor has to apply in advance and **follow for permanent photo gate pass** (three months duration validity) in GSECL format at his own cost for permission of entry in premise and work at site. For issuing permanent gate pass, he has to remain present and submit copy of your identity card, passport size photo, aadhar card, police verification certificate, valid workmen compensation policy, PPE issue record, job safety analysis, Chest X ray to our hospital-medical officer for fitness, etc of your all visiting team employees.
32) For any conflict, ambiguity & dispute, the decision of A.C.E.,KLTPS will be final and binding to all. The contract can be terminated by GSECL, KLTPS by giving notice, without assigning any reasons thereof and the contractor shall not be eligible for any compensation due to any reason.

33) The contractor has to submit within a week's time his planning/programme of works for prior approval KLTPS, clearly indicating KLTPS inputs.

34) **Security Deposit**: On issue of letter of intent (LOI), security deposit @ 5 % order amount should be paid by crossed Demand Draft drawn on Bank of Baroda, K.L.T.P.S. in favor of Gujarat State Electricity Corporation Limited, KLTPS or net banking. Detail work order will be issued after payment of security deposit. Tender fee & EMD will be paid by contractor with offer.
Agreement: As per GSECL's rules, contractor shall have to enter into an agreement on non-judicial stamp paper of appropriate value (Rs.300.00) with Gujarat State Electricity Corporation Limited in GSECL's prescribed format within one month. The cost of stamp fee shall be borne by contractor.

35) All other information as called for under various schedules forming part of the work order documents and / or the specification shall also be invariably furnished.

36) After correction, verification and due acceptance of draft impact assessment report by KLTPS ,the contractor has to provide five hard copies of Impact Assessment Report alongwith soft copy. All the relevant drawings covered in the report are also to be in autocad PDF format.

37) Contractor should endeavor that all the drawings, documents etc. are computerized and in editable/reproducible format. All the drawings, documents etc. to be furnished should be clear, legible to read and neat in presentation.

38) The Format for Impact Assessment Report remains as follows which is as per guideline of CGWA. It will be modified if any amendment published by CGWA in future and contractor has to do the report work accordingly.

1. *Brief about the proposed project giving location details, coordinates, google/ toposheet maps, etc. demarcating the project area.*
1.1 Land Use Land Cover of the surrounding area, Percentage of LULC categories
1.2 Topography and drainage.
1.3 Details of wetlands [Highlight protected wetlands / Ramsar sites / NLCP lakes/ other important wetlands in terms of dependencies of local communities if any]
2. Ground water situation in and around the project area including water level and quality data and maps along with quality issues, if any. In case of mines, ground water conditions in both core and buffer zone should be described.
2.1 Brief geology of the area
2.2 Hydrogeology of the area
2.2.1 Aquifer description [type, depth, storativity, permeability and porosity]
2.2.2 Ground water flow and aquifer interaction [flow direction, Ground water – surface water connectivity]
2.2.3 Ground water level trend analysis [pre – monsoon and post – monsoon] for 10 years
2.2.4 Hydrograph of the water level for 10 years
2.2.5 Predicted water level declines for affected aquifers [Ground water modeling]
2.2.6 Ground water quality [pre - monsoon and post – monsoon]
2.2.7 Water quality of nearby water bodies
3. Details of the tubewells/ borewells proposed to be constructed. This includes the aquifer parameters, drilling depth, diameter, tentative lithological log, details of pump to be lowered, H.P. of pump, tentative discharge of tubewells/ borewells, etc. Locations to be marked on the site plan/ map. Location of proposed piezometers.
4. Details of Geophysical studies carried out in and around the project area. Ground water resources computation of the block in which the project falls.
4.1 Results of Geophysical analysis [vertical electrical sounding (VES), horizontal profiling and imaging, transient electromagnetism method (TEM)] etc
5. Approved detailed dewatering plan in case of infrastructure dewatering projects.
6. Proposed usage of pumped water in case of infrastructure dewatering projects.
6.1 For drinking, irrigation etc.
6.2 Recharge
6.3 Runoff to stream
6.4 Benefitted area
7. Comprehensive assessment of the impact on the ground water regime in and around the project area highlighting the risks and proposed management strategies proposed to overcome any significant environmental issues.
7.2 Impact on groundwater sources
7.2.1. A description of the impacts on environmental values that have occurred, or are likely to occur, because of any past ground water abstraction.
7.2.2 An assessment of the likely impacts on environment that will occur, or are likely to occur, because of the ground water abstraction for a five years period starting on the consultation day for the report; and over the projected life of the resource project area, affected area and radius of influence in case of dewatering.
7.3 Socio-Economic Aspects:
7.3.1 Settlements and population dynamics around project area
7.3.2 Dependency on sources of water [surface or sub-surface]
7.3.3 Ground water uses [e.g. irrigation (irrigation method, number of watering) water supply etc.]
7.3.4 Improvement / decline in agricultural yield in last 5 years and likely impact after NOC
7.3.5 Impact of proposed / existing project on local communities [based on local interactions (interactions must be with stakeholders like fishermen community, farmers etc.]
8. Proposed measures for disposal of waste water by industries drawing saline water.

9. Measures to be adopted for water conservation which include recycling, reuse, treatment, etc. This includes the water balance chart being adopted by the firm along with details of water conservation methods to be adopted.

- Brief write up along with capacity and flow chart of Sewage Treatment Plants / Effluent Treatment Plants / Combined Effluent Treatment Plants existing/ proposed within the project.

- Details of water conservation measures to be adopted to reduce/ save the ground water.

- Total water balance chart showing the usage of water for various processes.

10. Any other details pertaining to the project.

GENERAL TERMS & CONDITIONS – (001-3)

1.	Contract means the documents forming tender and the subsequent agreement that may be entered into.
2.	Work or works means the work related to the subject mentioned in tender.
3.	Contractor means a firm or an individual undertaking these works or offers the rates for this work.
4.	The general rules and regulations of the GSECL for tender and contract for works will apply to the extent of the same and not modified herein. The contractor is deemed to have gone through and considered to be fully aware of the conditions mentioned therein.
5.	To sublet or to transfer the contract without prior approval of the GSECL shall be treated, as breach of contract and it shall be punishable by forfeiting the S.D. as well as termination of contract.
6.	The monthly payment to the labourers must be paid in the presence of Labour Welfare Officer, KLTPS. A copy of the same must be submitted along with monthly RA Bill, duly certified by the Labour Welfare Officer. The certificate should contain details of average no of labourers deployed, total wages/salaries paid and overtime amount separately.
7.	**Execution of Agreement(on stamp paper of Rs.300):** The successful bidder (contractor) will have to enter into an agreement with the GSECL before starting the work and the cost of the stamp paper will be borne by the contractor. The contractor will also have to execute indemnity bond on required value of stamp paper as per GSECL's rules. The cost of stamp paper for indemnity bond will be born by the contractor.
8.	**GST: (Tax)** GST is applicable as per government rules. The Bidder shall have to furnish attested copy of Registration Certificate issued by government authority mentioning GST Registration Number and the same is to be shown in each invoice. **If party has two GST registration out of which one is cancelled then party has to provide No Due Certificate from GST Department for the cancelled GST registration.**
9.	**Statutory variation :** Statutory variation on applicable taxes mentioned in order shall be admitted provided they take place during the contractual completion period subject to claim being supported by documentary evidence.
10.	**Income Tax:** Income tax, work contract tax & other taxes at the applicable rate will be deducted at source from your bill as per rules. Contractor has to submit all the invoices clearly mentioning PAN No. The contractor being exempted for Income tax or other applicable taxes shall submit the valid exemption certificate with bill.
11.	**Deductions :** The GSECL will be entitled to deduct directly from the bills to be paid to the contractor any sum or sums payable by the contractor and which sum/sums the GSECL is required to recover as its own dues/recoveries as well as to pay as a principal employer on account of contractor's default in respect of all liabilities referred to in above clauses.
12.	**Submission of Bill :** a) Bills (in triplicate) shall be submitted by the contractor for all works, executed at the frequency decided by the Engineer In charge (EIC). b) Measurement is to be taken jointly in presence of the EIC. The running as well as final bill will be prepared based only on measurement sheet duly accepted & signed by party & our supervisor or engineer-in charge. c) If the contractor does not submit the bill, within the time fixed, the EIC may depute a subordinate to measure the said work in the presence of the contractor or his duly authorised agent, whose countersignature in the measurement list shall be sufficient warrant and the EIC may prepare a bill which shall be binding to the contractor in all respect. d) If contractor fails to depute his representative, the measurement taken by the EIC shall be treated as final and shall be binding to the contractor. e) Other documents to be submitted with Bill (i) Along with the R.A Bill, the contractor should submit Material Account wherever applicable duly approved by EIC. (ii) Proof of payment of provident fund and other statutory dues. (iii) Certificate issued by IRO/Labour Welfare officer. (Certifying average number of labourers deployed during the month and total amount of wages and salaries paid to labourers) and No

	objection to release Payment of submitted bill. If applicable
13.	The contractor shall not engage any sub-contractor without written prior permission of the Chief Engineer or the authorized officer of the GSECL. In no case the GSECL will be liable in any manner regarding any liability in respect of any contract labourer engaged by the sub-contractor and the liability of such contract labourer will solely rest with the principal contractor.
14.	**Payment:** a) The GSECL shall not pay any advance(s) against this work including mobilization advance if not otherwise included hereunder. b) The quantity mentioned in schedule-B is tentative and may vary widely within the limit of order/ approval; payment will be made for actual work done only. c) The payment shall be made as per GSECL rules which is **For Supply:** 80% payment will be made against TRC within 30 days and balance 20% will be after acceptance of material & Completion of work within 45 days from the date of submission of bill. **For Work:** After 30 days from the date of recording of bill. d) Any delay in payment of bill shall not entail the contractor for any extra claim.
15.	**Penalty:** (a) Any delay that may take place in supply and / or erection, testing and commissioning activities beyond contractual cut off date / stipulated period in the order shall be subjected to penalty (not liquidated damages) at the rate of 0.5% of the contract price / order price per week or part there of subject to maximum of 10% of the total contract value / order value (i.e. end cost including taxes and duties) plus applicable GST on penalty amount. (b) The penalty for delay is over & above the charges deductable against performance guarantee and other dues/recoveries.
16.	The contractor shall deploy the adequate number of experienced staff at site for daily supervision and for maintenance of various registers and records required under the law and contract. No payment by the GSECL for supervision shall be admissible
17.	**Staff Discipline:** It is the responsibility of the contractor to ensure that his employees maintain strict discipline as regards security, methods of safe working etc., and not to cause any hindrance to smooth running of power station or in execution of duties by GSECL staff. Any lapse in this regard will be viewed seriously and contract is liable to be terminated. If any of his staff is found unsuitable or not behaving properly, the contractor shall have to remove him from the work-site on demand by GSECL. The contractor shall have to strictly observe the rules and conditions specified in the enclosed works contract booklet of the GSECL, which are not modified hereunder. To keep harmonious Industrial Relations amongst contract labourers is the sole responsibility of the contractor. Any breach of the same will be viewed seriously
18.	**Arbitration:** "All questions, disputes or differences, whatsoever which may at any time arise between the parties to this contract in connection with the contract or any matter arising out of or in relation thereto, shall be referred to the Gujarat Public Works Contract Dispute Arbitration Tribunal as per the provisions of the Gujarat Public Works Contracts Disputes Arbitration Tribunal Act 1992"
19.	**Labour Escalation:** The contractor shall pay minimum wages to his labourers as per the Minimum Wages Act, 1948 and rules therein, as applicable from time to time, in pursuance to the state government notification. The concerned contractor, after making such payment to his labourers, shall submit the details of the payment with the certification of Labour Welfare Officer/Industrial Relations Officer. However, no labour escalation will be payable by GSECL to the contractor as this is a firm price contract throughout the period of contract.
20.	The GSECL reserves the right to terminate the contract at any time during the contract period without giving notice of termination of any reason thereof and the contractor will not be entitled for any Compensations / damages / losses whatsoever on account of termination of such contract.
21.	In case of default, the work will be got done through other agency/agencies at the risk and cost of the original contractor, and the GSECL shall be entitled to recover such expenses from defaulting contractor by such methods as deemed fit. The contractor shall not, however, be entitled to terminate the contract or stop works undertaken by him before expiry of the contract period/extended period due to any reason whatsoever.
22.	Under the contract, the contractor should either himself be present at the site or should nominate persons in writing, who must be available at site and who should be authorised to take decisions In absence of any responsible man of contractor at the time of any emergency, ad hoc decision of Engineer-in Charge will be binding on the contractor
23.	The contractor is bound to execute the work for any item as per the instruction of the Engineer-in-Charge. On refusal to do so, the work will be carried out at the risk and cost of contractor by using the contractors tools and tackles, for which no compensation whatsoever shall be payable to the contractor
24.	If any immovable articles/tools/equipment will be found stolen from the working place, the contractor would be held responsible and cost will be recovered from his bill.
25.	For any conflict and ambiguity, the decision of the Chief Engineer (KLTPS) shall be final and binding on the contractor
26.	Before starting the work, the contractor should contact Industrial Relation Officer/ Labour Welfare

	Officer for all formalities and obtaining the gate passes of his labourers and for other formalities
27.	Office correspondence will be carried out in English language, and if at any time to facilitate the contractor, Gujarati translation may be furnished, if deemed fit. The English version will be the correct one and the same only will hold good for legal matters
28.	The contractor should intimate to the office the name, cell no. and address of authorized and responsible representatives, so that our field officers can contact them when required in connection with the execution of the said works.
29.	Contractor should take all risk insurance policies.
30.	All safety measures as required to be adopted as per the Statutory Regulations and the Safety Rules of the Plant shall be strictly followed by the Contractor during the execution of the Contract. The Contractor shall set up a suitable safety organization of his own in this regard. The contractor shall ensure the safety of workers, material and structure including existing structures during execution of the contract. Safety measures shall be followed during operations of equipments/machinery being used. No separate payment shall be made for the safety measures and the quoted rates shall include the cost for all safety measures
31.	In connection with the execution of the Contract, the Contractor shall comply with all applicable statutory Rules & Regulations including employment of labour at site
32.	If the GSECL Engineer-in-Charge is not satisfied with the progress of work at site, he shall direct the Contractor to depute more numbers of supervisory personnel/workers to meet the completion schedules as per the Contract. Upon receiving such direction, Contractor shall deploy additional personnel within given time without any extra cost.
33.	The GSECL may during the progress of work, order the removal of part or whole of the work executed, found not in accordance with the specifications/ instructions. No extra claims shall be entertained for re-executing or altering of such work
34.	On acceptance of the tender the name (s) of the accredited representative (s) of the bidder who would be responsible for taking instructions from the Engineer-in-charge shall be communicated to the Engineer-in-charge.
35.	The GSECL will not pay any extra charges or rate for any reasons in case the contractor claims, after acceptance of contract to have misjudged the site condition.
36.	The contract or any part thereof shall not be subject to change without the written permission of the CHIEF ENGINEER or his authorized representatives from issuing authority of certificates / details.
37.	In case of conflict/discrepancies among clauses of different specifications given in this document, the stringent specification shall be followed and under such circumstances, the decision of the EIC shall be final and binding to the CONTRACTOR.
38.	Time is the essence of this Contract. The whole of works must be proceeded as described in these specifications and as directed by the EIC. No extra payment or relaxation in the rates will be permitted on account of this.
39.	**Start of Work:** The contractor shall not enter upon or commence any portion of the work except with the written authority of Engineer, failing which the contractor shall have no claim to ask for measurement of or payment for work and shall be responsible for any claims or damages that may arise due to such unauthorized commencement or entry. The contractor shall make all necessary arrangements at site to mobilize labour, supervisor as per schedule.
40.	Work covered under this specification shall be completed in all respects, as stipulated under scope of work.
41.	The rates quoted by BIDDER shall be based on his own knowledge and judgment of the conditions and hazards involved and shall not be based on any representations of the Engineer. No claim on this account shall be admitted by the GSECL.
42.	Percentage quoted for Prices and rates shall be firm for the entire duration of the contract and any agreed extensions thereafter, without any escalation in prices.
43.	During the execution of the work if it is found that the work is not progressing as per the scheduled programme, approved by the GSECL & planned by the contractor, due to the reasons attributable to the contractor, suitable action shall be taken as per GSECL providing rules. And the GSECL may also take such action as it may deem fit to ensure that the work is completed in time at risk and cost of the contractor.
44.	Any clarification/queries asked by GSECL / GSECL's representative shall have to be furnished by the contractor.
45.	**Work to be executed to the satisfaction of the Engineer:** The contractor shall proceed with the work with diligence and expedition and the whole of the work herein specified as well as the mode of execution shall be under the supervision and direction and shall be carried on to the entire satisfaction of the Engineer,.
46.	**Liability for accidents to persons** a) The contractor or sub-contractor shall indemnify the GSECL against any claims which may be made under the workman's compensation Act, 1923, or any statutory modification or otherwise in respect of any damages or compensation payable in consequence of any accident or injury caused, by fault of contractor or sub-contractor and sustained by any workman or other person in the employment of the contractor or sub-contractor. In every case in which by virtue of the provisions of sub-section (1) of

	section 12 of the workman's Compensation Act, 1923, the GSECL is obliged to pay compensation to workman employed by the contractor or sub-contractor in execution of the work, the GSECL wi recover from the contractor the amount of compensation so paid, and without prejudice to the rights if the GSECL under sub-section (2) of section 12 of the said Act any such amount shall be paid by contractor within 30 days, failing which the GSECL shall be at liberty to recover such amount or any part thereof by deducting it from any some due by the GSECL to the contractor under this contract or otherwise. The GSECL shall not be bound to pay any claim made against either of them under section 12, sub-section (1) of its said Act, except on written request from the contractor and upon his giving to the GSECL full security for all costs for which the GSECL might become liable in consequence for entertaining such claim. b) The contractor and/or sub-contractor named in the contract shall indemnify the GSECL against all claims based upon injury or death to any person in the employ of the contractor or sub-contractor, or to third parties under paragraph (a) 2 or condition No.47 to the extent of any sums recovered under the insurance policy. c) On the occurrence of an accident which results in the death of workman employed by the contractor or sub-contractor, which is so serious as to be likely to result in the death of any such workman, the contractor shall within 24 hours of happening of such accidents intimate in writing to the Engineer the fact or such accidents. The contractor or sub-contractor shall indemnify GSECL against all loss or damage sustained, by the GSECL resulting directly or indirectly from his failure to give intimation in the manner aforesaid including penalties or fine if any, payable by GSECL as a consequence of GSECL's failures, to give notice under workman's compensation Act or otherwise to confirm to the provisions of the said Act in regard to such accident. d) The contractor will be responsible for complying with all rules and regulations and labour land applicable to him and the GSECL will not be responsible for any lapses committed by them. If there is any claim from any Govt. Authority pertaining to the contractor the same amount will be deducted from the contractor's bill.
47.	**Inspection of Works** The Engineer or his duly authorized agent shall have at all time full power to inspect the works, wherever in progress,
48.	**Recoveries** Recoveries due from the contractor, up to the end of the month previous to the one in which the bill is prepared shall be made from bills approved by payment every month or at other periods when the bills are prepared, for the various items in the following order of priorities and extents. i) Deduction on account of security deposit in full together with shortage, if any, to be made good. ii) Penalty in full, if levied. iii) Expenditure, if any, incurred by the GSECL on Contractor's behalf in labour or materials in full. iv) Charges for services such as water etc. in full. v) Other recoveries. (If any)
49.	**Speed of work** The contractor shall at all times maintain the speed of work to confirm to the latest operative progress schedule but the Engineer may at any time with sufficient notice in writing direct the contractor to slow down any part or the whole of the work for any reason (which shall not be question whatsoever, and the contractor shall comply with such orders of the Engineer. The compliance of the orders shall not entitle the contractor to any claim or compensation.
50.	**Contract document and matters to be treated as confidential** All documents, correspondence, decision and other matter concerning the contract shall be considered as of confident and restricted nature by the contractor and he shall not divulge or allow access there to any unauthorized persons of any kind.
51.	**Measurements to be provisional and subject to correction** Every measurement for running payment on account of work, done or supplies made shall be subject to adjustment or final measurements. In case of disagreement between such intermediate and final measurements, the latter shall prevail.
52.	**Performa returns** : The contractor shall maintain Performa, charts and details regarding machinery equipments materials, labour personnel and other matters as may be specified by the Engineer. He shall further, submit returns of Performa and details as may be specified by the Engineer from time to time.
53.	**Performance Guarantee (PG):** if applicable to this contract then, (a) The successful bidder shall have to furnish PG. (b) The Performance Guarantee for the tendered items wherever applicable shall be furnished in the form of D.D./Cash and by Bank Guarantee, valid for the period as per Technical Specifications and should have clear one time validity for the full period. (c)Performance Guarantee for an interim period will not be allowed. However, in case of expiry of PG before the said period the same should be got extended / renewed till the completion by the contractor at least one month before the expiry of the validity, failing which GSECL will be at liberty to encash the same, without entering into further correspondence, formalities, etc. in the matter. "NO STAGEWISE BANK GUARANTEES WILL BE ACCEPTABLE IN ANY CASE." **The supplier/contractor/party (i.e. tenderer) has to give bank guarantee with validity period of additional 01(one) months i.e. more than actual Guarantee/Warranty period of**

	06/12/18/24/36/48/60 months (depending upon the product) to safe guard Company's interest in case of eventuality happening on the last day of Guarantee/ Warranty period after office hours of the Bank or Bank Holidays."
54.	**Security Deposit :** (a) Security Deposit should be paid within 10 (ten) days after receipt of LOI. The successful bidder will be required to pay an amount equivalent to 05% of the value of the order as a Security deposit for satisfactory execution of the contract. Security deposit for satisfactory/successful execution is payable either in Cash / D.D./ Bank Guarantees only. (b) Bank Guarantees from Scheduled / Nationalized Banks is also acceptable if the amount of security deposit payable exceed Rs. 5,000/-. The Bank Guarantees will be executed on the standard form prescribed by the GSECL. In case of the Bank Guarantees furnished / submitted, they should have a clear one time validity till the completion of the order in all respect. Bank Guarantee for Interim period will not be allowed. If by any reasons the work period is extended then Contractor should undertake to renew the Bank Guarantee at least one month before the expiry of the validity, failing which GSECL will be at liberty to encash the same. CORPORATE BANK GUARANTEES are not allowed. (c) The GSECL reserves the right to forfeit the SD in case of any breach of contract and in case of disputes. The decision of Chief Engineer, KLTPS shall be final, binding and acceptable to the contractor. If the contractor fails to start the work as stipulated, the EMD and the SD shall be forfeited. (d) The security Deposit/ Bank guarantee covering execution of the contract will be released only on successful execution of contract and on receipt of the "**No Objection Certificate**" from the Engineer In charge of the work.
55.	"The concerned authorized party, from any state other than Gujarat, taking the Hazardous waste from GSECL power station shall obtain the permission of the Pollution Control Board of that State for receiving the said quantity of Hazardous Waste from State of Gujarat, before the actual disposal from GSECL power station. The copy of the said permission letter shall be submitted to GSECL." The said letter copy shall be submitted to GPCB, Gandhinagar with a copy to concerned RO by the respective power station. In response to this, GPCB shall issue the permission letter to GSECL power station."
56.	For ARC/BRC contract "The Contractor shall deposit 15 days salary at the-rate of last drawn salary for every completed one year of services for each worker for the liabilities of Gratuity".
57.	Actual payment made to the workers engaged under the running contract as per agencies record endorsed by GSECL welfare office [i.e. Work wise actual labour Payment in presence of LWO/IRO or bank through payment. It should be verified with Biometric presence of all workers, supervisor and should be certified by LWO/IRO .

TERMS AND CONDITIONS REGARDING INDUSTRIAL LAWS AND OTHER RELATED MATTERS:

01. **Wages to be paid, time of payment, etc., by the contractor:**
The payment shall be disbursed in presence of the GSECL representative during the working hours in the factory premises and the contractor shall get the entries certified in the register of wages by the representative of the GSECL. Any default will result in cancellation of contract forthwith or else the contractor shall be punishable to the extend of Rs.100/- per day by way of fine. The contractor shall give his telephone number, address to the GSECL, so that in case of labour unrest etc., the contractor can be contacted. The contractor shall arrange to have his office outside the factory premises and the contractor shall keep himself present throughout the working hours. It is absolutely necessary that the contractor either himself and/or a fully authorised representative having full power or authority concerning the contract shall have to remain present at KLTPS. He must also contact Executive Engineer daily at 08.00 hours, so that necessary instruction can be passed on to him. Also, he must be available during working hours (general shift) and during failure of any equipment at any time, so that he can be immediately contacted for any emergency work. The contractor and/or his authorised representative shall not leave KLTPS without specific permission from the Executive Engineer. If the period of absence from KLTPS is more than three days, an alternative arrangement shall be made and to be informed to the sectional head in writing.

02. **Labour Laws:**
The labour laws applicable and amended from time to time have to be followed scrupulously. A few of them for information are as under:

i). Person below the age of eighteen years shall not be employed for the works

ii). No female worker shall be employed in the night shift between 19:00 hrs and 06:00 hrs.

iii). Contractor shall maintain a valid labour license under the Contract Labour (Regulation & Abolition) Act for employing necessary manpower to be required by him. In the absence of such license, the contract shall be liable to be terminated without assigning any reasons thereof.

iv). The contractor shall, at his own expense, comply with all labour laws and keep the GSECL indemnified in respect thereof. Some of the major liabilities under various labour and industrial laws, which the contractor shall comply with, are as under:

a. Payment of contribution of employees (contract labour) as well as employer's (contractor's) contribution towards provident fund, family pension scheme, deposit linked insurance scheme,

administration charges, inspection charges, etc., at the rates applicable from time to time by the Government of Gujarat / Government of India or other statutory authorities.

b. Payment of deposit in respect of each contract labour at the rate as revised by the Government from time to time with the Office of the Commissioner of Labour as per the Contract Labour (R&A) Act.

c. License fee as prescribed under the Contract Labour (R&A) Act and rules framed therein, depending upon the number of workers employed by the contractor.

d. Paid leave facility and wages as per the provision of the Factories Act at the rate of one day for every 20 days of working.

e. Identity cards as prescribed under the Factories Act or by the Thermal power station with photograph affixed thereon, for identification.

f. Payment of retrenchment compensation, notice pay and other liabilities as per Industrial Disputes Act, 1947. Any payment to the contractor's employees arising out of any claim or disputes under the Industrial Disputes Act, 1947 or any other labour laws.

g. Payment of compensation in case of accidental injury, under Workmen's Compensation Act.

h. Provision of crèche if the female labour employed is more than 30.

i. Maternity leave as per the provision of the Maternity Benefits Act.

The above are some of the major liabilities of the contractor in addition to other liabilities prescribed under the various labour laws in force from time to time by the statutory authorities, like State Government / Government of India, which the contractor shall have to comply with.

03. **Provident Fund and Family Pension Scheme:** The contractor shall submit along with his bill (month-wise) a statement regarding deductions against Employees Provident Fund (EPF) and Family Pension Scheme (FPS) in respect of each concerned employee at the rate of 10%, or at the rates made applicable by the government from to time, of wages. The contractor's contribution and the worker's contribution towards PF and FPS shall be deposited by the contractor with the Regional Provident Fund Commissioner, Ahmedabad, or to the authority prescribed under the Act along with the other charges.

04. **Deposit Linked Insurance Scheme:** The contractor shall have to deposit 0.50% (half percent) or the rate applicable from time to time of the wages in respect of employees who are members of the PF, as the contribution to the Deposit Linked Insurance Scheme, with the Regional Provident Fund Commissioner, Ahmedabad.

05. **Minimum Wages Act:** The contractor shall pay prevailing minimum wages as applicable from time to time to the labourers engaged by him as per the Minimum Wages Act, in presence of the GSECL's officer or representative.

06. **E.S.I. Act:** The contractors shall comply with the provisions of E.S.I. Act wherever applicable as per the prevailing provisions of the Act and as amended from time to time.

07. **Administrative Charges:** Administrative charges for maintaining Provident Fund account shall be deposited by the contractor with the Regional Provident Fund Commissioner, Ahmedabad, at the rates applicable.

08. **Paid Leave Facility:** Paid leave facility at the rate of one day for every twenty days of actual work by the contract labour shall be provided by the contractor to his workers. He shall maintain leave records/verified and approved/certified by the authorised officer of the GSECL.

09. **Safety:** The contractor shall strictly observe all safety rules and provide safety equipment to the contract labourers as per the Factories Act, 1948, and whatever amendments made from time to time to avoid any chance of accident. The contractor shall strictly observe all instructions of Safety Officer and Factory Inspector to avoid any chance of accident.

10. **Workmen's Compensation Fund and Employer's Liability Insurance:** Insurance shall be affected for all the contract employees engaged in the performance of this contract. If any of the work is sublet after due permission in writing from the GSECL, the contractor shall require the sub-contractor to provide workmen's compensation and employer's liability insurance for the later employees, unless such employees are covered under the contractor's insurance. It shall be the liability of contractor for employees of his sub-contractor.

11. **Compliance to Security Matters:** The power station being a restricted/prohibited area, all the formalities as required by the Security and Vigilance staff of GSECL should be complied with, to whom the contractor should contact S.O.

12. **Submission of Returns & Maintenance of Records:** The contractor shall submit the returns under the Contract Labour Act, Payment of Bonus Act, Payment of Gratuity Act etc. and shall have to maintain all up-to-date records/registers in respect his employees as prescribed under various Labour Laws and produce the same as and when demanded by GSECL's or Govt.'s appropriate authorities.

13. **Contractor to Indemnify the GSECL:** The contractor shall indemnify and keep indemnified the GSECL and every member, officer and employees of the GSECL, including Engineer-in-Charge and his staff, against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or in connection with the matters referred in above clauses and elsewhere and against all actions, claims, demands, costs and expenses which may be made against the GSECL, by any workman/employee of the contractor or sub-contractor or any other person under any laws, rules or regulations having the force of law, including, but not limited to, claims against the owner under Workmen's Compensation Act, 1970. The GSECL shall not be liable for or in respect of or in consequence of any accident or injury to any workman or other person in the employment of the contractor. The contractor shall indemnify and keep indemnified.

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13. **Contractor to Indemnify the GSECL:** The contractor shall indemnify and keep indemnified the GSECL and every member, officer and employees of the GSECL, including Engineer-in-Charge and his staff, against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or in connection with the matters referred in above clauses and elsewhere and against all actions, claims, demands, costs and expenses which may be made against the GSECL, by any workman/employee of the contractor or sub-contractor or any other person under any laws, rules or regulations having the force of law, including, but not limited to, claims against the owner under Workmen's Compensation Act, 1970. The GSECL shall not be liable for or in respect of or in consequence of any accident or injury to any workman or other person in the employment of the contractor. The contractor shall indemnify and keep indemnified.

The GSECL against all such damages and compensation and against all claims, demands, proceeding costs, charges and expenses whatsoever in respect thereof or in relation thereto.
The contractor shall also indemnify GSECL in all respect against any liability due to breach of legal provisions contained in any of the Labour Laws.
The Contractor shall also indemnify GSECL for injury or damage to third party other than employees of the GSECL, contractor or sub-contractor.

14. As a contractor, the contractor shall be responsible and liable to pay difference in wages, if any, and/or observe the revised service conditions that may be awarded by the Honourable Industrial Tribunal effective from the date directed in the award.
15. The contractor must be maintaining regular labour record and should be paying all acquired benefits to labour force and contractor should obtain certificates to this effect from Labour welfare officer.
16. Any other rules and regulations, conditions etc. that are in force at present and that may be framed by the GSECL from time to time in connection with the contract will be binding and acceptable to the contractor.
17. The contractor will make arrangements at his own cost to insure all men, materials and equipment employed for this work. The GSECL will not be responsible for any loss or damage either to the contractor's personnel or his equipment.
18. Dispute, if any, taking place between the contractor and labourers must be intimated to Labour Welfare Officer, KLTPS, immediately.
19 The contractor must insure all the labourers before starting the works.
20. Any casualty will also have to be borne by the contractor for the period the contract continues

"GENERAL SAFETY RULES / NORMS" TO BE OBSERVED BY THE CONTRACTOR

All the contractors working in **Gujarat State Electricity Corporation Limited Factory like Coal/Lignite/Gas/Hydro/Pumping Station** shall have to strictly observe the following Safety Rules. Concern principle contractors are responsible for informing & observance of these rules by their supervisors/contract workers as well as the owner/supervisors/ workers of sub-Contractors engaged, if any, by them for the work contract awarded to them. Prior to commencement of the work, Contractor shall have to submit a written assurance on their letterhead to the concerned Sectional Head / Engineer-in-charge that they have thoroughly gone through these Rules, have educated their employees / workers of their sub contractor and will strictly observe the said Rules while execution of work under work contract awarded to them. They will have to indemnify the company for any loss or damage / accident / injury to the company's property / employee or employee of their own in default of non - observing these rules.

(01) Contractor should issue photo gate pass for their workers from GSECL Factory Manager as per Gujarat Factories rules, 1963 & details shall be filled up in GSECL gate pass format as per Aadhar card /Election card id proof & to follow the gate pass issue procedure through concern department EE & SE, Security Officer, LWO/IRO/DGM, Factory Medical Officer, Safety Officer/Dy. Safety Officer & Factory Manager.

(02) In case of emergency, temporary photo gate pass shall be issued by Security Officer only for three days with prior permission of Factory Manager only. More than three days, Permanent photo gate pass procedure shall be completed by contract agency for their contract workers.

(03) Certificate of Fitness of employment in hazardous process & operations in form no.33 of Gujarat Factories rules, 1963 shall be issued by GSECL Factory Medical Officer for all contractor workers before commencement of work & examination responsibility shall be taken by contractor as well as concerned Head of Department .Pre-employment & Periodical medical examination of contractor workers shall be carried out in form no.32 from GSECL Factory Medical Officer after every six (06) months of contractor with their contractor workers. Contractor shall be fulfilled all health requirements before commencement of work. After completion of medical examination in form no.32/33, GSECL Factory Medical Officer shall be signed in contract worker gate pass procedure format.

(04) Contract worker gate pass will issue after completion of safety induction 3D animation movie & Training record is to be maintained in IMS/OHSAS training format by TK Office/LWO.

(05) As per Gate pass format of GSECL, Safety Officer/Dy. Safety Officer shall be checked the issue PPE to contract workers as per nature of job, Form no.10 of lifting tools and tackles, Driving license, Electrical contractor license, Electrical trade qualifications, Safety induction training, SOP, supervisor qualifications etc. After fulfillment of all Safety compliances, Safety Officer/Dy. Safety Officer shall be signed in Contract worker Gate pass procedure format.

(06) Work Contract shall be completed by principle contractor/agency/person who is awarded the work order. Subletting of contract shall be allowed only if prior approval of Power station chief before execution of work. Contractor/agency shall be submitted the entire subletting contract documents with gate pass application through concern department EE & SE, LWO/DGM, Safety Officer/Dy. Safety Officer & Factory Manager.

(07) **Under The Conditions Framed Under Rule-45 Of The Indian Electricity Rules, 1956, Valid** Electrical contractor License shall be submitted to concern electrical department EE/SE/Electrical Safety Officer/ Safety Officer/Factory Manager at the time of apply gate pass by agency/party with latest renewal from Chief Electrical Inspector, Gandhinagar- Gujarat. Electrical License photocopy shall be checked by Concerned HOD of Electrical Department/Electrical Safety Officer/Dy.Safety Officer/ Safety Officer/Factory Manager.

(08) As per nature of job/work, Qualified supervisor (Diploma (Electrical/ Mechanical/Civil/C&I) + 3 years experiences or ITI + 10 years) shall be engaged by contract agency & qualification certificate with experience certificate shall be submitted to concern EE/SE/LWO/IRO/DGM/ Dy. Safety Officer /Safety Officer/Factory Manager at the time of apply gate pass.

(09) As per rule 3 of CEA regulation ,2010: **Designating person(s) to operate and carry out the work on electrical lines and Apparatus,** Contract person/worker possesses a certificate of competency or electrical work permit, issued by the Appropriate Government. That means, Electrical trade Qualification of contract worker/person like ITI-wireman/ Electrician, Diploma (Elect), BE/B. TECH (Elect), ME/ M. TECH (Elect) shall be submitted to concern EE/SE/LWO/IRO/DGM, Dy.Safety Officer/ Safety Officer/Factory Manager at the time of apply for photo gate pass procedure.

(10) As per nature of job/work & during capital overhauling work /Annual overhauling work /24X7 round the clock work/major shut down work, Qualified Safety Officer/Manager/Supervisor (BE/Diploma (Elect/Mech/Civil) + PDIS-Post Diploma in Industrial Safety) shall be engaged by contractor during dangerous operations/dangerous works as well as day to day dangerous activities, safety supervision, tool box talk, Safety awareness programme, SOP preparation with hazards & its control measures with each step , checking of lifting tools & tackles, hydra mobile crane, Safety precautions, coordination with Safety Department etc.

(11) License of driver shall be submitted with gate pass issue application as per nature of vehicles & to follow the Motor vehicle Act,1988,the Central Motor Vehicles (Amendment) Rules,2016 as well as Gujarat Motor Vehicles rules,1989 & driver license shall be checked every day by security shift in charge before entry in the Factory premises.

(12) SOP with JSA (Job Safety Analysis) shall be prepared by contractor through competent person as per GFR, 1963 or Qualified Safety Officer as per GFR, 1963 with 05 years experiences. SOP will review & approve by concern JE/DE/EE/SE/Elect. Safety Officer/Dy. Safety Officer /Safety Officer/Factory Manager before execution of work.

(13) It is compulsory to use standard make Personal Protective Equipments (P.P.Es.) as per the job requirement. Do not work without use of required P.P.Es. Contractor is responsible to provide standard make (ISI/DGMS/CE/EN/ANSI approved) & to checked standard/make in PPE issue format by concern JE/DE/EE/SE/Safety Officer/Factory Manager. Personal Protective Equipments / Safety Gadgets suitable to give sufficient protection against hazards involved in their work / job to their staff, as per the job requirement and insist / enforce their workers to put on the same while at works.
The ongoing work is liable to be stopped at any time if your contract workers/staffs found working without P.P.Es. Following is the list of various P.P.Es (as per ISI/DGMS/CE/ EN/ ANSI approved only) to be used for various works / worksites.
In any work, Contractor shall be issued the minimum 05 nos. of PPEs like Safety Shoes, Safety Helmet, Safety goggles, Mask & Reusable Ear plug to their workers/supervisor compulsory & it will check by concern section HOD & Dy. Safety Officer /Safety Officer at the time of gate pass procedure.

List of safety equipments	
Industrial Safety Helmet	For protection of head against falling objects or during fall of person from height. **Yellow Colour helmet is used for contract worker with agency logo.**
Safety Goggles/welding goggles/chemical splash goggles	For protection of eyes against flying particles / dust, chemical splash, welding spark, arc, flashover etc.
Full Face shield	For protection of face against flying particles / dust, chemical splash, spark, arc, flashover etc.
Reusable Earplug / Ear muffs.	For ear / hearing system protection while working in high noise level area.
Chemical suit/Gas tight suit /Fire proximity suit/FR Boiler Suit	For body protection against chemicals, oils, sharp edged objects, heat, hot objects etc.
Safety Hand Gloves	For protection of hands against chemicals, oils, sharp edged objects, heat, hot metals/objects, electricity etc.
Safety shoes/ Gum Boots with Oil/Chemical/water/heat/ Electrical resistance etc.	For protection of leg/feet against falling objects, sharp edged objects, heat, hot metals/objects, electricity etc..
Safety Belt(full body hardness with double lanyard & shock absorber) / Rope / Life line / Fall arrestor etc.	For fall prevention while working at heights or in depth, working in vessel or in confined space.
Dust Mask/Respirator with valve(FFP2)	Protection of respiratory system against dust.
Chemical Cartridge Respirator with full face mask type A2B2E2K2	Protection against toxic chemical fumes / gases/vapors/dust etc.
Trolley mounted Air line respirators with full face mask	Working in oxygen deficient zone or confine space area
Portable Single gas detector like Chlorine, Ammonia, Hydrogen, etc	Working in hazardous storage/process area

Portable Multi gas Detector (LEL,O2,CO,H2S,SO2, etc)	Working in oxygen deficient zone & use in entry of confine space & Major fire
Automatic voltage detector	To check the present voltage or induction voltage of electrical equipments/ bus/switch gears from 01 (one) feet distance before starting the any electrical work .
Auto darkening welding helmet (EN 379 & EN 175 Level-B) with PAPR as per EN 12941:1998, class TH2 and AS/NZS 1716	The new auto darkening welding helmet combines legendary Speed glass quality and auto darkening technology with an innovative wide-view grinding visor to give welders an all-in-one solution for more flexibility, precision, and efficiency. Respiratory System is a combined face and breathing protection device, for increased comfort and safety in welding. The unit is equipped with a particle filter which removes particles from the air. The unit provides a constant airflow independent of filter combinations and clogging. The unit can also be equipped with a gas filter (for example A1B1E1). The unit supplies air to the head top via the connecting breathing tube. The airflow creates a slight positive pressure which together with the sealing to the face prevents particles and other contaminants from entering the head top.

(14) All PPEs (as per ISI/DGMS/CE/EN/ANSI approved only) Should issued by party/agency/contractor to their contractor workers as per nature of job and allotment of PPE list shall be submitted to Safety Officer, KLTPS on his letter head as per below mentioned format by Contractor before commencement of work through concerned JE,DE,EE/SE .

Sub: Issue of PEE to Contractor workers
Sub of work Order:
Work order no.
Name of Agency:
Date of Commencement:
Time limit for work order:

Sr. no.	Name of workers	Design ation	Name of Section under work executio n	Name of PPE	IS :Code no. of PPE	Make of PPE	Qty	Unit	Date of issue	Receivin g signature
A	B	C	D	E	F	G	H	I	J	K
01				Safety Helmet				Nos.		
				Safety goggles				Nos.		
				Reusable Ear Plug				Pair		
				Dust Mask				Nos.		
				Safety Shoes				Pair		

(15) Shift Security Inspector/Security Officer shall be checked Safety Shoes & Safety Helmet of all contractor workers at entry gate of Factory Premises & shall entered contractor workers with Safety Shoes & Safety Helmet with photo ID Gate Pass.

(16) Shift Security Inspector/Security Officer shall be checked validity of Gate pass of all contractor workers on daily basis.

(17) During the work execution, one trained & competent supervisor of agency should always remain present at work site. Concern JE/DE of GSECL shall be supervised the contract work as per SOP .

(18) Approved NABL laboratory calibration certificates of electrical/mechanical/Civil/C&I/Environment survey/Chemical etc measuring /testing equipments/instruments which are used during contract work shall be submitted before starting the work & shall be checked by concern JE/DE/EE before starting work & it's record shall be maintained in concern section.

(19) The contractor shall take all the required safety measures prior to commencement of work on dangerous substances, machineries or area at which cautionary notice is displayed and obtain "Line Clear" or "Work Permit" through the concern Department / Section JE/DE and shall be informed to concern section JE/DE for closed/ returned after completion of work.

(20) Safety talk/Safety work instructions shall be given to contractor workers by concern JE/DE regarding hazards of specific work, risk & it's control measure (mentioned in HIRA) before starting the job work and records shall be maintained for each & every job works.

(21) Display Safety instructions shall be strictly followed by all workers who are working in factory premises.

(22) Material Safety Data Sheet (MSDS) of each chemical shall be available with Chief Chemist/Control room & work related Chemical information shall be taken by contractor & contractor workers from Concern EE/Chief Chemist before starting of chemical handling work.

(23) The contractor shall be checked & securely covered or securely fenced any opened fixed vessel, sump, tank, pit or opening in ground or in floor which, by reason of its depth, situation, construction or contents, is or may be a source of danger before starting the work each & every days or after interval/recess. Contractor supervisor shall be informed to concerned HOD regarding any unsafe conditions.

(24) Prohibition of smoking, fires, lights, spontaneous ignition substance, matches; fuses, mobile phone etc are to be strictly followed by all workers who are working in factory premises.

(25) Prior to carrying out welding, gas cutting, furnace heating or any other hot work job, remove all the inflammable material lying at or nearby worksite or cover it properly by suitable protective covering. Also, special care shall be taken before carrying out such job & see that all possible contributing factors to set fire shall be removed / vanished prior to commencement of the work. Advance intimation shall be given to concerned section / fire section to commence the work in fire prone areas. They should also keep ready all the First Aid Fire Extinguishers / equipments & fire extinguishing media / material like sand / water buckets or other appropriate equipment at such place.

(26) While carrying out work in confined space or inside vessel, obtain necessary **"Confined Space / Vessel Entry Permit"** from concerned department prior to commencement of the work.
For lighting in such areas, only 24-volt (ISI certified & with proper guard) hand lamp shall be used. For taking care of the persons working inside the confined space / vessel, a supervisor / person capable to keep continuous watch on person(s) working inside, assist them in case of emergency or arrange to get immediate outside help, shall remain present at entry point. Use full body safety belt without failed. While working inside sewage, trench or in-depth, a person to warn outsiders / entrants / passers etc shall remain available near entry point or the entry point shall be cordoned by a barricaded tape with a cautionary notice. After completion of the works, all the lids / covers / grills / grits opened, shall be re-fixed / re-placed in the original position as it were prior to commencement of the work and leave the work place in safe condition in all respect, so as to prevent accident to fellow workers.

(27) The contractor shall see that he / his persons do not work on or block (by stacking material, spare parts, tools-tackles, equipments etc), any passages / walkways / gangways / aisles / staircases / ladders / lifts or any other approaches / roads leading to plans or its auxiliaries, on which there is traffic movements or possible traffic movements in case of emergency. Such passages are meant for safe escape in the event of emergency. If it is utmost necessary to carry out work in such area with blocking of passage, prior permission of Competent Authority or the Engineer-In-Charge shall be obtained. To demarcate / declare the area as **"UNSAFE"**, cordon it using barricading tape & display suitable caution notice or keep a person to restrict / divert the traffic on this route through other safe passage.

(28) The contractor shall see that he / his persons do not work on or block (by stacking material, spare parts, tools-tackles, equipments etc), any passages / walkways / gangways / aisles / staircases / ladders / lifts or any other approaches / roads leading to plans or its auxiliaries, on which there is traffic movements or possible traffic movements in case of emergency. Such passages are meant for safe escape in the event of emergency. If it is utmost necessary to carry out work in such area with blocking of passage, prior permission of Competent Authority or the Engineer-In-Charge shall be obtained. To demarcate / declare the area as **"UNSAFE"**, cordon it using barricading tape & display suitable caution notice or keep a person to restrict / divert the traffic on this route through other safe passage.

(29) Prior to use power / electrically operated hand tools / equipments / machines / gadgets like welding machine, hand grinder, hand drill etc, ensure for its safe operation & use it only if it is found safe to use. Do not use defective, unsafe or improperly maintained equipments.
The electrical power supply required to run such equipments shall not be taken directly at their own but shall be obtained through concerned Electrical Maintenance Departments or their authorized persons or under their observations / guidance only. The Electrical Section shall provide temporary electrical connection up to contractor's Mains Board on which it is compulsory to install mains switch, ELCB & fuses of adequate capacity. All such equipments shall invariably be earthed adequately to prevent electrical shock, sparking, short circuit etc. Power cord to be used shall be of adequate capacity, without any joint & shall consist of earth wire also. Hence, it is necessary to use adequate capacity 3-wire power cord for single & 5-wire power cord for three phase power connections. The plugs, receptacles, pins, holders etc shall be of adequate capacity & safe to use.
All electrical & mechanical equipments / tools-tackles viz. welding machine, cutting machine, Grinder, Drill, Chain Pulley Blocks, Hook chooks etc required to be used during work execution shall be of standard make & bear ISI certification mark on it.
The consumables like welding electrodes, grinding wheels / discs etc which has specific prescribed life span shall not be used in any case if its expiry date is over.

(30) Non-Sparking Non-Magnetic electrical hand tools and tool kits shall be used by Electrical contractor for safe use in areas where hazardous, flammable, or combustible vapors, liquids, dusts, or residues may be present in Gas Based power plant and list of tools and tackles shall be submitted with technical bid. Non-Sparking Non-Magnetic electrical hand tools and tool kits shall be checked by JE/DE before commencement of Electrical work.

(31) Before using lifting machines / tackles (like C.P.Bs., Hook chooks, winch, forklift, mobile crane, EOT crane etc) & its attachments (like D-shackles, slings, U-clamps, Eye bolts or any fixtures), it shall be checked and used only if found safe to use. Also, ensure that these are tested, examined & certified in form no.10 by Competent Person as per the Factory act-1948 & Gujarat Factories Rules and its validity do not expire. Further, it shall be fixed properly and firmly prior to lifting the weight. **Valid Test certificate of all Lifting machines used by Contractor to be submitted to** Dy. Safety Officer/ **Safety Officer before commencement of work through concerned EE/SE.**

(32) Metal Scaffoldings to be used for working at height shall be of adequate size & capacity. Obtain the work permit when working at height. While climbing on such scaffolding or working on any structure at

(43) Party will damage any fire equipments or property or machinery in factory during execution of work, total damage cost will be recovered from party RA bill and recovery Office note put up by concern HOD.

(44) All the relevant labour and industrial laws shall also be followed compulsorily.

(45) After completion of work, cotton waste, grease, oil, unused material, welding rod pieces, scrap etc. are to be removed by contractor and scrap shall be deposited to scrap yard of Main Store.

(46) For performance evaluation of contractor, safety factors of work accident, fire incident & near miss accident will be considered. Steps can be taken to review the job assignment up to cancellation for negligence.

(47) Over & above these, contractor shall have to follow all the safety requirements /rules & regulations / norms and legal provisions laid down in various statutes. Particularly the provisions of The Factories Act-1948 & the Gujarat State Factories Rules-1963 (Amended up to date), The Electricity Act-2003 & rules, BOCW Act/Rules shall be followed strictly. The contractor shall also obey the rules / regulations / instructions of the local Competent Authority for safety & health requirements.

(48) The above rules shall be scrupulously followed and where required, Contractor /contractor workers may contact to the Dy. Safety Officer/Safety Officer/Electrical Safety Officer in case of any ambiguity or needs further guidance in this regard

For & on Behalf of GSECL

20.4.22

Chief Engineer(G)
KLTPS, GSECL

TRUE COPY
ADVOCATE

ANNEXURE-R-11

भारत सरकार / Govt. of India
जल शक्ति मंत्रालय / Ministry Jal Shakti
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
Department of Water Resources, River Development & Ganga Rejuvenation
केन्द्रीय भूमि जल बोर्ड / Central Ground Water Board
पश्चिम मध्य क्षेत्र/ West Central Region
स्वामीनारायण कॉलेज बिल्डिंग,शाहआलम टोलनाका , अहमदाबाद-22, गुजरात
Swaminarayan College Building, Shah Alam Tol Naka, Ahmedabad-22, Gujarat,
टेलीफ़ोन : 079-25320476, 25330009, फ़ैक्स : 079-25329379,
ईमेल : rdwcr-cgwb@nic.in, tswcr-cgwb@nic.in, वैबसाइट : cgwb.gov.in

File No. CGWA/WCR/Show-Cause_Notice/RL/Kachchh/2022-23- 4586

17 DEC 2022

SHOW–CAUSE-NOTICE

Whereas the Central Ground Water Authority has issued public notices directing all the existing ground water users to apply for No Objection Certificate for ground water withdrawal.

And whereas, it has been brought to the notice of Authority that **G.S.E.C.L(Kltps)panandhro** is withdrawing ground water without obtaining NOC from the Authority.

Now therefore, the Authority in exercise of powers under section 5 of the Environment (Protection) Act, 1986 hereby directs you to show cause as why your ground water abstraction structure(s) (dugwell/borewell/tubewell/dewatering structure) should not be sealed for illegal withdrawal of ground water. You are hereby given an opportunity to submit explanation within **15** days from the date of receipt of this notice, failing which the authority shall proceed in accordance with law, at your own risk, cost and responsibility including sealing of ground water abstraction structures and imposition of environmental compensation for illegal withdrawal of groundwater.

Gujarat State Electricity Corp. Ltd. INWARD No. 5898 26 DEC

Regional Director (I/C)

To
G.S.E.C.L(Kltps)panandhro
PLOT NO: 236P,255P, KUTH LIGNITE THERMAL POWER STATION, PANDANDHRO, Panandhro - 370601 DIST: Kutch West, TAL: Lakhpat
Taluka: Lakhpat
District: Kachchh
State: Gujarat

DEC (Env) (Eee Eff) 26/12

TRUE COPY ADVOCATE

Copy to:
1. The District Collector, Near Circuit House, Mandvi Road, Nr. Mota Bandh, Bhuj, Gujarat_370001
2. The Member Secretary, Gujarat Pollution Control Board, Paryvaran Bhavan, CHH Road, Sector 10A, Opp. Gujarat Rajya Beej Nigam Limited, Gandhianagar, Gujarat_382010

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK Vermanagar , Taluka: Lakhpat, Dist: Kutch-370601, Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434 e-mail: ceklips.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

No. GSECL/KLTPS/CE (G)/Civil-PH/CGWA/5688 Date 30 DEC 2022

By RPAD

To,
The Regional Director
Central Ground Water Board,
West Central Region,
Swami Narayan College Building,
Shah Alam Toll Naka,
Ahmadabad – 380022

ANNEXURE-R-12

Sub: Compliance of show-cause-notice to KLTPS, Panandhro for obtaining NOC from CGWA.
Ref: (1) Online application no. 21-4/3255/GJ/IND/2017 dt. 05.12.2017
(2) CGWA e-mail of dt. 19.12.2020
(3) This office work order no. KLTPS/TECH/WO-106822/Effi/We-46/2021-22/1446 Dt. 21.04.2022 to M/s. T. R. Associates, Ahmedabad
(4) Show cause notice no. CGWA/WCR/Show-Cause-Notice/RL/Kachchh/2022-23/4586 dt. 17.12.2022

Respected Sir,

In connection to above, this office had made online application under ref. (1) to obtain NOC from CGWA for extraction of ground water. The said application was rejected with remark to submit water non-availability certificate on dt. 16.09.2021.

It is to bring to your notice that this office has placed a work order with an accredited consultant M/s. T. R. Associates, Ahmedabad for preparation of area impact assessment report along with modelling study of existing borewells at KLTPS in response of CGWA e-mail of dt. 19.12.2020. In this way we are in process to collect all required documents for NOC. A fresh application will be made for NOC after receiving said modelling report and other documents as soon as possible.

This is for your kind information please.

Thanking you.

Encl.
1) Copy of online application no. 21-4/3255/GJ/IND/2017 dt. 05.12.2017
2) Copy of mail of CGWA of dt. 19.12.2020
3) Copy of work order to M/s. T. R. Associates, Ahmedabad
4) Show cause notice

TRUE COPY ADVOCATE

For & on behalf of GSECL,

30/12/22

Chief Engineer (Gen)
GSECL, KLTPS.

Cfwcs to:
1) The District Collector, Near Circuit House, Mandvi Road, Nr. Mota Bandh, Bhuj. Gujarat 370001
2) The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, CHH Road, Sector 10A, Opp. Gujarat Rajya Beej Nigam Limited, Gandhinagar. Gujarat 382010
3) The Chief Engineer (G), GSECL Corporate Office, Vidyut Bhavan, Race Course, Vadodara 390007

30.12.2022
I/c EE (Civil-PH)

SE (Elect.)

(63)

A-29

GUJARAT STATE ELECTRICITY CORPORATION LIMITED
Kutch Lignite Thermal Power Station, PO SK VermaNagar, Taluka Lakhpat, Dist. Kutch – 370601 Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434e-mail: cekltps.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

No. KLTPS/Civil PH/Area impact assessment/ 210 Date 16 JAN 2023

To,
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

ANNEXURE-R-13

Sub: Work of preparation of area impact assessment report along with modelling study of ground water withdrawal from existing borewells as per format & guidelines of CGWA (Central Ground Water Authority).

Ref: (1) WO No. KLTPS/TECH/WO-106822/Effi/We-46/2021-22/1446 Dt. 21.04.2022
(2) TOL no. KLTPS/Civil PH/Area impact assessment/256 dt. 02.07.2022
(3) CGWA show-cause notice no. CGWA/WCR/Show-cause-notice/RL/Kutch/2022-23/4586 dt. 17.12.2022

Dear Sir,

As per WO under reference, you have been entrusted the above subject work of preparation of area impact assessment report along with modelling study of ground water withdrawal from existing borewells as per format & guidelines of CGWA (Central Ground Water Authority). The date of commencement for the work is given as 04.07.2022 vide letter under ref. (2). Accordingly your team has visited KLTPS site on 06 & 07.10.2022.

Recently, this office has received show-cause notice from CGWA vide ref. (3) in regard to withdrawing ground water without obtaining NOC. This office has replied to CGWA and updated the latest status of procedure initiated by this office to obtain NOC. Keeping in view, it is necessary to complete the documentation and other procedures for NOC at earliest. Hence it is informed to complete the balance activities and documentation as early as possible.

This is for necessary action at your end.

Encl.
Copy of CGWA show-cause notice

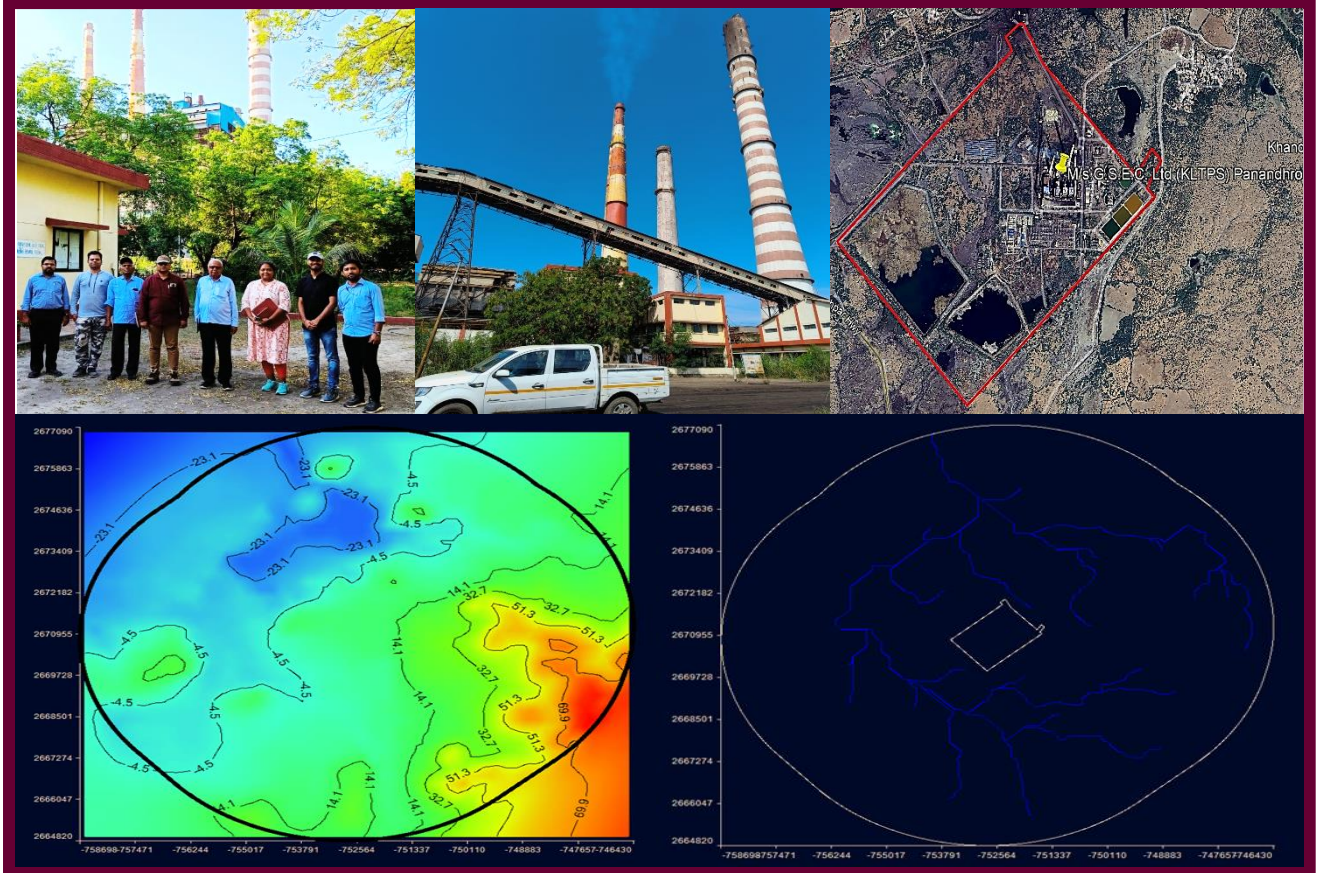
For & on behalf of GSECL

14/1/23

Chief Engineer (G)
GSECL, KLTPS

TRUE COPY ADVOCATE

Impact Assessment with Groundwater Modeling Report for M/s. G.S.E.C. Ltd (KLTPS) Panandhro, Taluka- Lakhpat and District -Kutch



Applicant

M/s. G.S.E.C. Ltd (KLTPS) Panandhro,
Plot No: 236P, 255P, Kutch Lignite Thermal Power Station,
Taluka: - Lakhpat, District- Kutch, Gujarat-370601

Report Prepared Jointly by

T.R Associates,
A-401, S G Business
Gandhinagar Hwy,
Ahmedabad,
Gujarat 380060

V. Pugazhendi,
A6, Balaji Arcade,
140 Arcot Road,
Viurgambakkam,
Chennai – 600 092

October – 2022 – As per SOP on May - 2023

Table of Contents

List of Plates

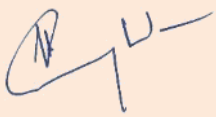
List of Tables

List of Figures

Annexures

Impact Assessment with Groundwater Modeling Report for M/s. G.S.E.C. Ltd (KLTPS) Panandhro, Plot No: 236P, 255P, Kutch Lignite Thermal Power Station, Taluka: - Lakhpat, District- Kutch, Gujarat-370601, Gujarat

1. SALIENT FEATURES OF THE PROPOSAL

1.1	*Application No.*	**Impact Assessment with modelling report submitted with fresh application**	
1.2	*Accredited by*	**CGWA / RGI**	
1.3	*Date of Accreditation*	**15-Feb-2021**	
1.4	*Validity upto*	**14-Feb-2026**	
1.5	*Work Order Date (Attach copy of the Work Order with masking details of charges)*	**08/04/2022 Work order and Copy of MoU attached in Annexure -2**	
1.6	*New/ Existing Project*	**Existing**	
1.7	*CTE issued date*	**13-07-2018 Attached in Annexure -3**	
1.8	*Alluvium/ non-alluvium*	**Alluvium**	
1.9	*Block Name & Category (GWRA, 2022)*	**Lakhpat – Safe (2023)**	
1.10	*Ground water requirement*	**27240 cu.m / day**	
1.11	*Ground water Modelling Required (Yes/No)*	**Yes**	
1.12	*In case the report is prepared jointly by accredited Institute and Individual consultant, name/details of chapters prepared by the Individual consultant*	**Report Prepared Jointly by T.R. Associates & V. Pugazhendi**	
1.13	*Signature of the Consultant(s)*		
		T.R. Associates	**V. Pugazhendi**

2. ABOUT THE PROJECT

Project Details

M/s. G.S.E.C. Ltd (KLTPS) Pandandhro is situated at Plot No: 236P, 255P, Kutch Lignite Thermal Power Station, Taluka: - Lakhpat, District- Kutch, Gujarat-370601. It has the elevation 80 m above mean sea level. M/s. G.S.E.C. Ltd (KLTPS) Pandandhro is an existing thermal Power plant and its commencement date is 29/03/1990. Total project area is 22,34,996 m^2. Fresh water requirement of this unit is 27240 m^3/Day. This existing unit is engaged in generating electricity through a Thermal Power Plant. M/s. G.S.E.C. Ltd (KLTPS) Pandandhro unit has consent vide order no. AWH-94499 dated 13/07/2018.

Need for the Study

As per the guidelines issued on 24-09-2020 and subsequent amendment for ground water withdrawal, it is mandatory to study the detailed Impact assessment report along with ground water modeling for the projects drawing ground water more than 500 cu.m/day. In order to adhere to the CGWA guidelines, for obtaining the NOC, the Impact assessment with ground water modeling in buffer zones 5 km radius for Industrial and infrastructure projects.

The amendment also states that Impact assessment reports along with modelling study shall also be required to be submitted in Semi Critical, Critical category, over exploited category where ground water withdrawal is >500 cu.m/day in hard rock and >1000 cu.m/day in soft rock/alluvium. In Safe category, the ground water withdrawal >500 cu.m/day in hard rock and >2000 cu.m/day in soft rock/alluvium, the impact assessment report along with modeling is mandatory.

A Detailed project report for rainwater harvesting and ground water recharge plan in the project premise and / or same watershed/ assessment unit, should accompany the request for ground water withdrawal prepared by an accredited consultant.

M/s. G.S.E.C. Ltd (KLTPS) Pandandhro unit is located in Lakhpat Taluka which is **Safe** as per the assessment of **CGWA 2023**. Geologically the area is underlain by the Hard rock formation.

The Katrol formation which is considered as –Soft Rock Terrain (As per GSI). Since the Plant site is falling in **Safe** Block as per 2022 assessment and the Plant area is underlined by Basaltic formation of Upper cretaceous to Eocene and the ground water withdrawl quantity is more than **500 cu.m/day**, it is mandatory to undertake Impact assessment report along with ground water modeling study as per CGWB Guidelines. Unit will apply for CGWA NOC **27240 m^3/Day**. The client needs to submit Impact assessment along with ground water modeling.

Accordingly, the company entrusted the work of "Impact assessment report along with ground water modeling study" as per CGWA Guidelines to **T.R. Associates** along with **V. Pugazhendi** (CGWA Accredited Consultant- Ground Water Modelling). As per CGWA Public Notice No. 20/2021 dated 20th December 2021, "With *effect from 01.01.2022, accredited Ground Water Agencies / institutions may enter into a Memorandum of Understanding (MoU) with up to a maximum of 3 accredited individual Consultants for utilizing their services in the preparation of impact Assessment Report / Hydrogeological Report Ground Water Modelling report as the case may be*. The copy of the MoU is presented in **Annexure - 1**

Scope of Study

Hydrological, Hydrogeological and Modeling Studies as per the **CGWA guidelines and SOP issued on February-2022 and Amendment in May-2023.** The study is also focus on the sub-surface lithology, aquifer characteristics, ground water level, ground water quality, long term ground water level and quality changes, availability of ground water in and around the Plant area (Buffer zones of 5 Km radius from the Plants boundary), socio-economic aspects of the study area and corporate social responsibility, Sewage and Effluent treatment process, study the ground water recharge possibility in and around the area and outside the Plant.

Ground Modeling Studies include ground water mass balance (input and output from various sources), the ground water heads changes, and impact of the withdrawal of ground water for the plant purpose. The specific scope is as follows:

- To study the aquifer geometry

- To study the ground water flow pattern
- To study the Hydraulic Head gradient
- To simulate the impacts on water table due to pumping
- The Prediction Model includes
    - Short – term drawdown interference between pumping wells and in the aquifer – 5 Year
    - Long – term drawdown interference between pumping wells and in the aquifer – 10 Year
- Water Mass Balance – 5^{th} and 10^{th} year

Methodology

To achieve the above scope the following methodology has been adopted

- Collection of satellite data, maps and literature about the aquifer characteristics etc.,
- Collection for rainfall data for a period of 25 years.
- Collection of legacy pre and post monsoon ground water level data for period of 10 years.
- Preparation of base map, drainage and water body map, topography map, geology map, geomorphology & structure map, land use map using satellite imagery, from the field data and from available literature.
- Pumping test to understand the aquifer characteristics.
- Field verification of rock type, lithology, type of aquifer such as shallow / deep aquifer, ground water withdrawal.
- Field verification of land use pattern, geomorphic features and structures such as fold, fault, fractures and fissures.
- Collection of well inventory data & measurement of well depth, water level, yield and ground water quality.
- Preparation of maps based on the well inventory data such as, ground water level zone, fluctuation, ground water table contour (pre and post monsoon) and ground water flow pattern, ground water quality.
- Interpolation and superimposition of the observed data using statistical and standard hydrogeological methods.

- Ground water impact assessment due to the pumping of water for Plant requirement.
- Conceptual model to generate aquifer geometry.
- Run numerical model based on the above data / information to arrive the impact of pumping from the Plant pit and the wells located in the study area.
- Estimation of runoff from the plant site based on CGWA runoff co-efficient.
- Suggest suitable rain water harvesting structures with in the plant site based on the estimated runoff.
- Suggest measures for ground water recharge outside the plant site.
- impact of the recharge structures already created by the Project proponent. / Suggest recharge structures.

Location of the Project

M/s. G.S.E.C. Ltd (KLTPS) is located at Lakhpat Taluka, Kutch District of Gujarat State. It is located at Pandandhro-Subhashpar Highway, Highway 0.5 km from Project site. Dayapar town is 11.4 Km in the ESE and Matano Madh is 21 Km in the SE. Plant has an aerial extent of **22,34,996 Sq.m.**

The area is accessible in all seasons. The nearest railway station is in Bhuj Railway Station which is about 101 kms from the Plant in the SE.

The administrative units within the study area from the project boundary (5 Km radius) comprises of **11 Villages.**

The study area (covering 5 Km radius) lies in between North Latitude 23°39'9.07"N and 23°40'15.61"N and East Longitude of 68°46'44.80"E and 68°46'52.36"E.

The study area of 5 Km from Plant boundary covers Topo Sheets: **F42C14 & F42C10.**

The Plant site falls in F42C14. The total aerial extent of the study area covering 5 Km radius from the Plant site boundary is **109.67 Sq.km.** The details of Plant area are given in **Table-1.**

Table 1: The details of Plant area

Feature	Details
Site Location	M/s G.S.E.C. Ltd (KLTPS) Pandandhro, Plot No: 236P, 255P, Taluka: - Lakhpat, District- Kutch, Gujarat-370601
Latitude	23°39'9.07"N to 23°40'15.61"N.
Longitude	68°46'44.80"E to 68°46'52.36"E.
Area of the Plant	**22,34,996 Sq.m.**
Topography	Site is located in Vegetation Patches & Mining Area. Forest & Barren land is predominant in 5 km radius area
SOI Toposheet	**F42C14 & F42C10**
Above Mean Sea level	5 Km Buffer Zone elevation: **Highest point 185 m amsl and Lowest point -13 m amsl** **Plant Site elevation: Maximum and Minimum elevation 80 m amsl and 35 m amsl respectively**
Nearest habitation	Khanot in the East 0.5 Km
Nearest Water body	Sanandhro Dam in SSE direction 2.93 KM
Nearest River	No Major River flow in the study Area.
Protected wetlands	No Protected wetlands (Certificate Enclosed)
Geology of the Area	**Sandstone, Shale, Clay and Conglomerate –Alluvium** **Basalt**

Index map, High resolution satellite imagery showing the Plant site and the SOI topo maps are presented in **Plates 1, 2 & 3.**

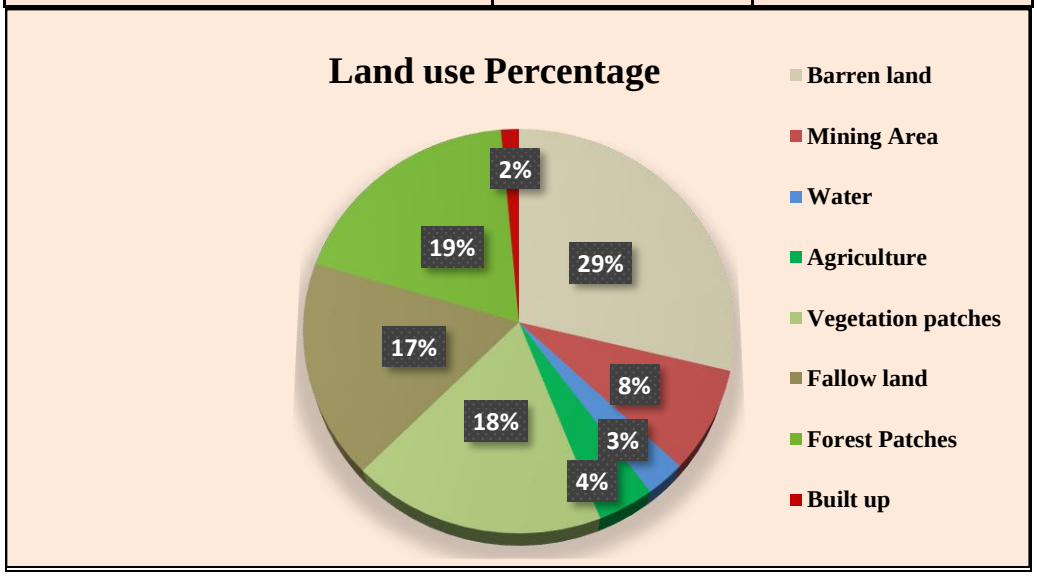
2.1 LANDUSE / LAND COVER OF THE SURROUNDING AREA

The land use in the village reflects the socio-economic conditions of the people in addition to the natural environmental factors. The land use is also one of the prime parameters to be considered for the ground water estimation. Primarily, 5 Km radius from the Plant site forms part of **crop land (about 91.14 %).** The second major land use is land with scrub. Majority of the area is irrigated by bore well. Canal-based irrigation predominant in the study area.

The land use and percentage of coverage in the study are is presented in **Table-2.** The Satellite imagery and the Land use map are presented in **Plate – 5** and **Plate – 6.** The following land use has been depicted from the satellite imagery and compared and updated with NRSA interpreted land use available in Bhavan web site.

Table 2: Land use Classification

Sr.no	LULC Class	Percentage	Area (Ha)
1	Barren land	28.9	3168
2	Mining Area	8.3	908
3	Water	2.9	312.9
4	Agriculture	4.1	446.7
5	Vegetation patches	18.3	2004.8
6	Fallow land	17.4	1904.2
7	Forest Patches	18.9	2067.8
8	Built up	1.4	152.9
Total		**100**	**10965.8**



Land use Photographs outside the Plant Boundary- within 5 Km radius

Built-up Land - Industry

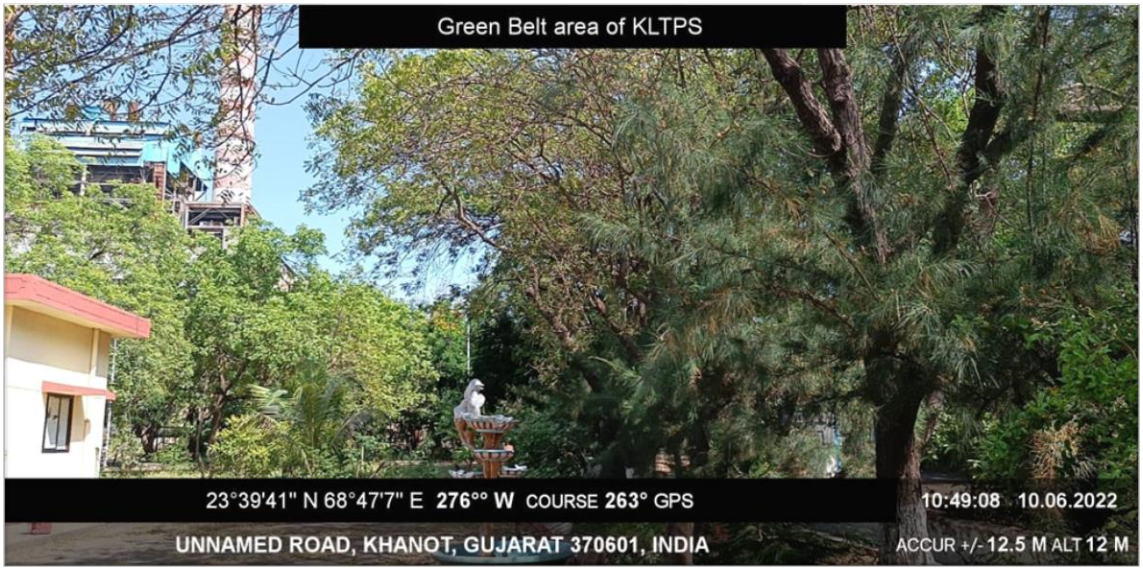
Fallow Land

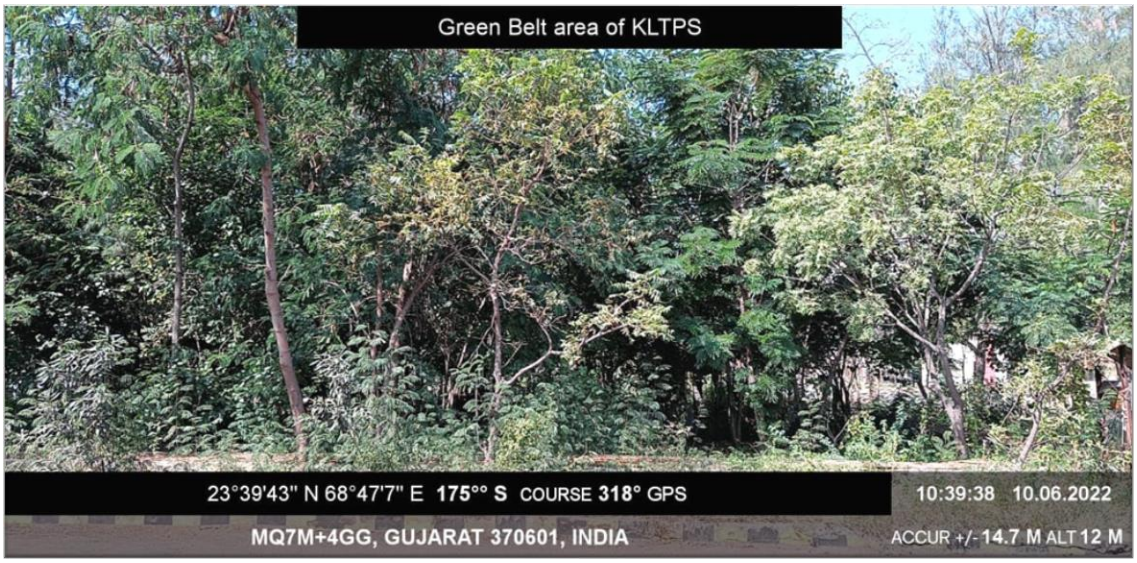
Land Use of Plant area

The Land use of the Plant area is presented in **Table-3.** The Plants layout Plants is present in **Plate-4**

Table 3: Plant area details.

S. No	Particulars	Area (Sq.m)
1	Green Belt Area	1870
2	Open Land	20,62,116
3	Road / Paved Area	63,550
4	Roof area of Building / Sheds	1,07,460
	Total	**22,34,996**





Green Belt Area in the Plant Site

2.2 DEM / TOPOGRAPHY

The district has a diverse landscape with surface elevations varying from less than 35 m to more than 458 m above mean sea level. Physio graphically, the district can be divided into 4 part; a) Central High land and the Upland in the Rann Area, b) Central Plain in the southern part, c) Little and Great Rann areas, d) Banni plains. The main land of Kachchh features undulating terrain with rugged areas, broad plains, and hill ranges. Notably, the Dhinodhar, Jura, and Vavar ranges rise to elevations of 387m and 274m above mean sea level (amsl). Additional upland regions are found in the eastern Wagad area, forming parts of Bhachau and Rapar Talukas. In the northern Great Rann, the Pachham, Khadir, and Bela islands serve as highlands, reaching a maximum elevation of 458m amsl. The hill ranges exhibit an overall east-west orientation.

The Terrain elevation (Topography) is derived from the Carto-DEM data. The maximum elevation is observed in the eastern part of the study area.

The Study area (5 Km radius from the Plant site boundary – buffer zone) elevation ranges from **-13 m to 185 m amsl**.

The maximum and minimum elevation of the Plant site is **80 m and 35 m amsl** respectively. The Plant site is sloping towards north side.

Topography map of the study area is presented in **Plate-7**

2.3 GEOMORPHOLOGY AND DRAINAGE

The land forms / geomorphic units and structures such as fractures, fissures and faults have been interpreted from the recent satellite image. All the landform / geomorphic units and structures occurring in the study area are mapped.

The geomorphology and structures of the area plays the vital role in identifying the ground water potential zones. The majority of the study area covering 5 km radius from the plant boundary underlined by Hard rock basaltic Terrain and soft rock sandstone and shale.

Geomorphologically, the study area has been divided into following unit

1. Older Flood Plain
2. Highly Dissected Lower Plateau
3. Pediment
4. Low Dissected Lower Plateau
5. Active Flood plain
6. Moderately Dissected Lower Plateau
7. Anthropogenic Terrain
8. Pediment-Pediplain Complex

The occurrence and movement of ground water is controlled by the fractures, fissures. The Plant is located in Pediment.

The Geomorphology and structure maps are presented in **Plate 8.**

Drainage and Water Bodies

Most part of the district is drained by Bharud, Kali, Suri, Khari, Mithi, Rukmavati and Bhukhi Luni, Rupen, Kankawati and Malwan. All these rivers are ephemeral in nature and flow only during good monsoon years. Major part of the area is devoid of drainage network and does not fall in any catchment.

Seasonal river system is present in the study area and its distance from the plant site is given in **Table-4**

Table 4: Streams in the Study area

Sl. No	Name of Drainage	Distance from Plants boundary	Direction from Plants boundary	Flow direction
1	Seasonal Rivulet	1.59 Km	West	South to North

The development of stream is very less as the runoff flows as overland flow towards the river. The drainage system is the main recharge source for the study area.

1) From the plant site the surface water flow towards west and joins with Seasonal Rivulet. The reservoir/dam named Sanandhro Dam is located to the SSE within a 5 km study area. However, number of small water bodies is noticed in the study area. The Drainage map is presented in **Plate-9.**

2.4 DETAILS OF WETLANDS / MAJOR WATER BODIES

A wetland is a distinct ecosystem that is flooded by water, either permanently or seasonally, where oxygen-free processes prevail. Any wetland site which has been listed under the Ramsar Convention that aims to conserve it and promote sustainable use of its natural resources is called a Ramsar Site. The total number of Ramsar sites in India is **75**. The nearest wetland is located in **Khijadia Wildlife Sanctuary**, which is approximately **190 km to the southeast** from the plant's boundary**.** The Plant site is located away from **500 m**. The Ramsar site map is given in **Figure -1.** Affidavit regarding the same is presented in **Annexure – 4.**

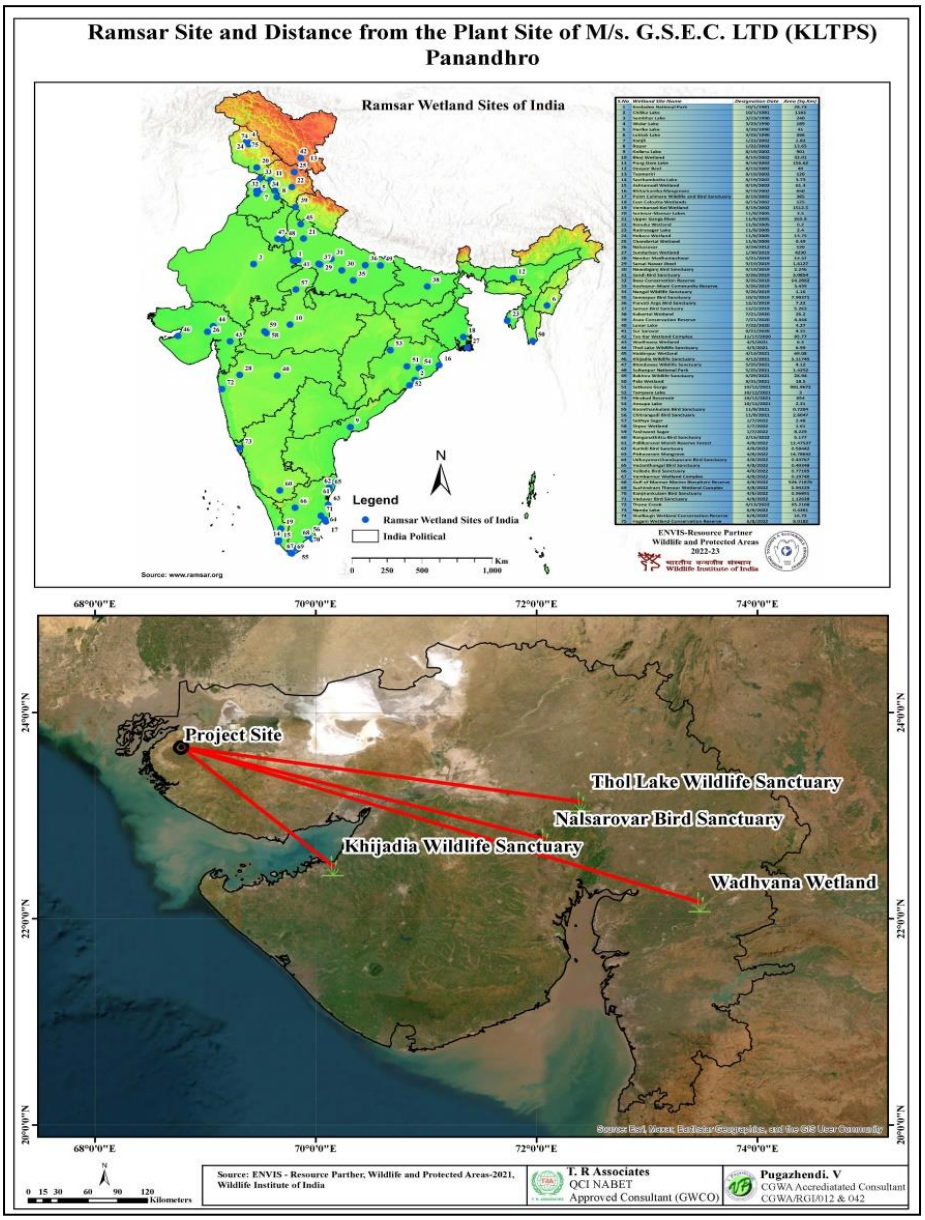


Figure 1: Ramsar sites and distance from the Plant

Climate and Rainfall

Temperatures vary considerably from season to season. The summers are generally hot and winters are cool. Mean maximum temperature ranges between 26.7°C during January to about 39.5°C during May and the mean minimum temperatures vary between 9°C during January and 27°C during June. The normal annual rainfall of Kutch district is **345 mm**. District received maximum rainfall during south west monsoon period i.e., June to September. The Yearly for the period 1998 -2022 is given in **Table-5** and Monthly Rainfall in **Table-6**

Table 5: Yearly Rainfall for 25 Years

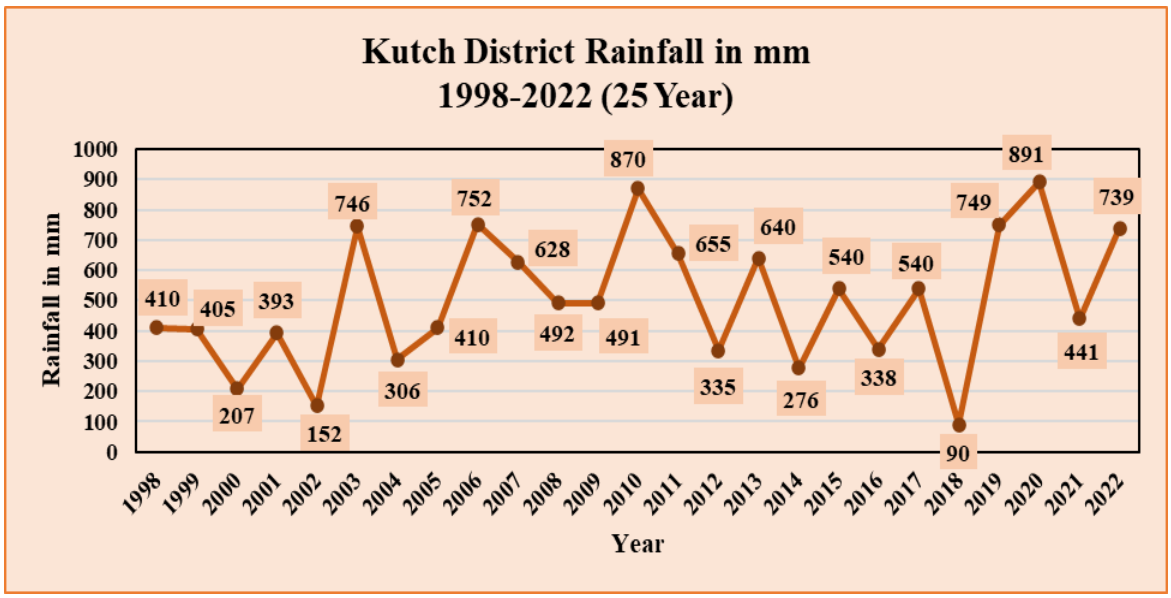
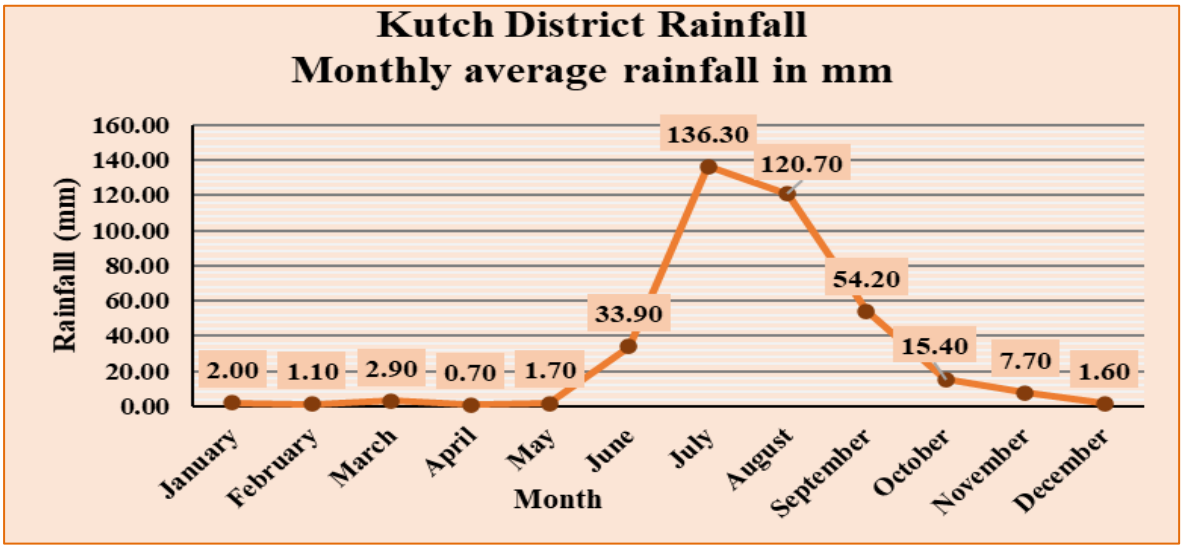


Table 6: Monthly average Rainfall



3. HYDROGEOLOGY

3.1 GEOLOGICAL SETUP

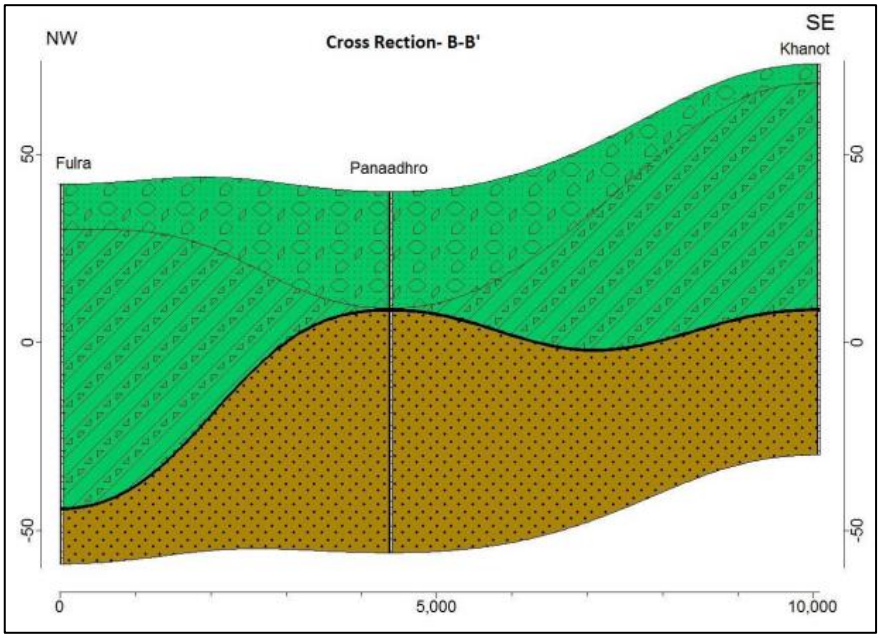
Major part of the district is Sedimentary rocks of marine and non-marine origin formed under different environmental conditions during middle Jurassic to Recent period occur in the district besides volcanic and intrusive rocks (Deccan Trap) of middle Cretaceous to lower Eocene. The occurrence and movement of groundwater is mainly controlled by intergranular pore spaces.

Two major aquifer units have been identified the upper unit is mostly phreatic but becomes semi confined to confined in some parts. In Plant site area there is only unconfined aquifer found. A generalized stratigraphic sequence observed in in the area is as **Table - 7.**

Table 7: Generalized geological succession of the area

Period	Age	Series	Formation
Tertiary	Plio- Pleistocene		Sandhan (Unconformity)
	Middle Miocene		Chhasra
	Early Miocene		Khari Nadi (Unconformity)
	Oligocene		Manyara fort (Unconformity)
	Middle Eoceneto Early Late Eocene		Fulra Limestone
	Early Middle Eocene		Harudi (Unconformity)
	Late Eocene to Early Eocene		Naredi (Unconformity)
	Early Paleocene		Mata no madh (Unconformity)
Lower Cretaceous	Albian to Neocomian	Deccan Traps Unconformity Umia	Bhuj
Upper Jurassic	Kimmeridgian to Tithonian	Katrol	Jhuran (Unconformity)
Middle Jurassic	Callovian to Oxfordian	Chhari	JUMARA
	Bathonian to Aalenian	Patcham	JHURIO
Lower Jurassic to Upper Triassic	Rhaetian to Lias		Not Exposed

Source: GEOLOGY OF KUTCH BY DR.SK BISWAS



Source: Kutch CGWB Aquifer Mapping Report (Kutch District)

Figure 2: Hydrogeological Cross section in the centre part

Geology of the Study Area

The study area (5 Km buffer) including the Plant site comprises of Basalt flow and in study area comprises of Sand stone, Fossiliferous sandstone, Shale, Marl and conglomerate of Katrol formation. The availability of ground water in this formation is Good. The geology map generated from GIS data base is presented **Plate - 10.** The geological formation of as per Geological Survey of India (GSI) is given in **Table-8.**

Table 8: Geological Formation of the study area

Age	Formation	Lithology
Late Cretaceous	Dayapar Volcanic	Basalt
Eocene	Fulra Formation	Foraminiferal Lst Argillaceous Lst & Clay
Eocene	Matano Madh Formation	Variegated Gypseous Shale / Clay With Limestone
Oligocene	Kakadi Nali Formation	Glauconitic Sst,Shale And Coralline Limestone
Paleocene	Maniyara Fort Formation	Laterite/Bauxite With Clay

Geology of the Plant area

The Plant area is underlined by Basaltic formation of Upper cretaceous to Eocene. In general, the top soil of the plant area 2-3 m.

3.2 HYDROGEOLOGICAL SETUP

Ground water of the district occurs both under phreatic, semi confined and confined conditions. However, the development is restricted depending on the aquifer geometry and yield characteristics of individual aquifer. The alternate bands of Sandstone and shale (Upper Jurassic to lower Cretaceous) forms the most prolific aquifer system present in the northern part of study area. The hard rock exposed in the Southern part form aquifer with low yield prospects. Thickness of Hard rock is gradually decreasing towards South to North. Within the explored depth of 10-25m, the Basaltic flow is underlain by Upper Jurassic to lower Cretaceous sandstone. Center part of the study area bed-rock is encountered on the surface. The maximum explored depth of about 400m below surface. On the basis of hydrogeological survey and exploratory drilling carried out earlier and findings of GWSSB. Ground water occurs in various aquifer system in the district, the depths vary from 10 m to 200 m below ground level and the yield varies from 80 to 800 lpm.

Hydrogeology / Ground water prospects of the Study Area

Hydrogeology / Ground water prospects of the study area have been assessed. Based on the CGWB Kutch Technical report, 5 Km radius details have been collected and presented in **Plate -11.**

The ground water Potential of the study area covering 5 km radius are classified in the various zone. The zones of ground water Potential with depth and yield range is given in the **Table-9**

Table 9: Ground water Potential

Depth range	Yield range (LPM- Liters / Minutes)
Zone with 10-25 m Dug well	80-150 LPM Yield
Zone with 100-200 m Deep well	100-300 LPM Yield
Zone with 50-150 m Deep well	400-800 LPM Yield

Source: CGWB Kutch Technical report

The Plant site falls in 50-150 m Deep well with a yield range of 400-800 LPM.

3.2.1 Aquifer Characteristics

The existing data of lithological logs of Exploratory wells and VES interpretations through geophysical studies carried out by CGWB and State Ground Water Departments (GWRDC).

Exploratory well drilled in phreatic aquifer systems of Patcham, Chari, Katrol and Umia or Bhuj series belongs to Mesozoic group consist of alternating layers of shale and sandstone up to the depth of 120m, generalized thickness varies from 20 to 120 m, discharge ranges from 7.5 to 112 lps and transmissivity values ranges from 42.35 to 126.48 m2/day. Major part of the formation of phreatic aquifer observed TDS value more than 3000 mg/l and EC value ranges from 929 to 51600 µS/cm. Water Level ranges from 3.48 to 31.98 m bgl and shallower water less than 10 m bgl observed mostly in northern part of district. Depth of occurrence of aquifer II (confined), aquifer III (confined), aquifer IV (confined) are 40 to 290m, 110 to 290m and 250 to 300m respectively. Discharge in confined aquifer varies from 0.5 to 9.5 lps and EC values varies from 696 to 50400 µS/cm.

The Deccan Trap is restricted only to the Kachchh Mainland bordering the Mesozoic highlands extending from Lakhpat in the west to Anjar in the east. Exploratory well drilled in basaltic formation showing occurance of basalt upto the depth of 245m, thickness vary from 123 to 185m, discharge ranges from 0.04 to 31 lps and transmissivity varies from 0.04 to 129 m2/day. Ground water quality vary from fresh to saline ranges from 930 to 75000 µS/cm. Water level ranges from 7.02 to 15.55 m bgl. Exploratory well drilled in Manchar/Gaj series of Tertiary age encountered phreatic aquifer up to the depth of 94 m bgl, discharge vary from 0.32 to 6 lps, water quality observed fresh to saline ranges from 1351 to 51480 µS/cm and water level vary from 0.77 to 23.98 m bgl. Depth of occurrence of aquifer II (confined), aquifer III (confined), aquifer are 33 to 125m and 155 to 200m respectively. Quality of aquifer II (confined) vary from 2375 to 4500 EC µS/cm and aquifer III (confined) mostly saline

3.2.3 Depth to water level

To understand the ground water situation of the study area covering 5 km radius, ground water level monitoring was carried out in **12 wells** located in different places of the **buffer zones (7 wells within 5 km radius and 5 wells outside 5 km radius)** of the study area during Post-monsoon season -October 2022.

At the time of well inventory public enquiry was made and recorded the post-monsoon ground water level and the same is confirmed with the nearest CGWB observation wells. A customized Mobile App was developed for navigation system, covering the villages where the monitoring / well inventory was under taken in the core and buffer zone.

The App will guide to the locations of the villages. The field expert identifies the open well or bore well in the village and the ground water monitoring has been under taken. While, monitoring of the ground water level, the well inventory has also been taken up. The Electrical Conductivity (EC) has also been recorded for the ground water using (Potable EC meter). The snap shot of the mobile app is presented in **Figure – 3.**

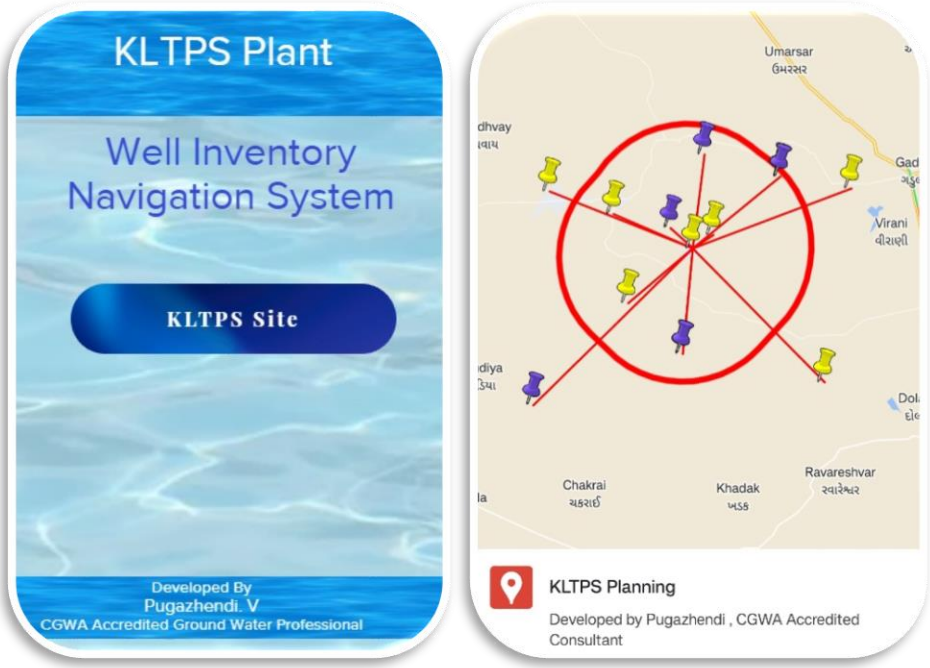


Figure 3: Snap shot of Mobile APP

Since there is a lesser no open well in the study area, all the 12 deep tube wells are established as key observation wells in the buffer zone (5 Km radius) for monitoring purposes.

The minimum and maximum depth is **150 m to 180 m** respectively. Yield varies from **150 – 1000 lpm for 12 hours of Pumping**. Post-monsoon water level varies from **96 m to 105 m** below ground level. In Pre-monsoon period it varies from **98 m to 108 m** below ground level. Seasonal fluctuation in water level in these Bore well varies from **2.0 m to 3.0 m**.

Tube well are being used for Industrial / drinking purpose with 50 HP electrical submersible pumps and running 10 to 12 hrs daily.
The recorded spring depth (tapped zone) varies from **90 m to 180 m** below ground level.

The Key well data for the core and buffer zones are presented in the following **Table 11 and 12**.

Table 10:Bore well- Core zone, Pre, Post Monsoon ground water level and fluctuation

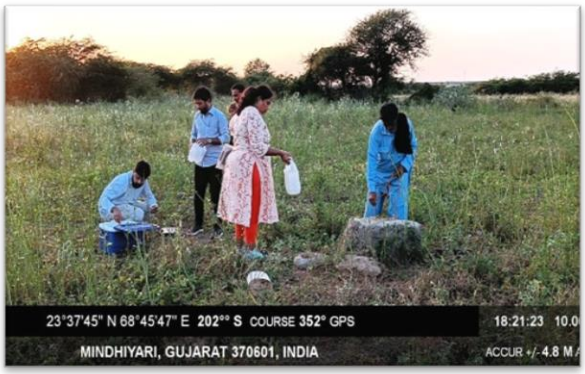
No	Location	Latitude	Longitude	Depth in m	Ground Water Level in m (Pre-Monsoon)	Ground Water Level in m post-Monsoon)	Ground Water Level Fluctuation in m
1	Tubewell-38	23.68106 N	68.787267 E	150	43.0	40.0	3.0
2	Tubewell-43	23.681111 N	68.786389 E	150	44.0	41.0	3.0
3	Tubewell-51	23.680835 N	68.786114 E	150	44.0	41.0	3.0
4	Tubewell-35	23.682517 N	68.786683 E	150	42.0	40.0	2.0
5	Tubewell-C 06	23.6794 N	68.785467 E	180	44.0	41.0	3.0
6	Tubewell-C 02	23.680167 N	68.785433 E	180	42.0	40.0	2.0
7	Tubewell-DR 36	23.691222 N	68.83748611 E	150	39.0	36.0	3.0
8	Tubewell-DR 35	23.691225 N	68.83790556 E	150	39.0	37.0	2.0
9	Tubewell-DR 33	23.691258 N	68.83838611 E	150	38.0	35.0	3.0
10	Tubewell-DR 34	23.691613 N	68.83800833 E	150	37.0	34.0	3.0
11	Tubewell-DR 37	23.690158 N	68.83739167 E	150	39.0	37.0	2.0
12	Tubewell-DR 28	23.690111 N	68.83744167 E	150	38.0	35.0	3.0

The summarized ground water level of the Bore well for the core and buffer zone are given in the **Table 12. 5 Bore well are considered to arrive minimum, maximum water level and fluctuation.**

Table 11: Summarized ground water levels in Bore well in core and buffer zone.

Ground water level	5 Km radius ground water level (Based on 5 Key wells)		
	Pre-Monsoon	Post-Monsoon	Season wise Fluctuation in m
Minimum in m	**37.0**	**35.0**	**2.0**
Maximum in m	**44.0**	**41.0**	**3.0**

Geotagged Photograph of the bore wells in the study area



The above geo-tagged photographs of the bore wells are capture during the field visit performed on 6th -7th -October-2022.

In order to study the spatial distribution of ground water level for the pre and post monsoon periods, the Bore well ground water level considered which is reflecting the aquifer properties.

Pre-Monsoon

The pre-monsoon depth to ground water level depict that relatively deepest of ground water level zone of **42-44 m** falls in the central and western part of the study area.

The shallowest ground water level zone of **38-40 m** occupies in the eastern part of the study area near Akari and Dhareshi villages.

The Plants falls in **42-44 m** zone. Pre-monsoon ground water level zone map is presented in **Plate-14.**

Post Monsoon

The post monsoon depth to ground water level depict that relatively deepest of ground water level zone of **40-42 m** falls in the Center and western part of the study area near Khanot, village.

The shallowest ground water level zone of **34-36 m** occupies in the isolated patches of the study area. The Plant site falls partially in **40-42 m** zone.

During the post monsoon period there is considerable rise in the ground water level. It is observed that there is increase of ground water level in the throughout the study area where the ground water level is deep during the pre-monsoon period.

It clearly indicates that rainfall recharge is taking place considerably. Post-monsoon ground water level zone map is presented in **Plate-15.**

Ground water level Fluctuation

Based on the pre and post monsoon ground water level data of the study area, the ground water fluctuation is generated in presented in **Plate – 16.**

The ground water level fluctuation of the study area indicates that the ground water level fluctuation ranges from **2.0 – 3.0 m** which indicates that the aquifer of the study area has moderate recharge potential.

3.2.4 Long term water level data analysis

In order to understand the long term (10 years) ground water level changes, the CGWB observation wells located in and around the study area has been downloaded from INDIAWRIS web site and plotted on the SOI topo map. The nearest continuous monitoring well (with less data gap) has been chosen for the long-term trend analysis. The locations of the CGWB observation in and around the study area is presented **Figure-4**:

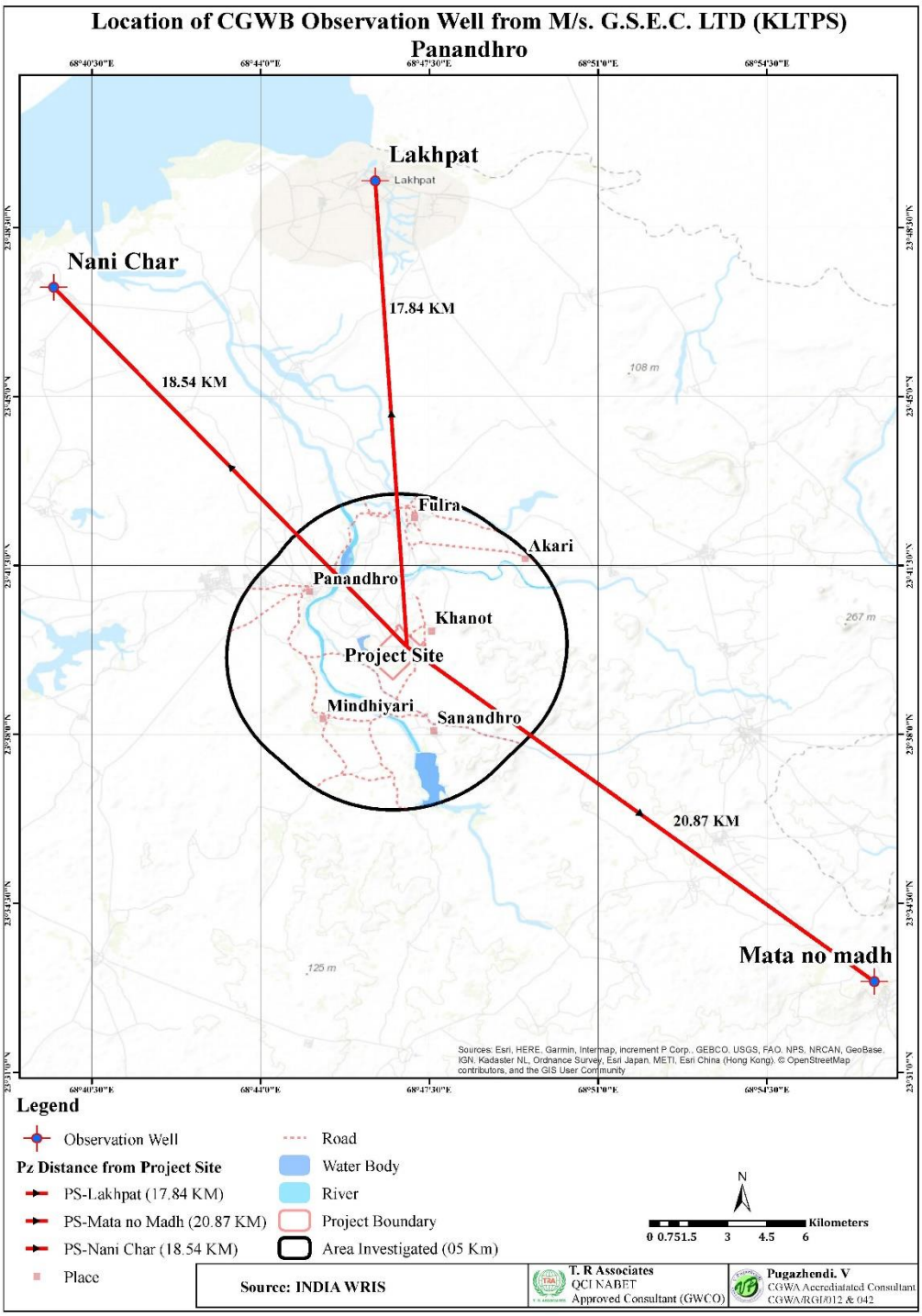


Figure 4: Location of CGWB Observation well

The continuous monitoring data available for location of **Lakhpat, Moti cher and Matano Madh** which are located around 5 **km radius** in same hydrogeological environs. The above observation wells have been considered for the long term analysis.

Ground water observation well data for a period of 10 Years has been collected from CGWB for the above 3 locations. The geographic coordinate of the monitoring well is given in **Table-13.**

Table 12: CGWB monitoring well location

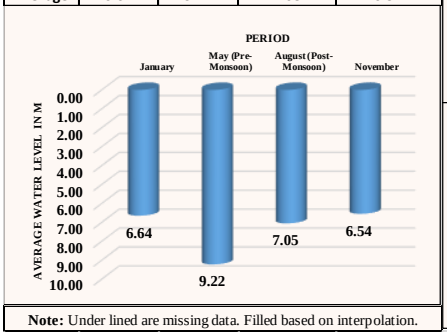
Sl.No	Location	Monitoring Agency	Latitude	Longitude	Direction	Distance
1	**Lakhpat**	CGWB	23.824420 N	68.772984 E	North	17.84 Km
2	**Moti cher**	CGWB	23.787665 N	68.661829 E	NW	10.78 Km
3	**Mata no Madh**	CGWB	23.547998 N	68.945363 E	SE	20.87 Km

Ground water observation was done by CGWB to monitor the shallow ground water level in the study area. The ground water level data from 2012 to 2021 has been collected from INDIAWRIS Website.

Hydrograph of water level for 10 years

Decadal Trend of water levels for pre-monsoon and post monsoon periods for the last ten years (2012-2021) have been computed for CGWB Ground Water Monitoring Wells. The Season wise hydrograph was constructed for the 3 Monitoring well is presented in **Figure – 5 & 6.**

Lakhpat Monitoring well -10 Years Ground water level; CGWB Monitoring well,Kutch District, Gujarat State				
Latitude and Longitude : 23.824420 N 68.772984 E				
Year	January	May (Pre-Monsoon)	August (Post-Monsoon)	November
2012	3.85	5.56	5.10	6.05
2013	7.10	8.13	8.92	9.95
2014	9.86	11.60	10.65	9.25
2015	13.17	13.17	5.85	5.75
2016	6.23	8.80	3.74	3.19
2017	4.65	7.95	5.67	4.55
2018	5.22	7.38	11.05	11.48
2019	8.51	10.00	6.21	5.22
2020	3.90	8.62	5.08	3.30
2021	3.95	10.96	8.23	6.70
Average	6.64	9.22	7.05	6.54



Note: Under lined are missing data. Filled based on interpolation.

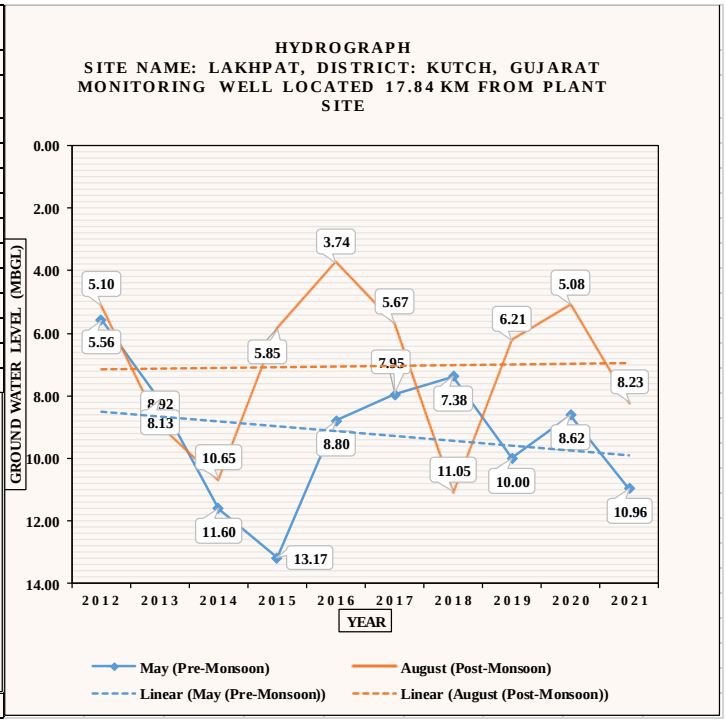
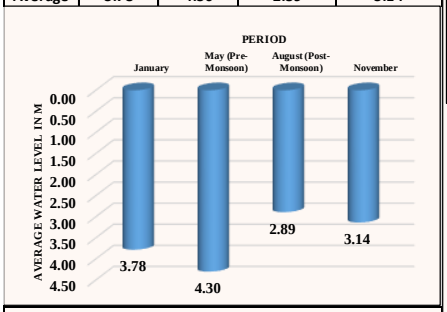


Figure 5: Hydrograph of Lakhpat CGWB Monitoring well

Moti cher Monitoring well -10 Years Ground water level; CGWB Monitoring well,Kutch District, Gujarat State				
Latitude and Longitude : 23.787665 N 68.661829 E				
Year	January	May (Pre-Monsoon)	August (Post-Monsoon)	November
2012	4.55	4.09	3.14	2.95
2013	3.03	4.00	3.52	3.41
2014	3.78	3.91	3.06	3.81
2015	3.80	3.85	1.42	4.01
2016	4.10	4.05	2.93	4.12
2017	4.35	4.21	5.01	4.06
2018	4.92	4.37	4.41	3.51
2019	4.23	4.77	2.31	2.09
2020	3.01	4.81	1.74	1.96
2021	2.03	4.93	1.35	1.43
Average	3.78	4.30	2.89	3.14



Note: Under lined are missing data. Filled based on interpolation.

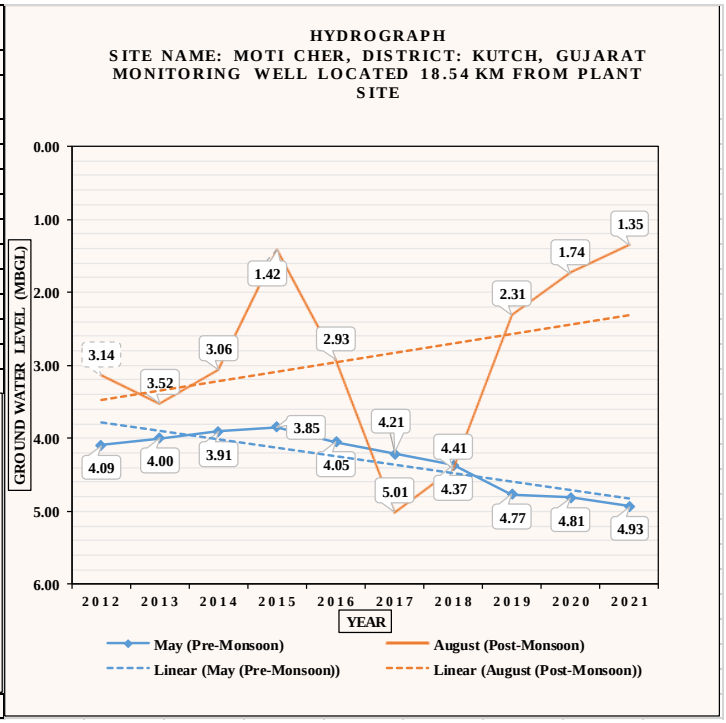
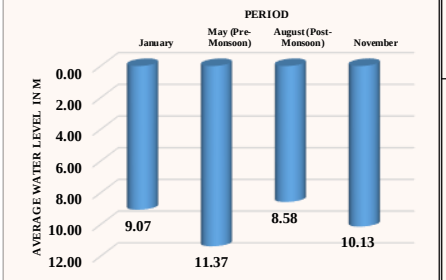


Figure 6: Hydrograph of Moti Cher CGWB Monitoring well

Matano Madh Monitoring well -10 Years Ground water level; CGWB Monitoring well,Kutch District, Gujarat State				
Latitude and Longitude : 23.547998 N 68.945363 E				
Year	January	May (Pre-Monsoon)	August (Post-Monsoon)	November
2012	5.27	7.72	9.84	10.35
2013	10.13	11.65	9.65	10.17
2014	11.25	12.07	10.27	13.37
2015	11.10	14.17	10.50	11.29
2016	8.52	10.74	7.62	9.97
2017	7.77	12.67	4.97	10.40
2018	10.73	13.82	8.62	11.45
2019	10.90	11.99	9.02	8.11
2020	8.44	10.87	5.51	7.72
2021	6.59	8.03	9.79	8.47
Average	9.07	11.37	8.58	10.13



Note: Under lined are missing data. Filled based on interpolation.

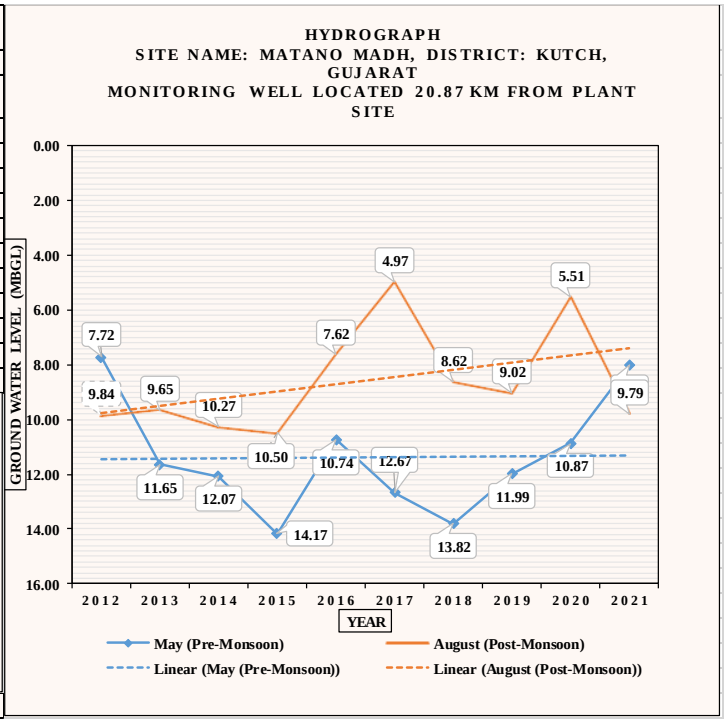


Figure 7: Hydrograph Mata No Madh CGWB Monitoring well

3.2.5 Ground water quality

As part of ground water quality assessment stipulated in the CGWA Guidelines, Groundwater samples have been collected from **5 No. of Tube well (5 within 5 km radius from plant boundary there is no borewell present outside the study area)** of different locations in and around the project area and analyzed by adopting standard method of chemical analysis. The samples were collected during October – 2022.

The samples are tested in the NABL Certified Lab The results obtained from the lab for the 5 sample results are presented in **Annexure - 5**.

The Ground water quality parameters for the selected villages are presented in **Table-15.**

The analysis reveals that the quality of water is within the permissible limits of CPHEEO.

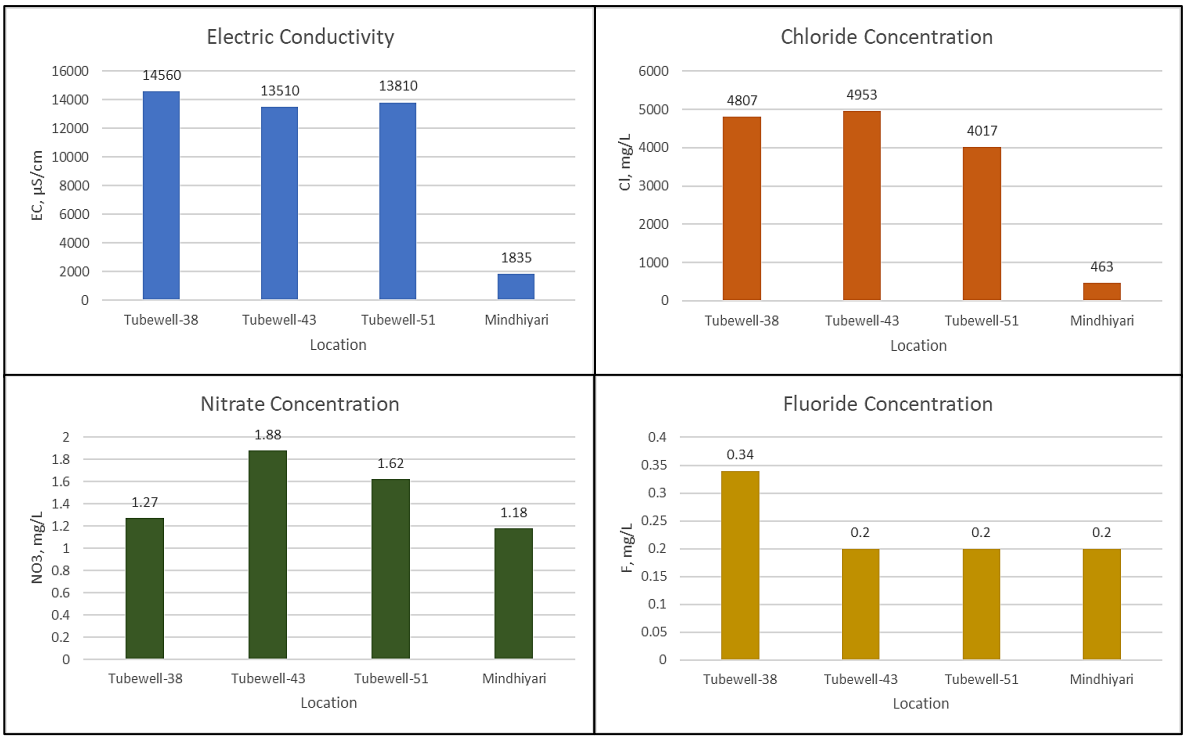


Table 13: EC, Chloride, Nitrate and Fluoride in Selected Well

No	Village	Latitude	Longitude	Well Type	EC µs/cm	Cl mg/L	No_3 mg/L	F mg/L
1	Project site Tubewell-38	23.68107 N	68.787267 E	BW	14560	4807	1.27	0.34
2	Project site Tubewell-43	23.68111 N	68.786389 E	BW	13510	4953	1.88	0.2

No	Village	Latitude	Longitude	Well Type	EC µs/cm	Cl mg/L	No_3 mg/L	F mg/L
3	Project site Tubewell-51	23.68084 N	68.786114 E	BW	13810	4017	1.62	0.2
4	Mindhiyari	23.63964 N	68.754125 E	BW	1835	463	1.18	0.2

The maximum and minimum EC concentration in ground water is **14560 and 1835 µs/cm** which is potable as per the CPHEEO Standards. Based on the above results of EC, the spatial distribution of EC concentration has been generated and presented in **Plate – 17**

The higher concentration of EC is observed in the western part of the study area. Majority of the area falls under **13000-15000 µs/cm** EC zone. The Plant is located in 13000-15000 **µs/cm** zone. The spatial distribution of EC concentration reveals that the area is in saline zone.

On perusal of results of chemical analysis of ground water sample collected and analyzed shows that ground water in general is potable and majority of the constituents are more than acceptable limits.

pH: pH value of ground water indicates that water is in general a bit alkaline in nature. The range of pH is 6.54 to 7.30. The pH values of all analyzed samples remain within the standard norm.

Chloride:

The range of Chloride is 463-4953 mg/L. The Chloride values of all analyzed samples remain more than the standard norm. The higher concentration of 4000-5000 mg/L is noticed in the North east part of the study area. The spatial distribution of Chloride concentration is presented in Plate **– 18.**

Nitrate: The concentration of nitrogen in groundwater is derived from the biosphere. Nitrogen is originally fixed from the atmosphere and then by soil bacteria into ammonium. Under aerobic conditions nitrogen is finally converted into nitrate by nitrifying bacteria.

All samples show nitrate concentration within the permissible limit. Nitrate concentration varies from **1.18-1.88 mg/L**. As the nitrate is a point pollution, Nitrate concentration map showing as point and its value has been generated and presented in **Plate – 19**

Fluoride: Fluoride concentration in ground water is of geo-genic nature. The fluoride concentration of the study area is within permissible limits of the drinking water standards. Fluoride concentration varies from **0.20-0.34 mg/L**. The fluoride concentrate ion as point map is presented in **Plate - 20**

2.2.7 Water quality of nearby water bodies

No major river in the study area. All the water bodies and small drainage rivulet in the study area are dry during the site visit and hence the surface water samples tested

4.DETAILS OF PROPOSED / EXISTING BORE WELLS

Aquifer Parameters

Pumping test is the most accurate, reliable and commonly used method to evaluate the hydraulic parameters of an aquifer, efficiency of a well / bore well, safe operational rates of pumping and selection of suitable pump. The methods of a pumping test are highly varying in its application. The main objective of pumping test is to determine the aquifer parameters such as Transmissivity (T), Storage co-efficient (S) Hydraulic Conductivity (K), well performance and safe yield for execution of water supply.

In order to evaluate the aquifer characteristics and safe yield to match the ground water requirement, constant discharge test has been conducted in the Bore well located within the plant site.

Pumping test Methodology

- The constant discharge test has been carried out with the help of the motors fitted in the Bore well & electronic water level indicator etc.,
- During the pumping test, discharge has been measured by volumetric methods and ground water level has been measured using electronic indicator.
- Draw down and recovery have been measured from the pumping well.

In order to assess the aquifer parameter, the recovery data has been used. Both drawdown and recovery measurement have been taken in the wells. After stopping the pump recovery measurements were taken, the principle behind the estimation of Transmissivity of deeper aquifer of a Bore well is that the recovery of water level in a well after the pump is shut off can be simulated by continuing pumpage as before, and recharging by an imaginary recharge well at the same rate during the recovery period. Under such conditions the

residual drawdown s', i.e. the difference between the drawdown component due to continued pumpage and the recovery component due to recharge is given by Theis (1935):

$$s = \frac{Q}{4\pi T}\left[\log_e\left(\frac{4Tt}{r_w^2 S}\right) - \log e\left(\frac{4Tt'}{r_w^2 S''}\right)\right]$$

Where Q = constant discharge, s' = residual drawdown

rw = effective radius of well in which the water level recovery is measured.

t = time since pumping started and t' = time since pumping stopped

If storage coefficient remains constant and equal (S during pumping = S' during recovery) and $u = r^2S/4Tt'$ is sufficiently small, the above equation is simplified to

$$s = \frac{2.303Q}{4\pi T}\log_{10}\frac{t}{t'}$$

The procedure for data analysis is to plot s^1against t/t' in semi- logarithmic paper, with s^1 on the arithmetic scale and t/t' on the log scale. After the value of t' becomes sufficiently large, the observed data should fall on a straight line. The slope of this line gives the value of $\log_{10}$ t/t'. For convenience, the value of t/t' is chosen on log cycle apart, so that its logarithm becomes unity. The above equation is simplified to:

$$T = \frac{2.303Q}{4\pi\Delta s'}$$

Where Q = constant discharge, in cu.m/day and

Δs' = change in residual drawdown in meters per log cycle of t/t'.

Storage coefficient is calculated based on equation

$$S = \frac{2.25Tt^0}{r^2}$$

Where T = Transmissivity,

t^0 = intercept of the straight line at zero drawdown in days

r = radius of the well / distance from observation well in m

Pumping tests carried out in Bore well-constructed in the consolidated formation of Limestone. The data and graphs pertaining to pumping tests are shown as below:

The estimation based on the pumping test results indicate that the required quantity of 27240 cu.m/day can be drawn through 38 Bore wells.

A total of 38 tube wells have been drilled to fulfill the water requirements of the industry. However, none of these tube wells have been constructed within the plant premises. In the past, we attempted to drill tube wells within our plant premises, but due to the limited aquifer potential attributed to the plant's location in a Basaltic formation, the efforts were not successful. Consequently, we pursued approval from GMDC to establish abstraction structures on their premises. **Annexure-1** contains the attached permission from GMDC. The details of the Existing Bore well are presented below:

Table 14: Tube well within the plant site

No	Type of Structure / No.	Geographic Coordinates / Location	Depth in m	Dia in mm	Tentative Lithology	Pump and pump Lowered depth in m	Horse Power / Fitted with Flow meter /	Discharge of the borewells cu.m/hour and operational Hours in days / Whether permission Registered with CGWA / if so, Detail Thereof
1	Tube well / 38	23 40.864 N 68 47.236 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
2	Tube well / 39	23 40.891 N 68 47.200 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
3	Tube well / 35	23 40.951 N 68 47.201 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
4	Tube well / 49	23 40.967 N 68 47.219 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
5	Tube well / 44	23 40.968 N 68 47.240 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
6	Tube well / 51	23 40.831 N 68 47.165 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
7	Tube well / 37	23 40.810 N 68 47.154 E	150	200	Alternatve S.St & Shale	Submersible / 96	50 /Yes	60/ 12 / No
8	Tube well / C-06	23 40.764 N 68 47.128 E	180	250	Alternatve S.St & Shale	Submersible / 104	50 /Yes	60/ 12 / No
9	Tube well / C-02	23 40.810 N 68 47.126 E	180	250	Alternatve S.St & Shale	Submersible / 105	50 /Yes	60/ 12 / No
10	Tube well / G-9	23.680489 N 68.785667 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
11	Tube well / G-24	23.680764 N 68.785753 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
12	Tube well / G-40	23.681072 N 68.785669 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
13	Tube well / G-41	23.680878 N 68.787219 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
14	Tube well / G-42	23.680833 N 68.787303 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
15	Tube well / G-47	23.682050 N 68.785819 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
16	Tube well / G-17	23.679914 N 68.785311 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
17	Tube well / G-20	23.679478 N 68.784367 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
18	Tube well / G-28	23.679564 N 68.784422 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
19	Tube well / G-15	23.679519 N 68.784247 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
20	Tube well / G-23	23.680100 N 68.785500 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
21	Tube well / G-1	23.680753 N 68.785506 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--

No	Type of Structure / No.	Geographic Coordinates / Location	Depth in m	Dia in mm	Tentative Lithology	Pump and pump Lowered depth in m	Horse Power / Fitted with Flow meter /	Discharge of the borewells cu.m/hour and operational Hours in days / Whether permission Registered with CGWA / if so, Detail Thereof
22	Tube well / G-20	23.681272 N 68.785825 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
23	Tube well / G-17	23.680703 N 68.786189 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
24	Tube well / G-22	23.681272 N 68.786900 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
25	Tube well / G-40	23.680925 N 68.787217 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
26	Tube well / G-15	23.682600 N 68.786692 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
27	Tube well / G-27	23.679639 N 68.784156 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
28	Tube well / G-26	23.679636 N 68.784286 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
29	Tube well / PR36	23.691222 N 68.837486 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
30	Tube well / DR-35	23.691225 N 68.837906 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
31	Tube well / DR-33	23.691258 N 68.838386 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
32	Tube well / DR-34	23.691614 N 68.838008 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
33	Tube well / DR-28	23.690158 N 68.837392 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
34	Tube well / DR-37	23.690111 N 68.837442 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
35	Tube well / DR-22	23.691783 N 68.837892 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
36	Tube well / DR-3	23.691803 N 68.838092 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
37	Tube well / DR-21	23.691744 N 68.838158 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--
38	Tube well / DR-16	23.690797 N 68.838650 E	150	200	Alternatve S.St & Shale	Not installed Pump	--	--

The location of the Bore wells with in the plant are presented below

A total of 28 tube wells have been constructed near Khanot Village in the northern direction, approximately 1.37 km away from the plant site. As shown in below figure:

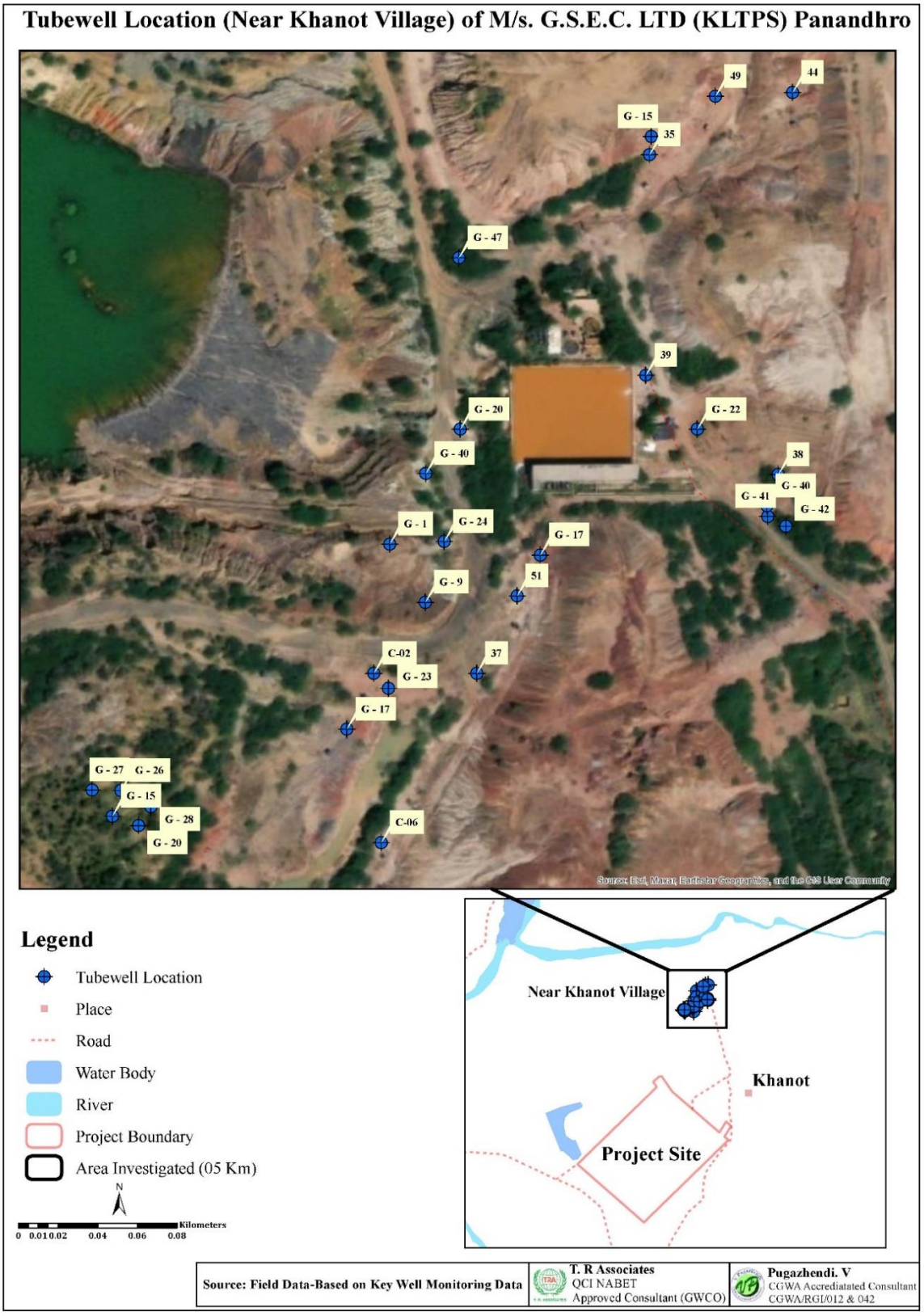


Figure 7 A : Location of Existing Bore wells

A total of 10 tube wells have been constructed near Dhareshi Village in the north eastern direction, approximately 5.36 km away from the plant site. As shown in below figure:

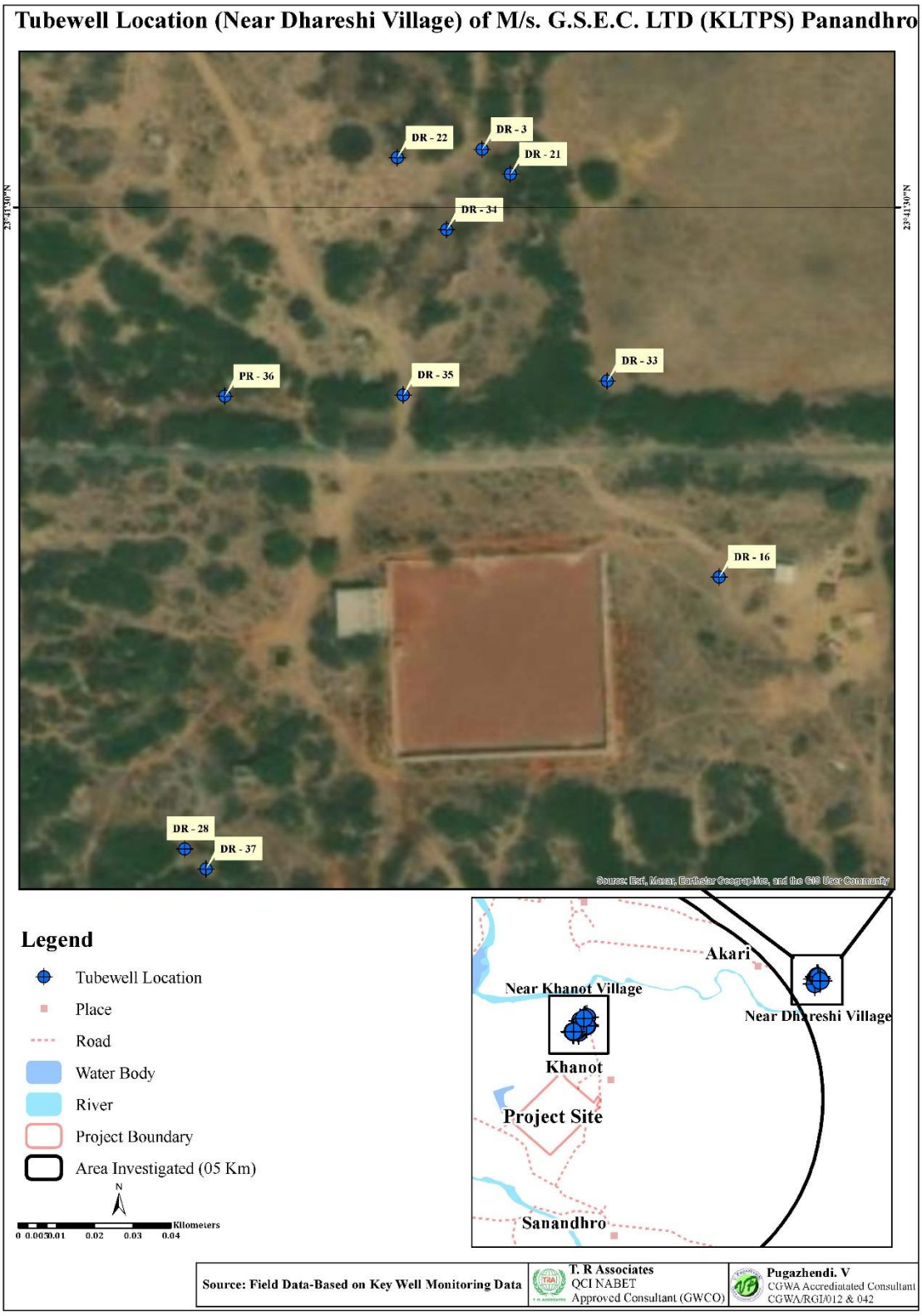


Figure 8 B: Location of Existing Bore wells

The Photographs of the bore wells are presented below

Location of Piezometers

As per the Guidelines CGWA, 2 Bore well has been drilled for installing piezometer (as per CGWA guidelines, the drawl or dewatering quantity exceeding 500 cu.m/day, 2 Piezometers are installed. (One DWLR and 1 DWLR with Telemetry). The Location of the existing piezometer is presented in **Figure- 9.**

The location information such as latitude and longitude of the existing Piezometers, is presented **Table -20**.

Table 15: Location of proposed Piezometers

PZ No.	Location	Coordinate	Depth in m	Diameter in mm
PZ-1	Near Project site	23°40'55.83"N 68°47'12.24"E	180	152
PZ-2	Near Dhareshi Village	23°41'25.80"N 68°50'15.48"E	150	152

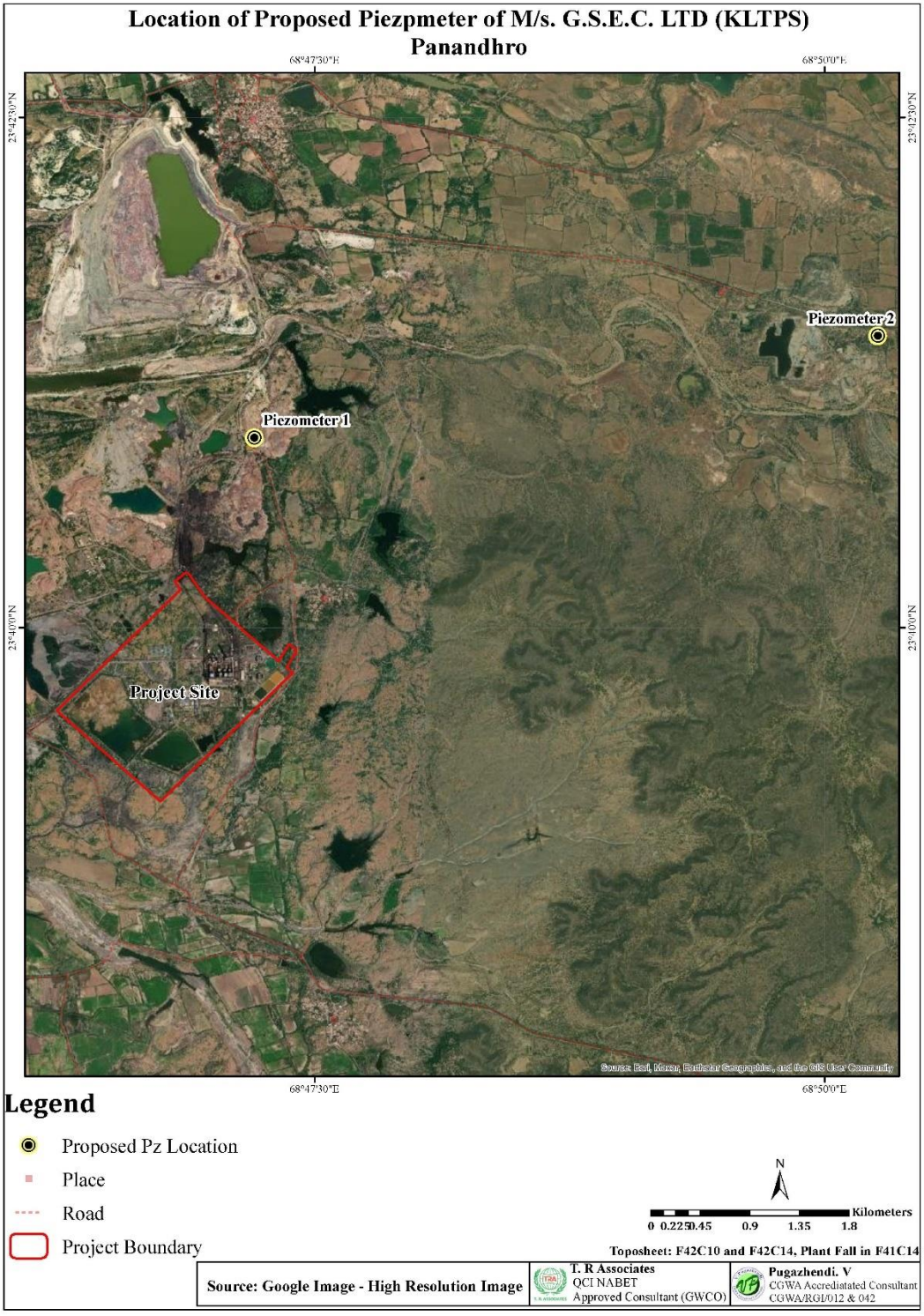


Figure 8: Location of Proposed Piezometer

Water Requirement for the Plant site

The net water requirement is **27240.00 cu.m/day.** The water requirement for industrial purpose is **27240 cu.m/day**. (The Water balance chart is given in Chapter-9)

It is noted that there is no water supply scheme available in the village (Certificate of nonavailability of water supply is enclosed as **Annexure-6**

-5). Hence, the water requirement of the project is dependent on the groundwater through Bore well only.

Table 16: Water requirement format as per CGWB format

Activity	Existing requirement (cu.m/day)	Proposed requirement (cu.m/day)	Total requirement (cu.m/day)	No. of Operational Days in a year	Annual requirement (cu.m/year)
Industrial activity	27240	0	27240	365	9942600
Residential / Domestic	0	0	0	0	0
Greenbelt development / Environmental maintenance	0	0	0	0	0
Other use	0	0	0	0	0
Grand total	**27240**	**0**	**27240**		**9942600**

Table 17: Various usages of Treated waste water

Particulars	Waste water cu.m/day	No. of Days	(cu.m/year)
Quantity of treated water available	**13500**	**365**	**4927500**
1. Reuse in Industrial activity			
2. Reuse in Green Belt Development & Environmental Management			
3. Other usages (Ash water, Service and General Cleaning, Fire & others)			
Total waste water utilized			

Ground water requirement after the use of treated waste water is **27240 cu.m/day**. This quantity is required for NOC from CGWA. The Split-up details of the above quantity is given below:

NOC for 38 borewell for drawing the above quantity will be obtain from Central Ground Water Authority.

Flowmeters will be installed for each bore well.

5. PROPOSED DEWATERING PLAN IN CASE OF INFRASTRUCTURE DEWATERING PROJECTS

No dewatering involved in the industrial operation during the construction phase and in operational phase.

5.2 USAGE OF PUMPED OUT WATER

No Dewatering involved

6. IMPACT ASSESSMENT

6.2 IMPACT ON SURFACE WATER SOURCES

The industry adopts Zero discharge waste water. The treated wastewater is being Recycle and ruse in process and shall be utilized in dust suppression and sprinkling purpose to minimize dusting. Hence, there would not be any adverse impact on surface water sources.

6.3 IMPACT ON GROUND WATER QUALITY

The industry is not recharging the treated wastewater. The rainwater is being used for rain water harvesting. Hence, there would not be any adverse impact on ground water quality.

6.4 MITIGATION MEASURES

Lots of surface and subsurface recharging measures are possible depending upon the site conditions. The specific recharge measures are to be selected depending on the soil characteristics, lithology and nature of the aquifer material, pre- and post-monsoon, ground water level and rainfall, and so on.

The average ground water level in the plant site clearly indicates that the ground water level in the study area is moderately deep.

As the study area is completely saline ground water, surface storage such as lined pond with draw well is suggested in the study area. The schematic diagram of pond is as follows:

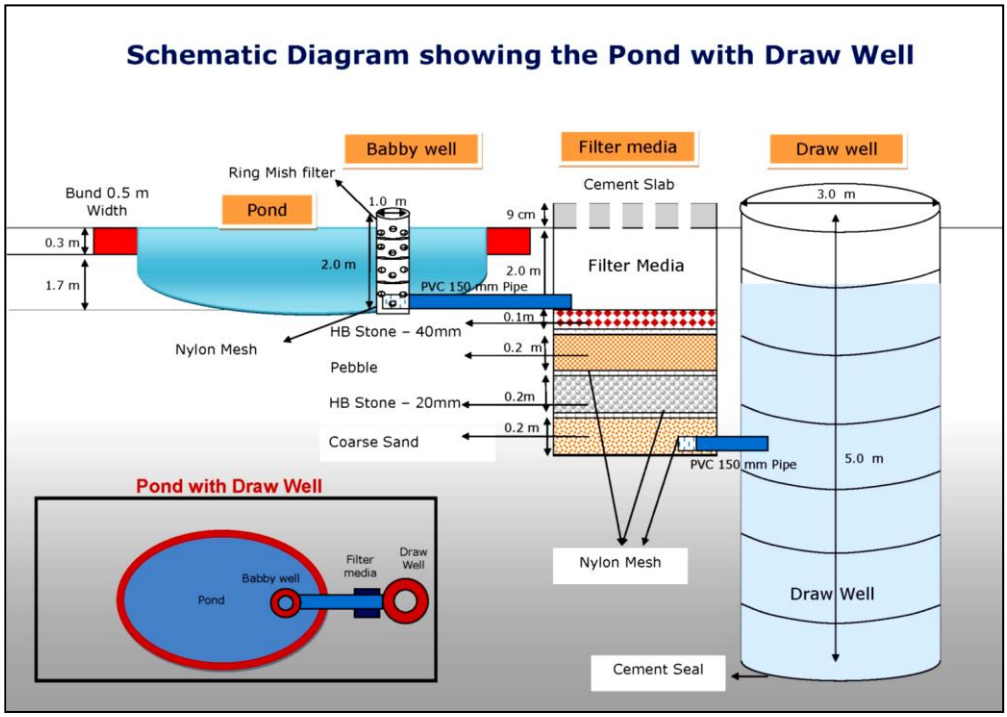


Figure 9: Schematic Diagram showing the pond with Draw Well

6.5 SALINE WATER DISPOSAL STRATEGIES (INCASE OF SALINE WATER ABSTRACTION)

The industry is not used saline water. Hence, the disposal of saline water does not arise.

6.6 GROUND WATER MODELLING

As per the SOP, Ground water modelling has been attempted considering the draft, recharge of the study area covering 5 Km radius from the plant boundary.

6.6.1 BRIEF ABOUT THE MODEL AREA

The Total ground water requirement for the plant is 27240 cu.m/day (saline water). The requirement is being met out from 49 bore wells. The model area covering 113 Sq.km. The total area is considered for Modeling as there is no hill or runoff zone.

In order to estimate impact of ground water (Saline water) drawl for industrial, a detailed Ground Modeling Studies include ground water mass balance (input and output from various sources), the ground water head changes has been attempted. The DEM of the study area is shown in figure 17, it shows that elevations range from 69.9 m amsl to -4.5 m amsl.

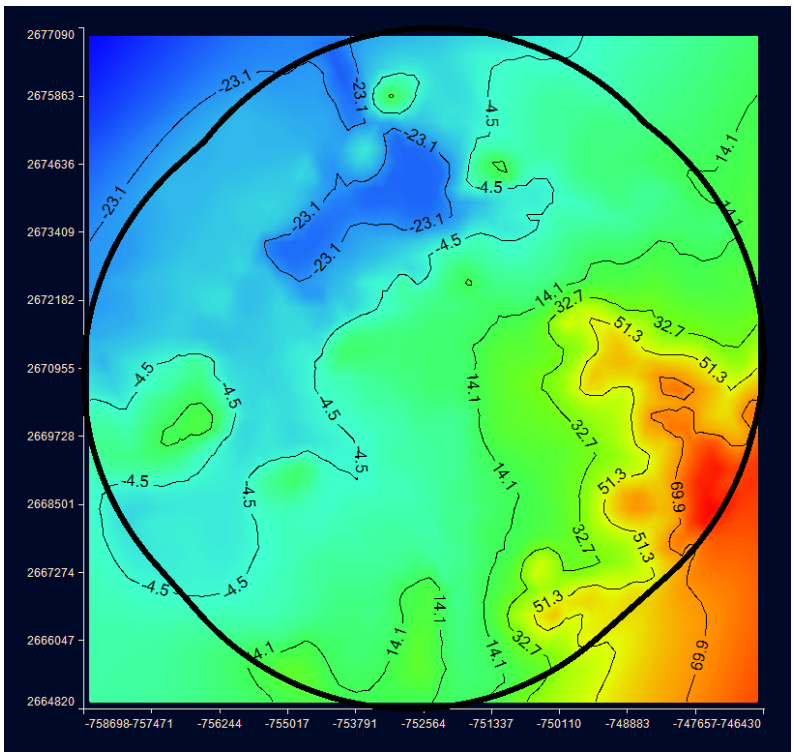


Figure 10: Digital Elevation Model (DEM) of the Model area

6.6.2 CONCEPTUAL MODEL

The entire study area forms part of Sedimentary formation. Two major aquifer system are explored by CGWB.

For the purpose of ground water modeling, the two aquifer systems are considered as a single domain in the region and appropriate layers and aquifer parameters are provided for understanding the prevailing flow regime. Aquifer disposition is given in **Figure-20.**

Table 18: Conceptual Model

Parameter	**Value**	
Grid	Grid Size in m	100 X 100 m and 10 X
	No. of Column	150
	No. of Row	153
	No. of Active Grid	15129
	No. of Inactive	Nil
Top of aquifer (m) range of elevation	Ground surface Elevation –4.5 to +69 m Layer 1 - 82 to + 42 m	
Bottom of aquifer (m) range of elevation	Bottom Layer - 108 to -233 m	
Initial Piezometric Heads (m amsl)	Layer 1	-47.8 to 44 m
	Layer 2	-98.1 to 4 m
	Layer 1	Unconfined

Aquifer Type	Layer 2	Semiconfined
Boundary Conditions Used	Recharge Boundary Condition Well Boundary Condition River	
K (m/ Day)	Layer 1	2.3
	Layer 2	1.5
Specific yield (%)	0.2	
Storage Parameters	1.23×10^{-03}	
Recharge applied	50 mm/year *(Based on the CGWA Estimation Committee Report)*	
Draft applied	As per CGWB Estimation Committee, the area has been categorized as **Saline block**. No irrigation and domestic draft	
Proposed Draft applied for the firm (NOC)	**27240 KL/Day cu.m / day NOC Required Quantity**	

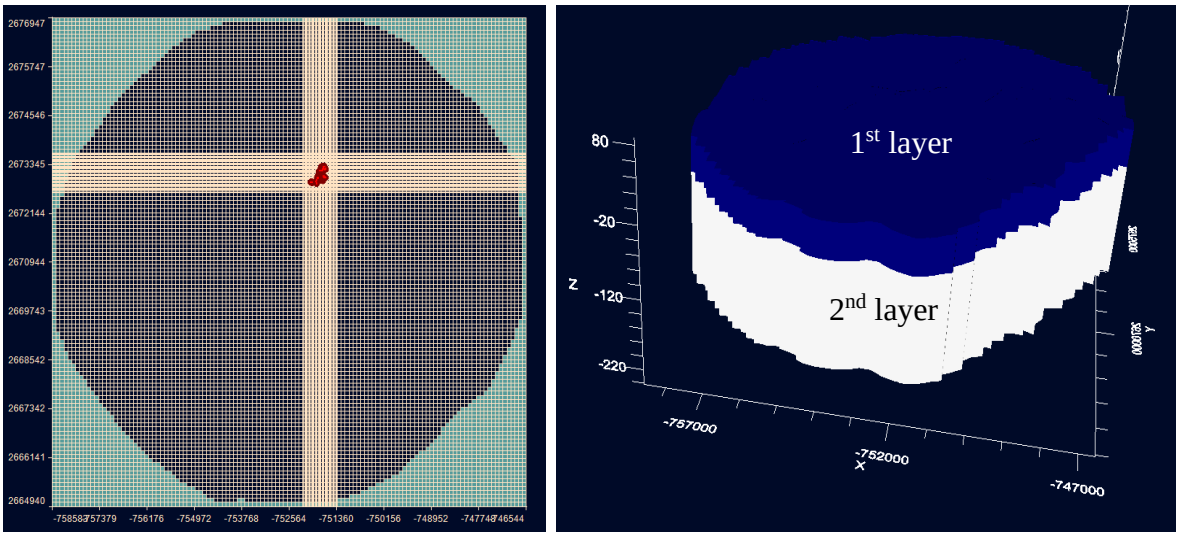


Figure 11: Aquifer geometry of Model area

Model area

The model area is created covering 5 Km radius from the Plant boundary (as per CGWA Guide lines). The below figure shows the model area covering the Plant boundary. The model area and the components of the model is given **Figure:21**

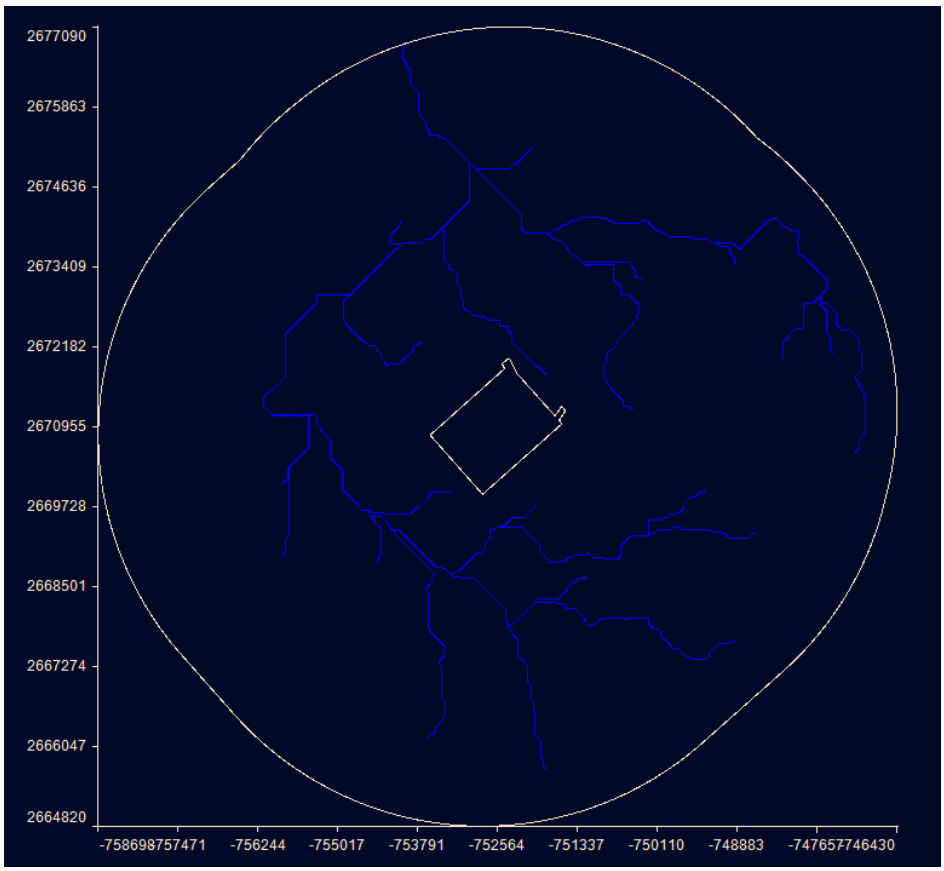
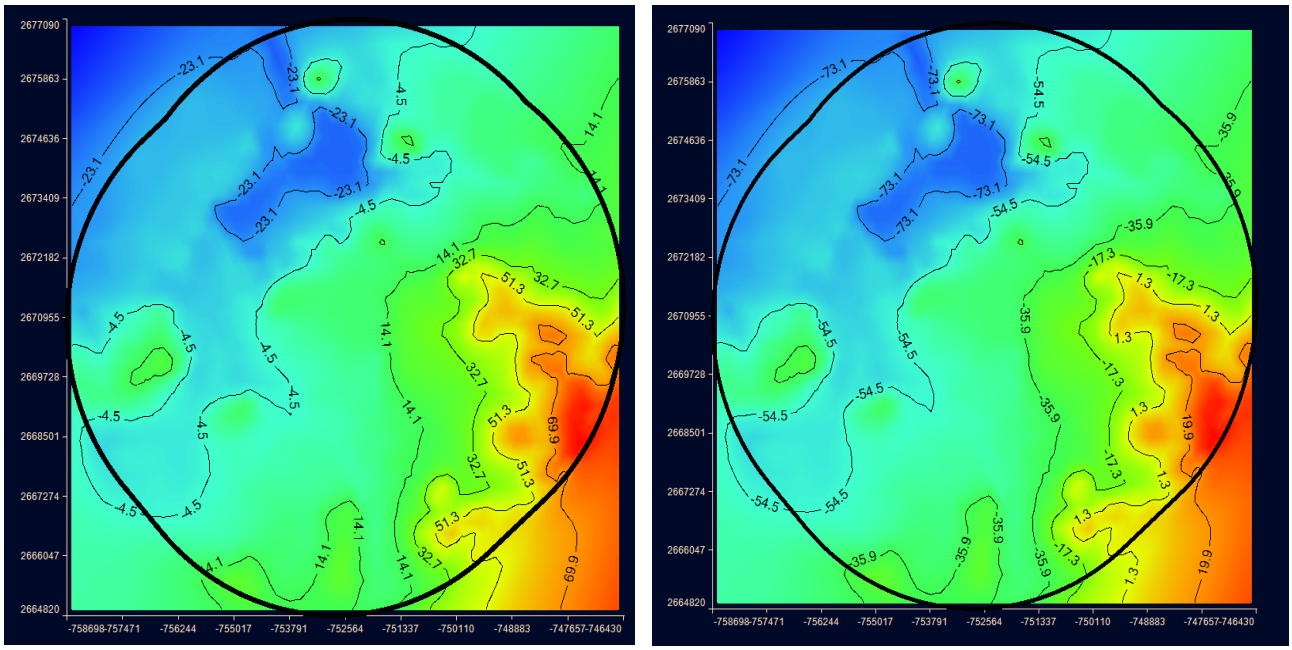


Figure 12: Model showing the Model Boundary, River and Plant site

Aquifer Geometry

The ground elevation has been generated using SRTM -DEM of 30 m resolution data for the model area. From the surface elevation, the layer thickness is generated based on interpolation of the well inventory data and geophysical survey interpreted results. The reduced level surface has been generated and the same is used as input for the model. The aquifer geometrical distribution for each layer is presented **Figures – 20-21**

Figure 9: Top Ground Elevation & Layer 1 Top Elevation



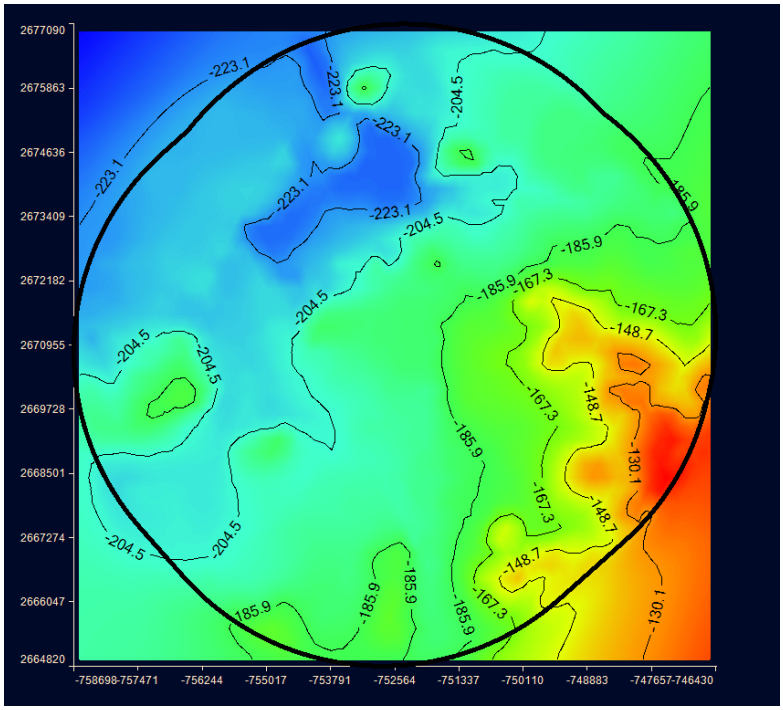


Figure 13: Layer 2 Top Elevation & Layer 3 Top Elevation

Grid Design

The grid has been grouped into 2 layers containing 2 main aquifers. The bottom layer is considered as base of semi-confining layer. Spatial and vertical variations in hydrologic characteristics in the aquifer framework were represented by discrete values in each of the model cells.

Model cells extend vertically into the aquifer and divide the aquifer into discrete volumes of aquifer material that are assumed to have uniform hydrologic characteristics. The model grids are shown in **Figure: 25**. No hill in the study area. It is coastal area. The green colour in the numerical grid are inactive cell. The layer thickness model is given in **Figures: 26**

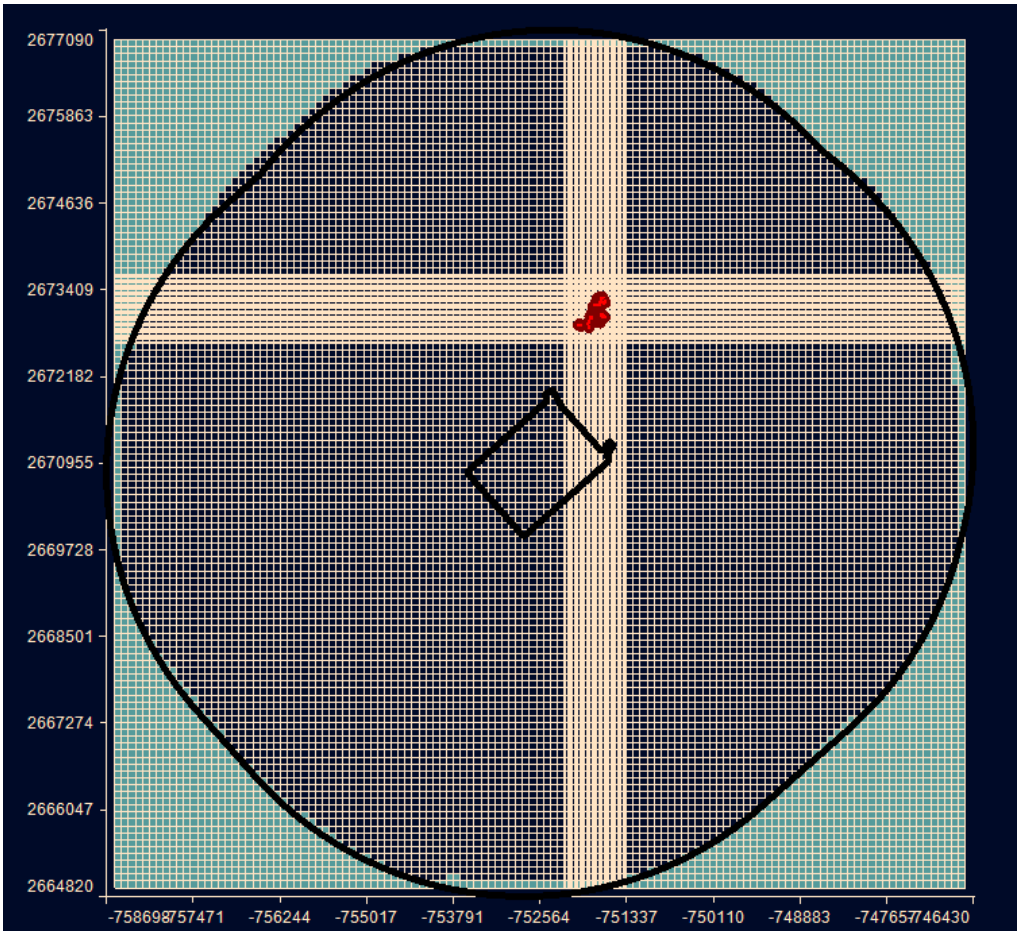


Figure 10: Spatially variable grid design (100 X 100 m and 10X10 m) in the Numerical model

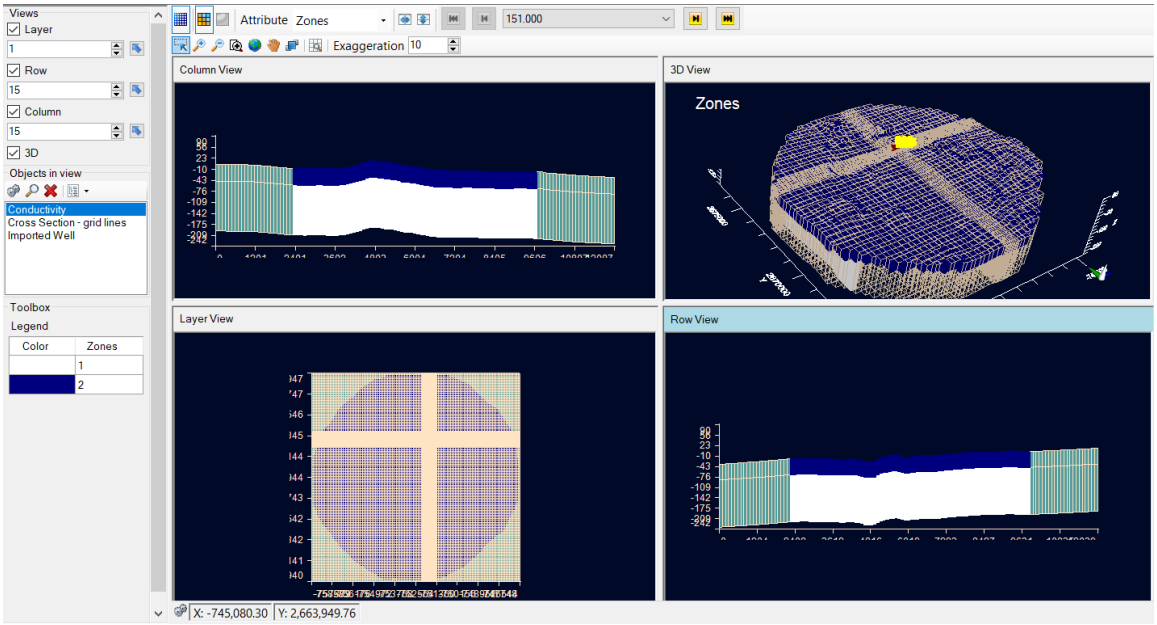


Figure 11: Hydrogeological cross section along row 15 and column 15 (Plant site)

Boundary Conditions

Boundary conditions are defined along the edges of the simulation domain including the top and the bottom. Their main function is to separate the model region from the rest of the world and are required for solution of the ground water flow equation.

Model boundaries are either physical (real) and hydraulic (artificial). While the physical boundaries are well defined geologic and hydrologic features that permanently influence the pattern of groundwater flow hydraulic boundaries are artificial and are derived from groundwater flow nets (Kresic, 1997).

The study area forms part of coastal area. There is a river in the study area, hence the river boundary conditions is assigned, the depth and width of river were considered google and field observations. Based on the geological formation and infiltration characteristics of the formation the rainfall recharge boundary condition defined.

The rainfall recharge values of 15 % have been assigned in the recharge boundary condition.

As there is no irrigation and drinking water wells in the study area and the area is completed composed of saline area, no irrigation wells are considered in the model.

All the wells have been assigned pumping well boundary condition. The boundary condition in the model is presented **Figures:29, 30**

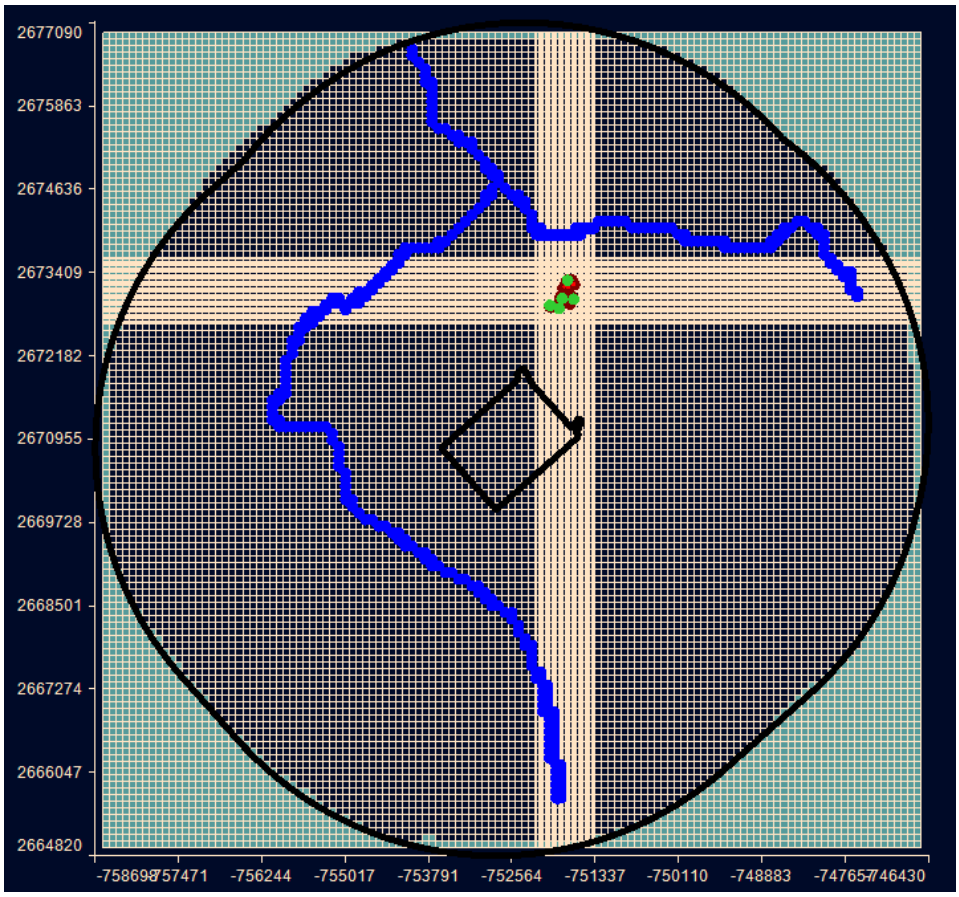


Figure 12: Boundary Conditions in flow model for the study area

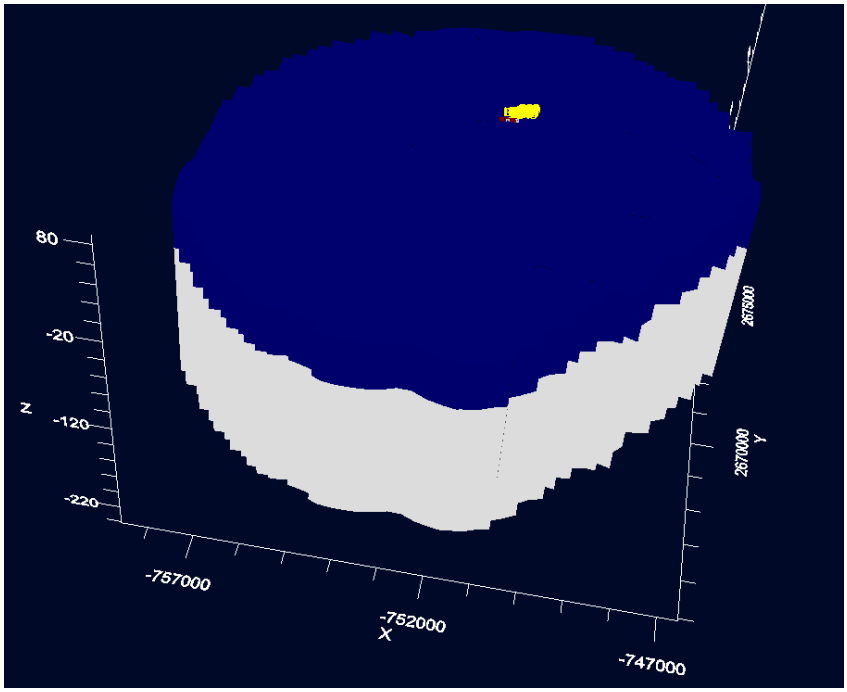


Figure 13: Pumping well (Plant pumping well)

Initial Head

Regarding the initial heads for all the aquifers, there is no observed wells in the area, hence, CGWB monitoring wells available around 5 Km away for the year 2018 from the model boundary has considered to assign as initial head in the first layer. For the second layer, observed groundwater levels at deep bore wells are assigned. The initial head is presented in **Figure- 33**

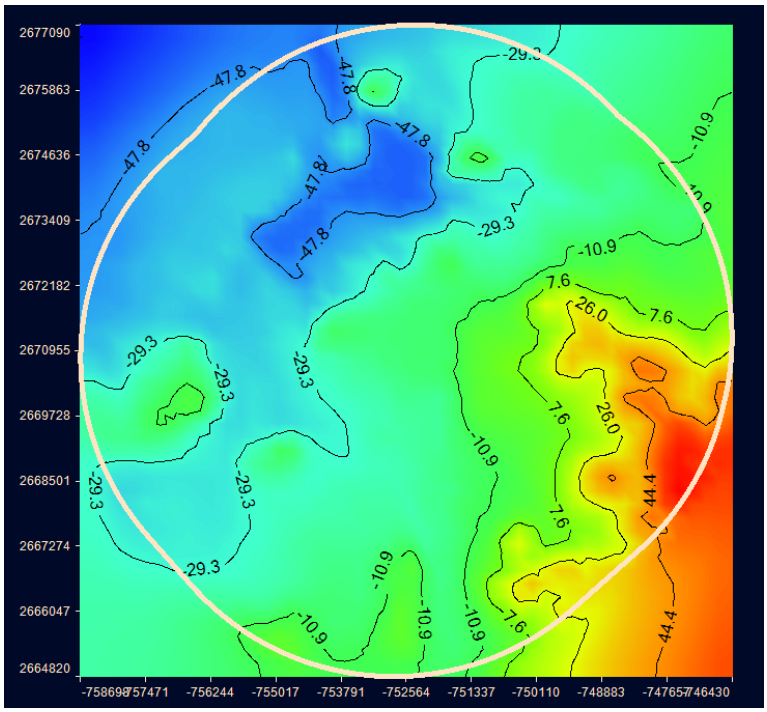


Figure 14: Initial Head

6.3. CALIBARATION AND VALIDATION

To evaluate the validity of the computed numerical groundwater flow model, the groundwater heads simulated by the flow model were compared to observed hydraulic heads at six locations (5 are monitored at proposed pumping site and one is virtual well) that were monitored during 2023 have been used for calibration.

The scatter plot showing the statistics for 151 days (Year 2018) for aquifers produced in exhibits the **root mean squared (RMS) of the residuals mean for aquifers as 0.36 m** indicating a reasonably good fit of the observed and simulated levels with majority of the data lying close to the 1:1 line. **(The accepted RMS error as per CGWA Guidelines (Webinar Presentation) is less than 3.5 m)**

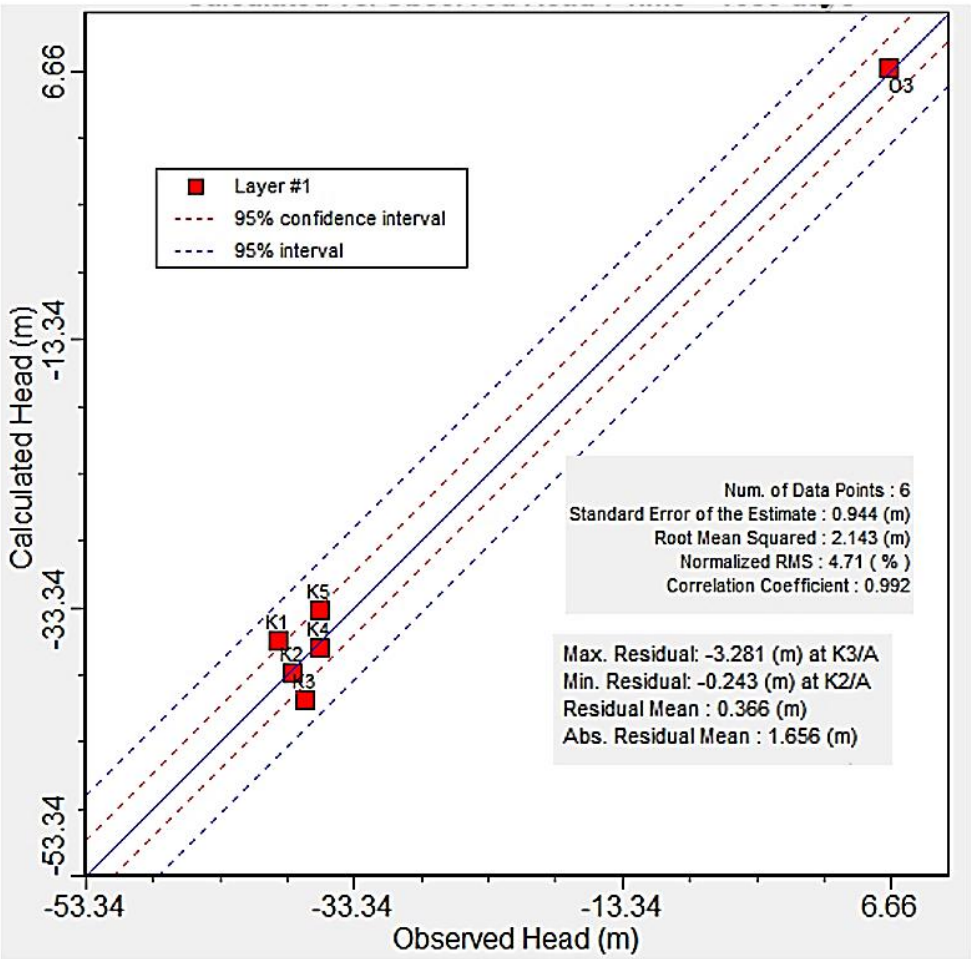


Figure 15: Calculated Vs observed head of the aquifers

Table 19: Comparison of the observed head with the model computed head.

Well/Point	X-Model	Y-Model	X-World	Y-World	Obs.	Calc.	Calc.-Obs.
K2/A	6932.314	8076.98	-751651	2673017	-38	-38.6436	-0.64358
K3/A	6759.518	8090.804	-751824	2673031	-37	-40.2071	-3.2071
K4/A	6718.047	7941.048	-751865	2672881	-36	-36.7414	-0.7414
K5/A	6579.81	7984.823	-752004	2672925	-36	-33.8295	2.170471
O3/A	7653.712	457.2348	-750930	2665397	6.5	8.073044	1.573044

The boundary conditions and aquifer properties are defined for the model and also pumping well and observation well objects are added in the model. Then data from conceptual model is translated to Numerical model.

The above input for the Numerical model is entered and then VISUAL MODFLOW FLEX module with flow budget is estimated. The model convergence is obtained after number of trial run by changing errors in the initial heads and aquifer parameters entry.

The model could not be simulated in steady state condition as it is a fully homogenous area where there will never be the inflows and outflows are equal. Hence only Transient Simulation is attempted. The model was run in transient state.

The prerequisite data requirement for running the model in transient state is initial heads and stress periods. The year is divided into two stress periods i.e. pre and post monsoon. The prediction model was run for the years from 2023 to 2034.

Considering the above-mentioned facts, the calibrated model has been used to assess the impact of groundwater withdrawal for industrial purpose on the groundwater system for a period of five and ten years.

The final ahead at the of 5^{th} year is -33 m and after that it is stabilized at the same range until 10^{th} year. However, spatial extent of 5 m depletion is extended from around 200 square meters to around 1 km^2

Though the predicted change in the head and the drawdown is moderately less, the recharge from the rainfall and the recharge imitative taken by the project proponent has ameliorated the ground water scenario.

The predicted change in head for end of 5th year and end of 10th year is presented in **Figures: 35-36.**

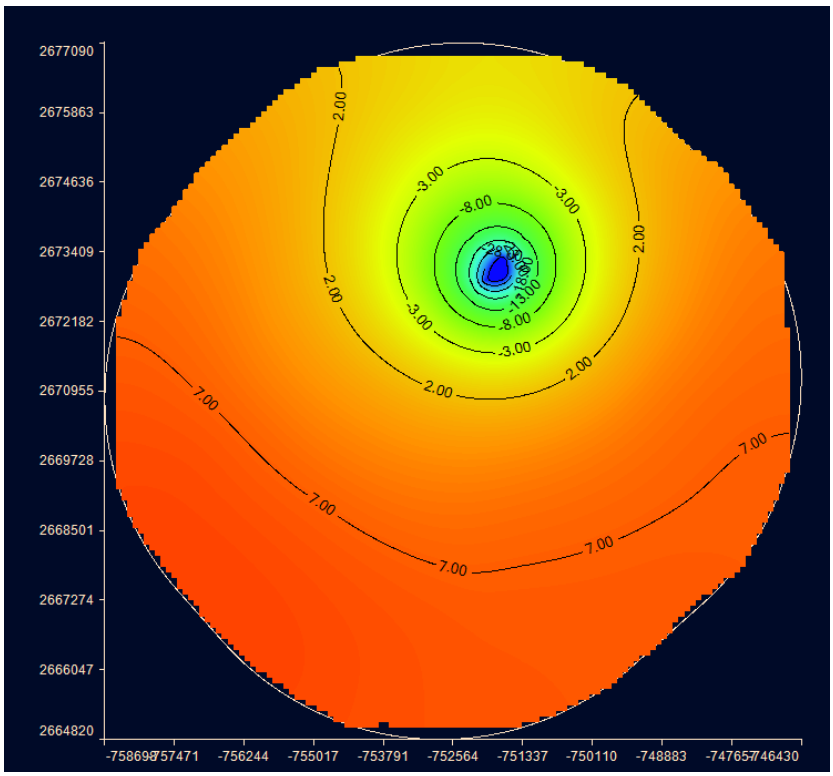


Figure 16: Predicted Head – End of 5h year

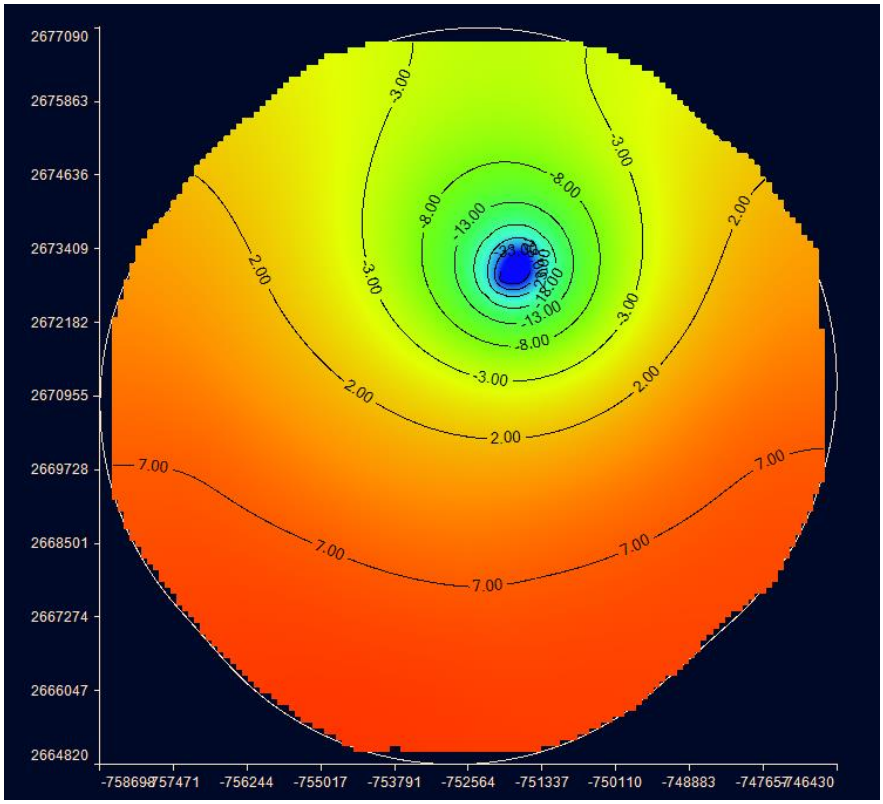


Figure 17: Predicted Head – End of 10th year

The main benefit of using the VISUAL MODFLOW FLEX code is that its mass balance calculations provide a very useful way to examine the source of water provided to a system of pumping wells.

Table 20: Statement showing the Mass Balance

Inflow and Outflow from various boundaries in Second Year (2024)		
Heads	**Inflow**	**Outflow (Sink)**
	Volume in Cum	**Volume in Cum**
Storage	28193175	14571840
Constant Head		
Wells		95409536
River	20100	2099647
Recharge	22303163	
Total	50516436	50510944

Inflow and Outflow from various boundaries in Fifth Year (2027)		
Heads	**Inflow**	**Outflow (Sink)**
	Volume in Cum	**Volume in Cum**
Storage	73823056	28253990
Constant Head		
Wells		102843420
River	37653	6171576
Recharge	63407186	
Total	137267896	137268988

Inflow and Outflow from various boundaries in Tenth Year (2032)		
Heads	**Inflow**	**Outflow (Sink)**
	Volume in Cum	**Volume in Cum**
Storage	136921536	41845304
Constant Head		
Wells		211029176
River	39578	11828109
Recharge	127713448	
Total	264674576	264702584

From the mass balance graph for 5th year and the cumulative mass balance for 10th year, the changes in the contribution from various sources have been computed. From the table below, it can be seen how the contribution from various sources changes in the projected scenario for year 2024 from that of year 2032.

The most important changes are in the Recharge boundary which contributes major part of the pumping of for the industrial needs in 2024 and 2032.

The mass balance clearly indicates that the ground water drawl of the study area is only from the recharge quantity.

The Mass balance graphs at the end of the 2nd year (2024), end of the 5th year (2027), end of the 10th year (2032) is presented in **Figures**: **37-39.**

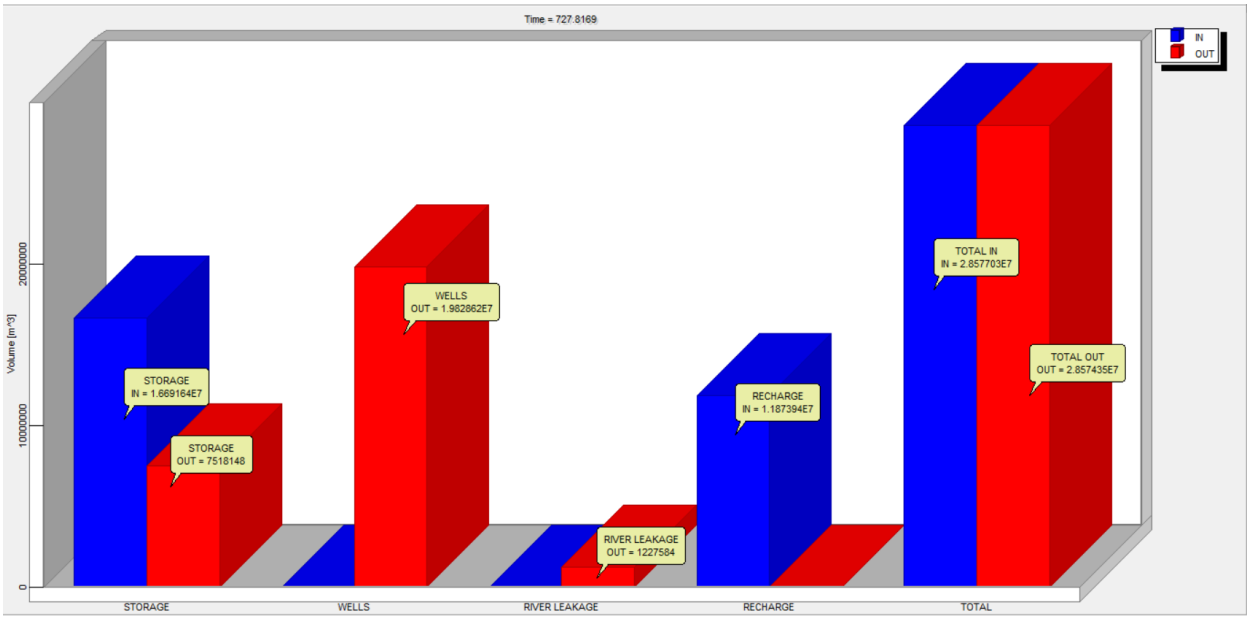


Figure 18: 2nd Year Mass balance

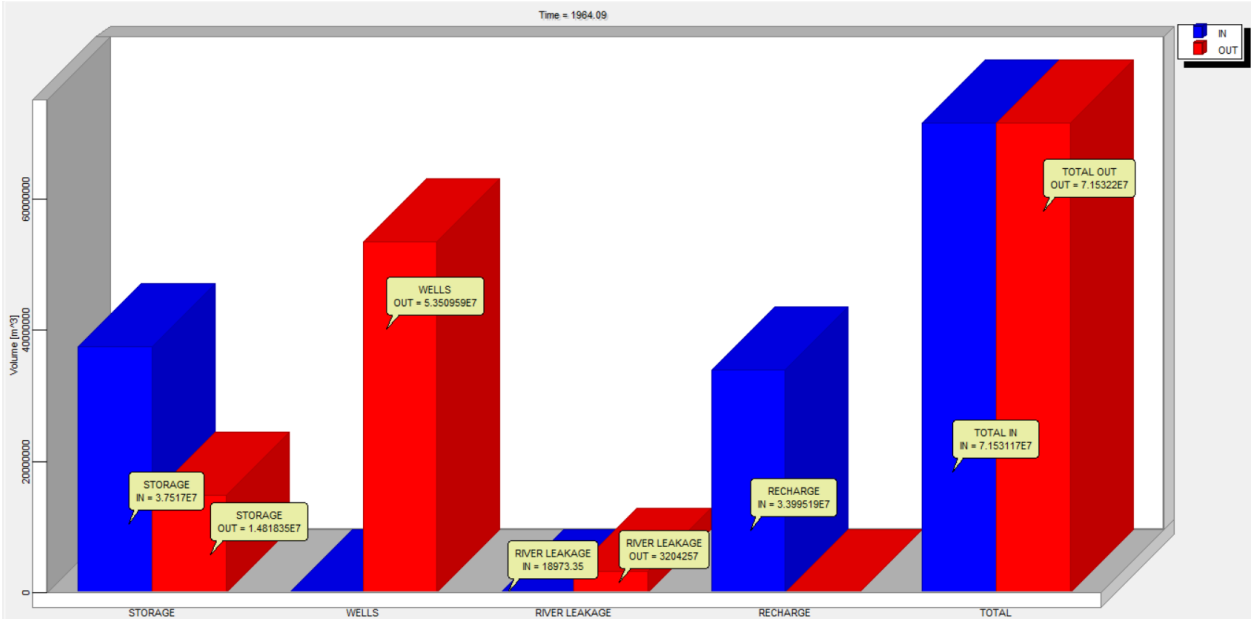


Figure 193: 5th Year Mass balance

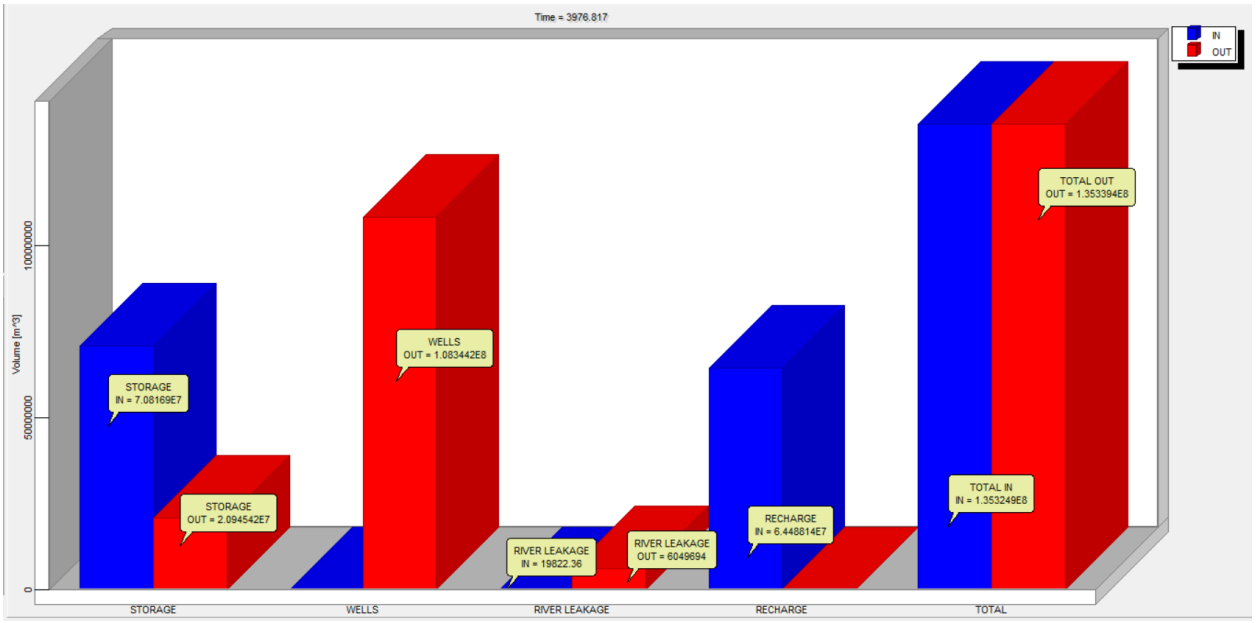


Figure 20: 10th Year Mass balance

6.4 MODEL LIMITATION

The major simplifying assumptions in the present modeling study include

1. Recharge is invariant over large periods of time

2. Spatial variations of hydraulic conductivity is negligible

3. Vertical layers are generalized as two aquifers and neglected clay in between that may encounter at few places.

6.5. CONCLUSTION AND RECOMMENDATION

- The results of numerical modeling have thrown light on the overall scenario of different ground water flexes in the study area. Ground water modeling study reveals that the pumping in the first and second layer has very less effect on Aquifer.
- The Plant saline water requirement is being met out from the second aquifer (layers 2 in the model). The pumping quantity of 27240 cu.m/day for the Plant would not make adverse impact on shallow groundwater system of the model area.
- **There would not be any sea water ingress due to industrial pumping.**
- Change in the ground water head at the end 5th year and end of 10th years has been simulated.
- Change in the ground water head at the end 5th year and end of 10th years has been simulated. **There is change of head in and around the Plant site observed and the head change is about 5 m to 10.5 m from Initial head -23 in 5th and 10th year respectively that is -28 m and -33.5 m.**

6.6. SUBMISSION OF SOFT COPY OF THE MODEL

The soft copy of the model is given in CD / Pen drive.

7. WATER BALANCE, RECYCLE AND REUSE

As per the MINISTRY OF JAL SHAKTI (Department of Water Resources, River Development and Ganga Rejuvenation) (CENTRAL GROUND WATER AUTHORITY NOTIFICATION issued on 24th September, 2020 states that Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 cu.m /day.

Total water balance chart showing the usage of water for various processes

The flow chart for the water balance of Plant is prepared. The water usage data is presented in **Figure 40.**

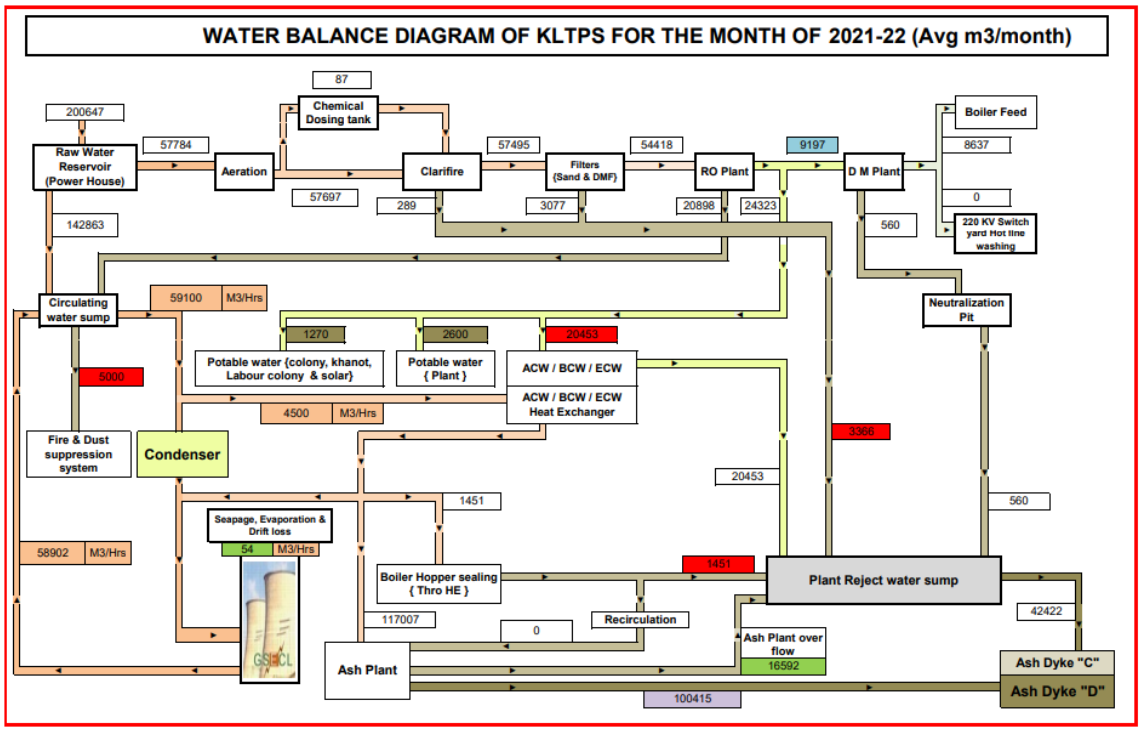


Figure 21: Breakup of water uses

Table: 21 Breakup of water uses in various areas

Sr no.	Area	Quantity in m3/day (Approx.)
1	Process	1196
2	Cooling	8250
3	Ash slurry making	12463 (in that 47 from Re circulation from plant reject water)
4	Services	2451 [(2264 - Boiler hopper sealing, Fire, Dust suppression, etc.) + (187 – For domestic purpose for plant, solar plant & nearby villages)]
	Total	24360 * (i.e. 290 MW x 24 hrs x 3.5 m3/MWH -water ratio)

*KLTPS making sincere efforts to bring down Raw water consumption factor for plant upto permissible limit i.e. 3.5 m3/MWH.

Table: 22 Breakup of effluent generation

Sr no.	Area	Quantity in m3/day (Approx.)
1	Industrial	3171
2	Ash slurry ,making	12463
	Total	15634

Note:

- No Effluent Discharge Outside Plant Premises.
- Effluent collect in Final holding Sump and then discharge in Ash Dyke through Pipeline and Flow meter is also there to measure the quantity of effluent. Effluent is used to suppress dust by mobile sprinklers in plant , recirculation of plant reject effluent in ash plant as per requirement and for dust suppression in ash dyke

ETP In the Plant Site

The effluent treatment primarily consists of equalization cum neutralization of waste streams generated during the regeneration of DM plant resins. The details of existing ETP units are given below and the process briefly, described as under:

Process Description

Effluent Collection Sump (Neutralization Sump)

At Demineralization plant approximately 21 m3/day of effluent is generated due to regeneration of cation and anion resins. The effluent is collected in equalization cum neutralization tank where the provision for mixing through compressed air supplied by 2 hrs. Blowers of 20 m3/hr. capacity each are also made. In fact attempts are made to arrange the regeneration steps in such a way that the acidic effluent from cat ion generation neutralizes the alkaline effluent from anion generation. Generally, further to pH adjustment is required. The neutralized effluent is then discharged directly unto RCC rectangular open channel for its onward movement.

Effluent Oil Separator

Oil separate in trench area before further process. Zig Zag Channel for Suspended Particles Removal Effluent passes through these trench and efforts have been made to remove Suspended particles removal from that trench.

Final Holding Sump (Plant Reject Water Sump)

Effluent collect in Final holding Sump and then discharge in Ash Dyke through Pipeline and Flow meter is also there to measure the quantity of effluent.

Details of mechanical equipments utilized for Effluent Treatment Plant

Sr. No.	Name of the Unit	Nos.	Dimensions (m)	Capacity (KL)
1	Equalization Cum Neutralization Pit	01	14 x 7 x 7	686
2	Dosing Tank For Caustic Lye Solution	01	--	5
3	Oil Separator	01	0.8 x 12.5 x 1.2	12
4	Suspended Solid Removal Sump (Zigzag Channel Sump)	02	(4.2 x 5 x 2.3) x 2	96
5	Final Holding Tank (Plant Reject Water Sump)	02	(4.9 x 4.5 x 4) x 2	176

ETP Flow Diagram

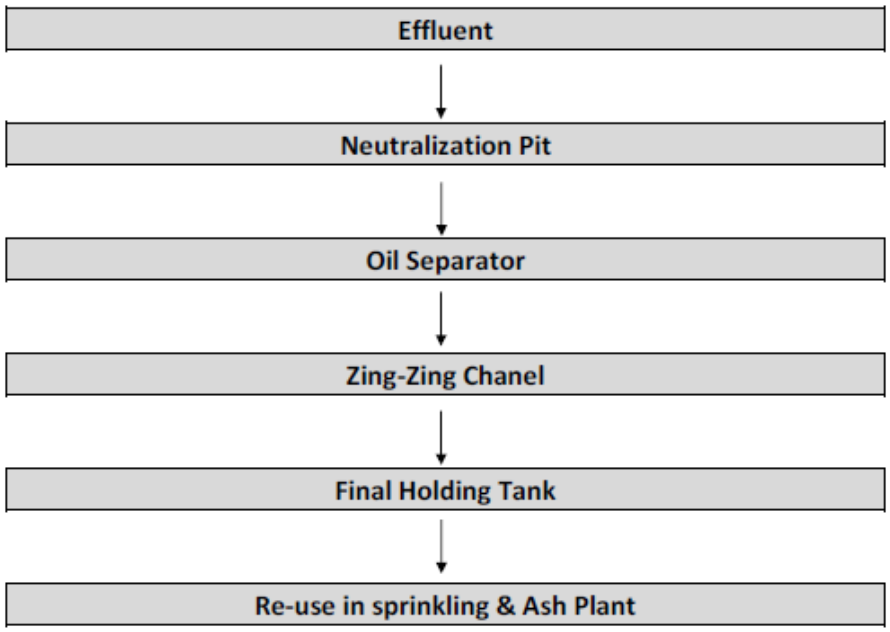


Figure 22: ETP Flow Diagram

8. SALINE WATER DISPOSAL STRATEGIES (INCASE OF GROUND WATER ABSTRACTION)

The Plant is not drawing any saline water for the industrial use. The Plant is using only ground water and the treated waste water.

9. ANY OTHER DETAILS PERTAINING TO THE PROJECT

Socio-Economic Aspects

Any developmental activity exerts a direct impact on the socio-economic environment of the region. Usually, the beneficial impacts such as better job opportunities, improved education, communication, energy, housing, health, transportation facilities etc. outweighs the adverse impacts, if any. The study of socio-economic component of environment is incorporating various facets, viz. demographic structure, availability of basic amenities such as housing, education, health and medical services, occupation, water supply, sanitation, communication and power supply, prevailing diseases in the region as well as features such as places of tourist attraction and monuments of archaeological importance. The study of these parameters helps in identifying predicting and evaluating the likely impacts due to project activity in the surrounding region.

Settlements and population dynamics around project area

The latest available data has been complied to generate the existing socioeconomic scenario of the study area. Information on socio-economic profile was collected from the **Primary Census Abstract CD 2011** including the population details of the region. The study area is uninhabited. No population in the study area.

Moreover, the entire block drinking water need is met out through **Narmda Water supply scheme.**

10 SUMMARY AND CONCLUSION

M/s. G.S.E.C. Ltd (KLTPS) Pandandhro is located in Plot No: 236P, 255P, Pandandhro, Taluka: - Lakhpat, District- Kutch, Gujarat-370601, India. Plant has an aerial extent of **223.49 Hectare (2234996 Sq.m).**

The study area (covering 5 Km radius) lies in between North Latitude 23°39'9.07"N and 23°40'15.61"N and East Longitude of 68°46'44.80"E and 68°46'52.36"E. The study area of 5 Km from Plant boundary covers Topo Sheets: **F42C10 and F42C14.** The Plant site falls in **F42C10.**

Primarily, 5 Km radius from the Plant site forms part of **Barren Land (about 29 %).** The second major land use is Agriculture.

The Study area (5 Km radius from the Plant site boundary – buffer zone) elevation ranges from **-13 m to 185 m amsl**. The maximum elevation is observed in the South east part of the study area.
The maximum and minimum elevation of the Plant site is **80 m and 35 m amsl** respectively. The Plant site is sloping towards north.

As per the Ramsar Site, the project is located more than 500 m away from the periphery of any demarcated wetland areas. The nearest Wetland is located in **Khijadia Wildlife Sanctuary** which is about **190 km in the South east from the Plant's boundary.**

The normal annual rainfall of Kutch district is **345 mm (25 year Normal)**. District received maximum rainfall during south west monsoon period i.e., June to September. About **94 %** of the annual rainfall received during south west monsoon season.

The study area (5 Km buffer) including the Plant site comprises of Basalt flow and in study area comprises of Sand stone, Fossiliferous sandstone, Shale, Marl and conglomerate of Katrol formation. The availability of ground water in this formation is Good.

The pre-monsoon depth to ground water level depict that relatively deepest of ground water level zone of **42-44 m** falls in the central and western part of the study area.The shallowest ground water level zone of **38-40 m** occupies in the eastern part of the study area near Akari and Dhareshi villages.The Plants falls in **42-44 m** zone.

The post monsoon depth to ground water level depict that relatively deepest of ground water level zone of **40-42 m** falls in the Center and western part of the study area near Khanot, village. The shallowest ground water level zone of **34-36 m** occupies in the isolated patches of the study area. The Plant site falls partially in **40-42 m** zone.

The ground water level fluctuation of the study area indicates that the ground water level fluctuation ranges from **2.0 – 3.0 m** which indicates that the aquifer of the study area has moderate recharge potential.

Ground water withdrawal NOC requested for 27240 cum/day. The ground water modelling results confirming the above quantity.

11 ACCREDITATION CERTIFICATES

Accreditation Board of CGWA

Certificate of Accreditation

Mr. V. Pugazhendy

Has been accredited as Ground Water Professional to prepare reports in the Functional Areas of

- *Impact Assessment Report with Modelling.*
- *Hydrogeological Report for mining projects.*

Valid from : 01.10.2021

Valid thru : 30.09.2026

Certificate No. : CGWA/RGI/042

Dated : 30.11.2021

क्षेत्रीय निदेशक
Regional Director
आरजीएनजीडब्ल्यूटीआरआई
RGNGWT&RI

सदस्य
Member
आरजीएनजीडब्ल्यूटीआरआई
RGNGWT&RI

Accreditation Board of CGWA

Certificate of Accreditation

Mr. V. Pugazhendi

Has been accredited as a Ground Water Professionals to prepare reports in the Functional Areas of

- *Impact Assessment of Existing / Proposed GW Extraction*

Valid from : 15.02.2021

Valid thru : 14.02.2026

Certificate No. : CGWA/RGI/012

Dated : 07.07.2021

क्षेत्रीय निदेशक
Regional Director
आरजीएनजीडब्ल्यूटीआरआई
RGNGWT&RI

सदस्य
Member
आरजीएनजीडब्ल्यूटीआरआई
RGNGWT&RI

Quality Council of India

National Accreditation Board for Education and Training

ITPI Building, 6th Floor, 4 - A, Ring Road, I P Estate, New Delhi - 110002

CERTIFICATE OF ACCREDITATION

Under the QCI-NABET Scheme
for
Ground Water Consultant Organisation

★★

T R Associates

Address: A-401, S.G. Business Hub, Between Sola Bhagwat And Gota Overbridge, Near Umiya Campus, S.G. Highway, Ahmedabad 380060 GUJARAT AHMEDABAD-380060

SL. No.	SCOPE COVERAGE		
	Industrial Use	Mining Projects	Infrastructure Projects
1	Hydrogeological report: Comprehensive report on groundwater condition/situation		
2	Impact Assessment Reports without modelling studies		

Note: Names of approved Project Coordinators and Technical Area Experts are mentioned in IA AC Minutes dated Sep 29, 2021 on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in NABET's letter of accreditation bearing no. QCI/NABET/ENV/GWCO/21/53 dated Oct 13, 2021. The accreditation needs to be renewed before the expiry date by Feb 07,2026 following due process of assessment.

Sr. Director, NABET	Certificate No.	Valid Upto
Revised on: Oct 13, 2021	NABET/GWCO/IA/GW0010	Feb 07,2026

12. List of References / Bibliography

- CGWB 2013. District at a Glance
- DEM and/ or topographic contour map of the area (The details of elevation of the surrounding area) https://earthexplorer.usgs.gov/
- Geomorphology map (including drainage and water bodies) https://bhukosh.gsi.gov.in/Bhukosh/MapViewer.aspx
- Kresic N (1997), Quantitative Solutions in Hydrogeology and Groundwater Modeling. LEWIS Publishers, London, New York, Washington, D.C.
- Map of Land use/ Land cover map of the surrounding area https://www.arcgis.com/home/item.html?id=d6642f8a4f6d4685a24ae2dc0c73d4ac
- Maps of both regional Geology and the local Geology of the surrounding area https://bhukosh.gsi.gov.in/Bhukosh/MapViewer.aspx
- Open street map (includes roads, places and railways) https://extract.bbbike.org/
- Rainfall data collected from https://indiawris.gov.in/wris/#/rainfall
- Toposheets collected from Survey of India https://onlinemaps.surveyofindia.gov.in/FreeMapSpecification.aspx
- Water level data collected from https://indiawris.gov.in/wris/#/groundWater

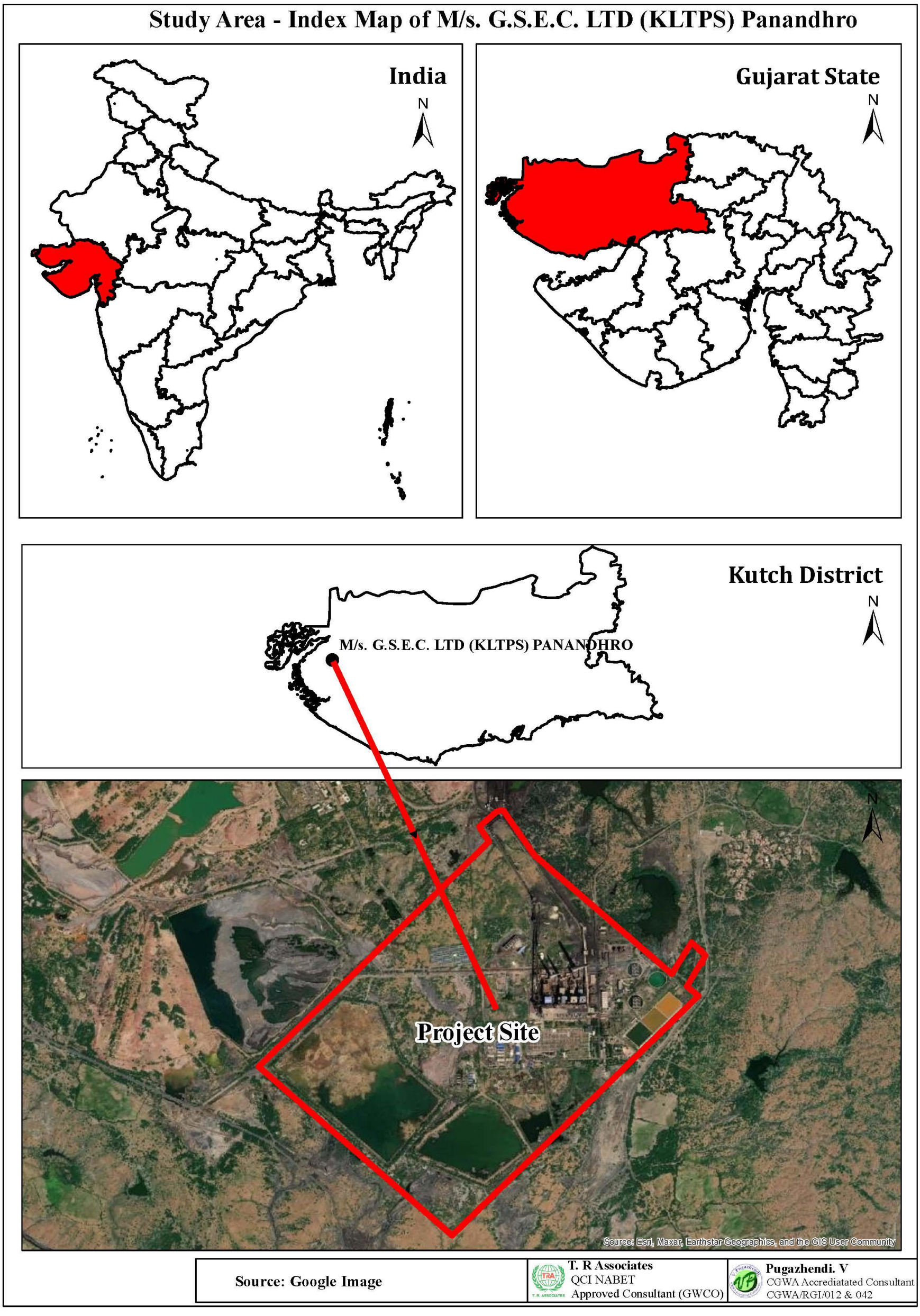


Plate 1: Study area – Index Map

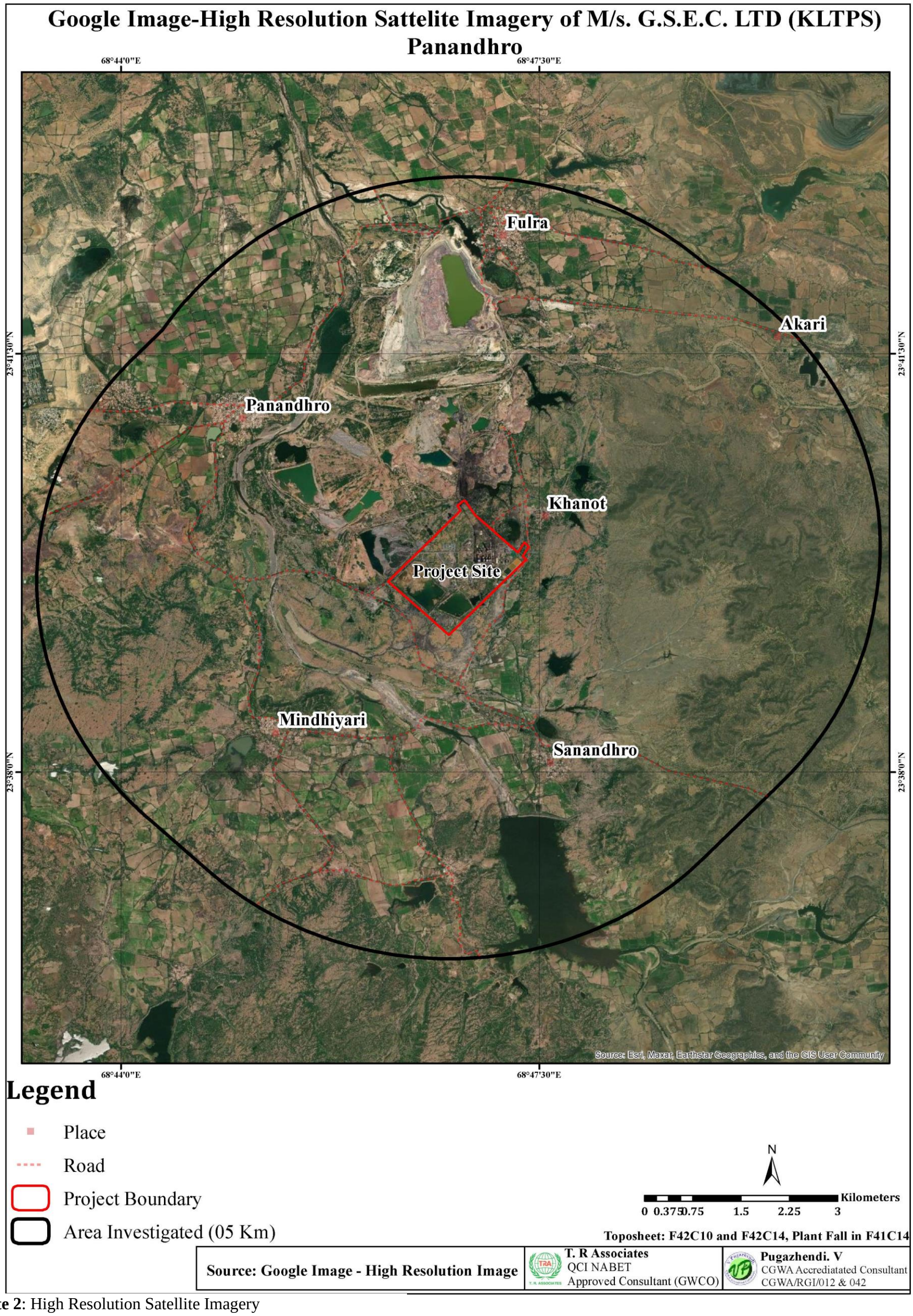


Plate 2: High Resolution Satellite Imagery

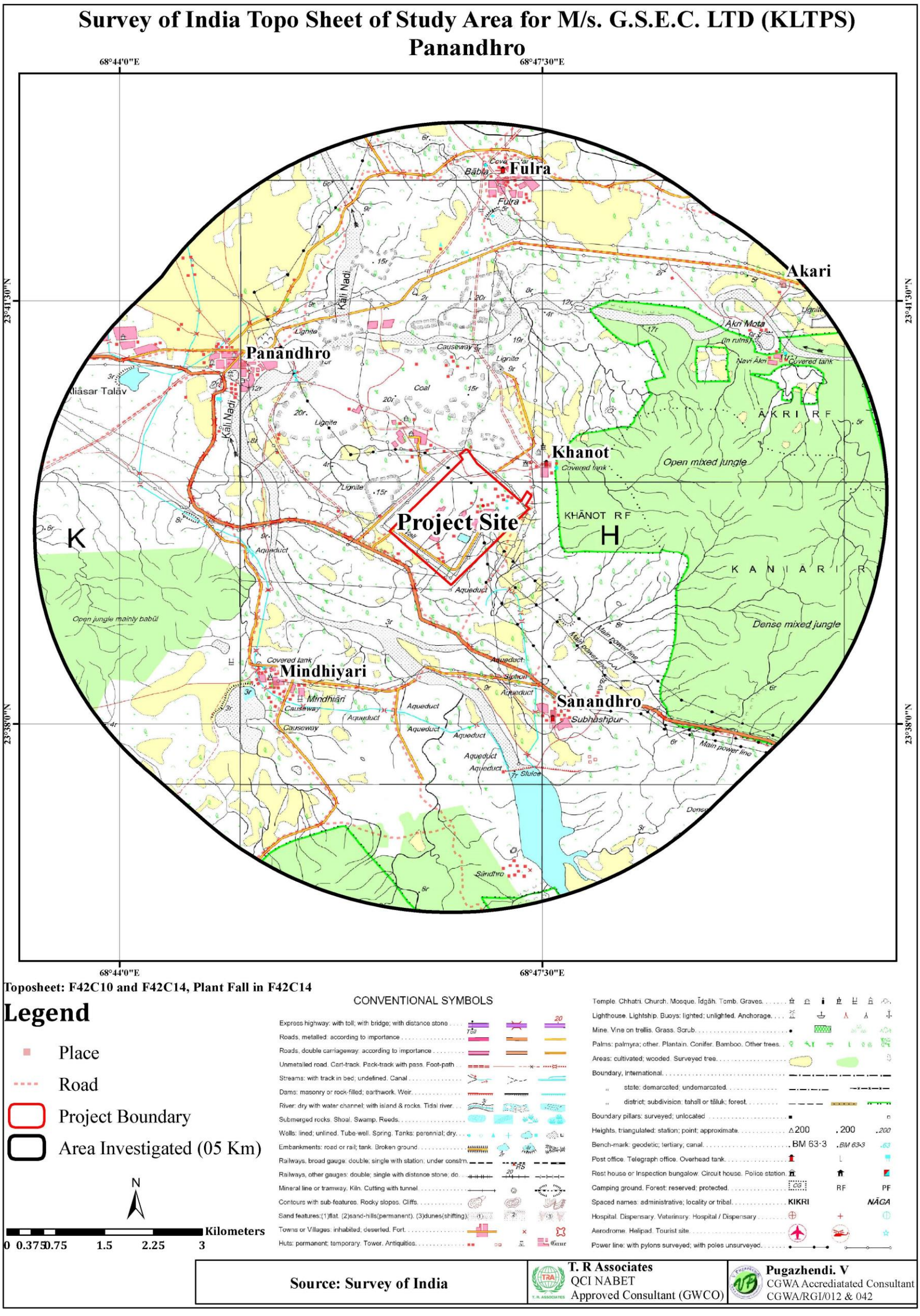


Plate 3: Survey of India Topo map

Plate 4: Plant Layout Plan

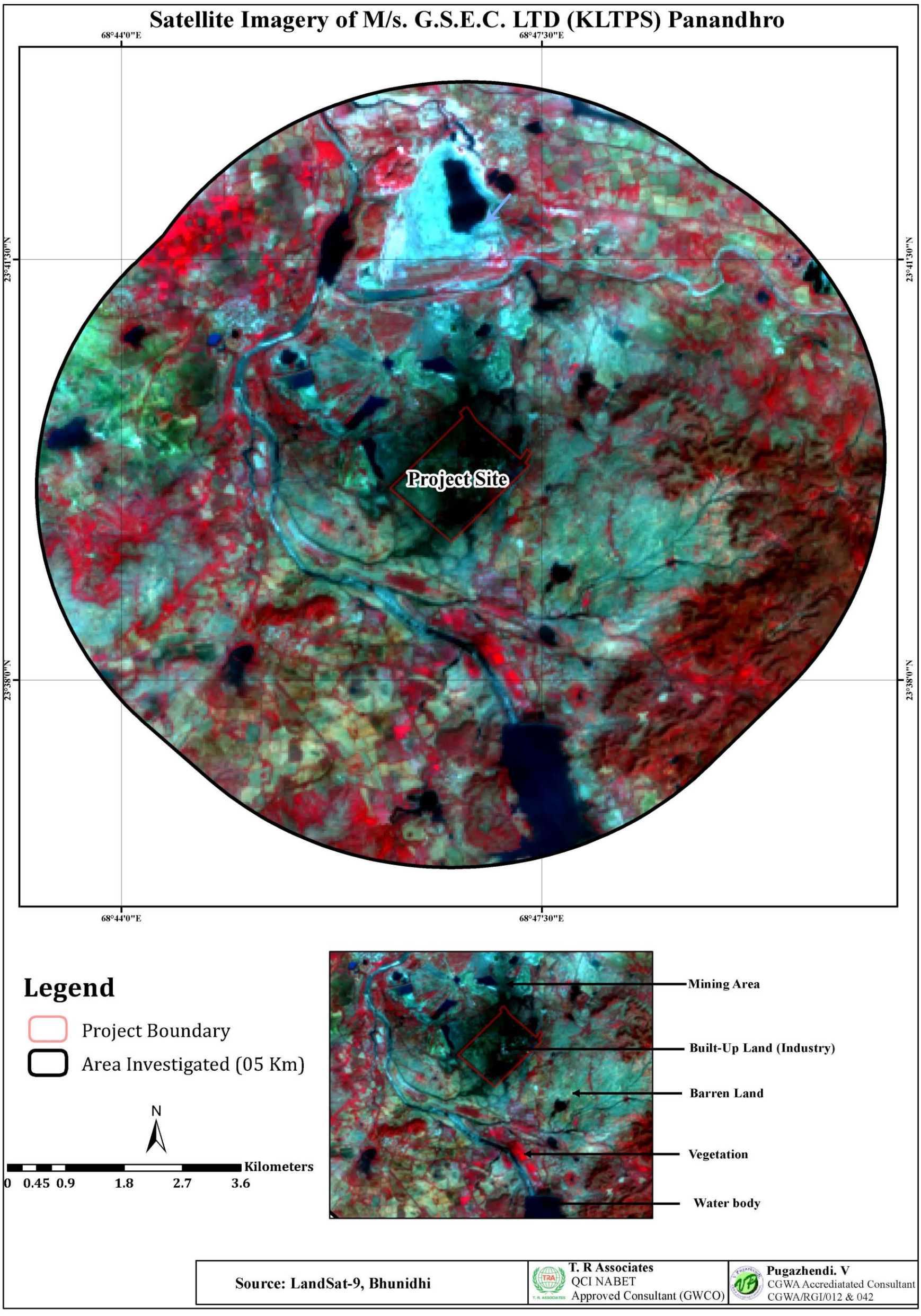


Plate 5: Satellite Imagery

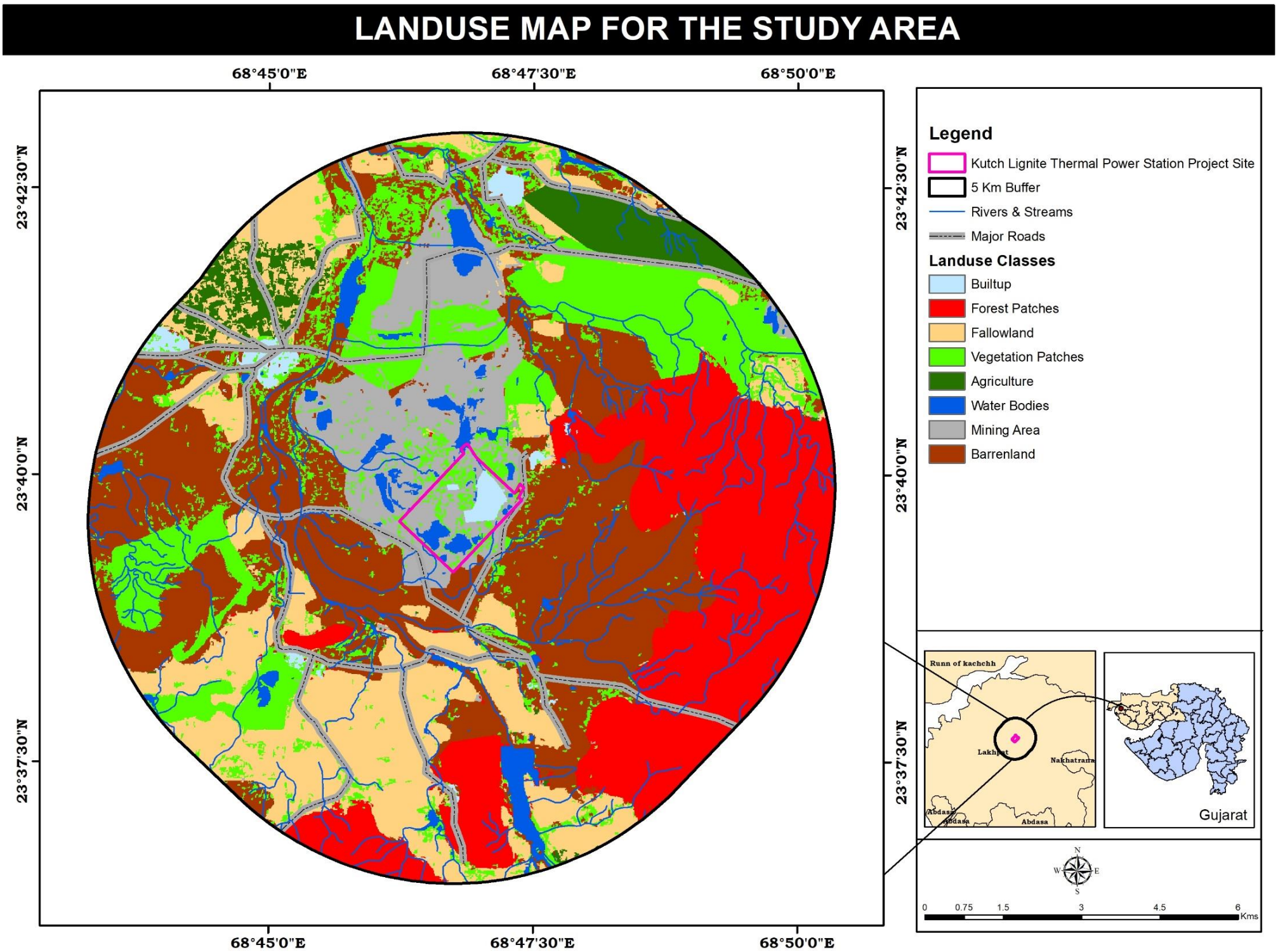


Plate 6: Land use Classification

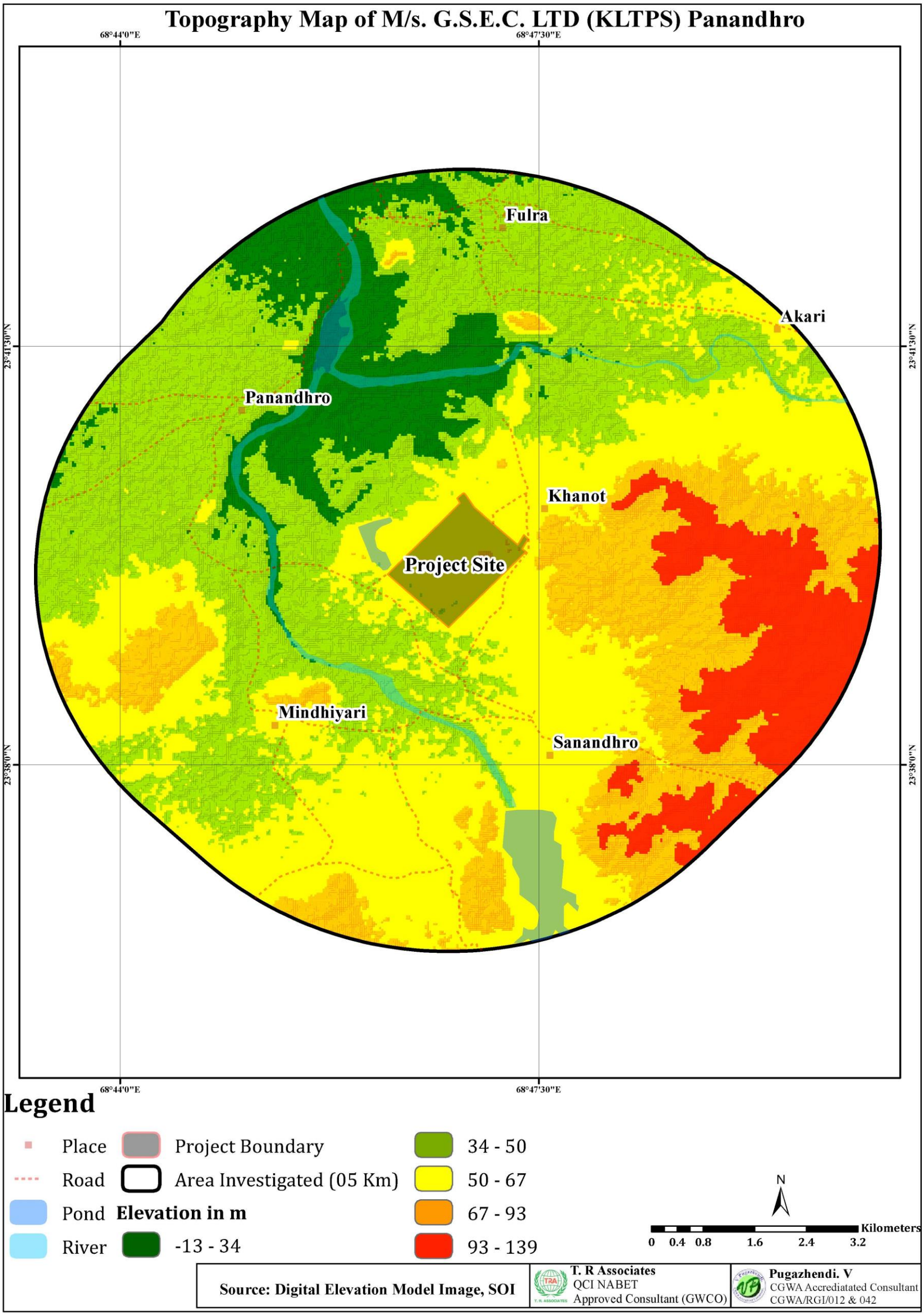


Plate 7: Topography of the Study area

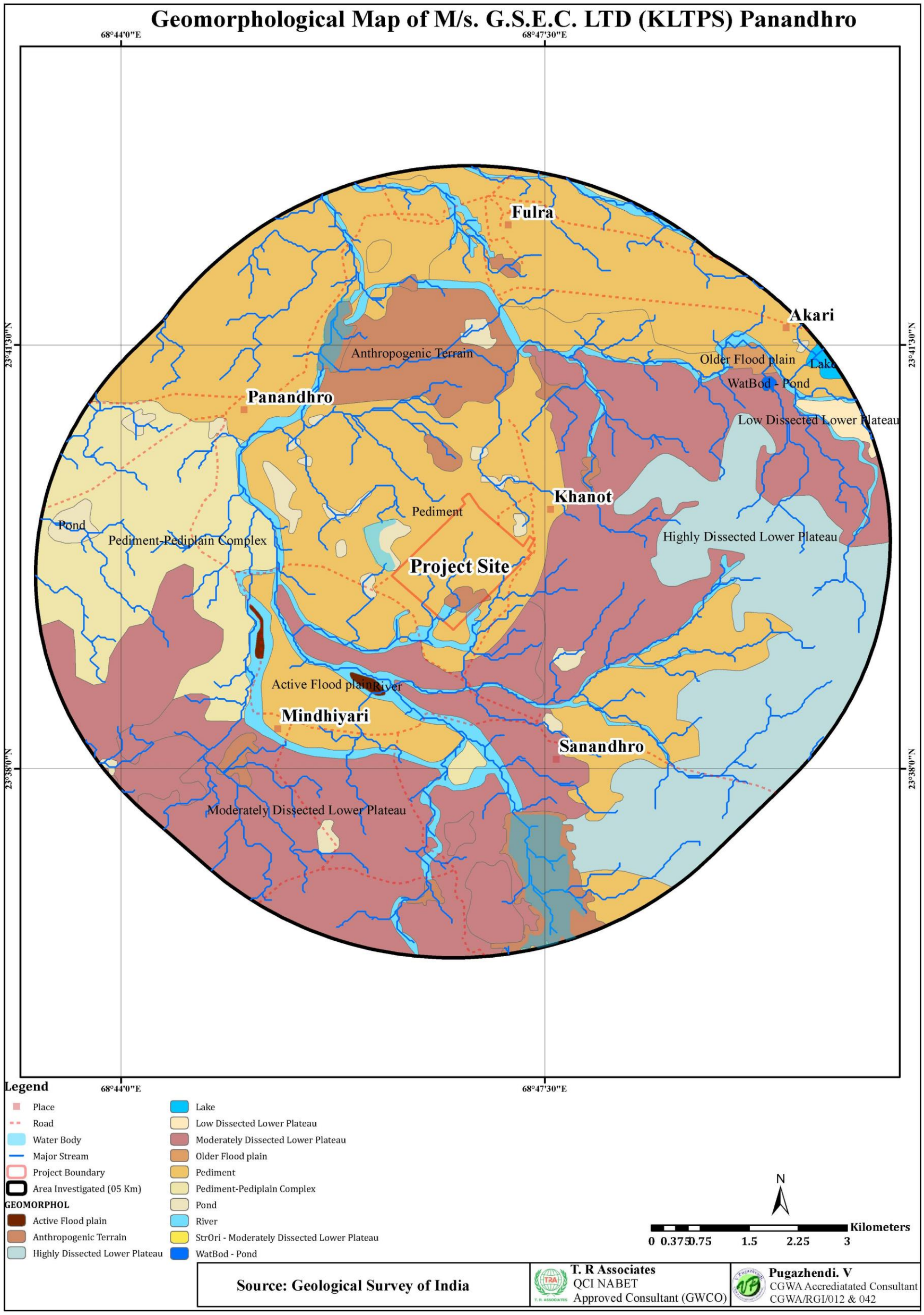


Plate 8: Geomorphology

Plate 9: Drainage and Water bodies and surface water flow vectors

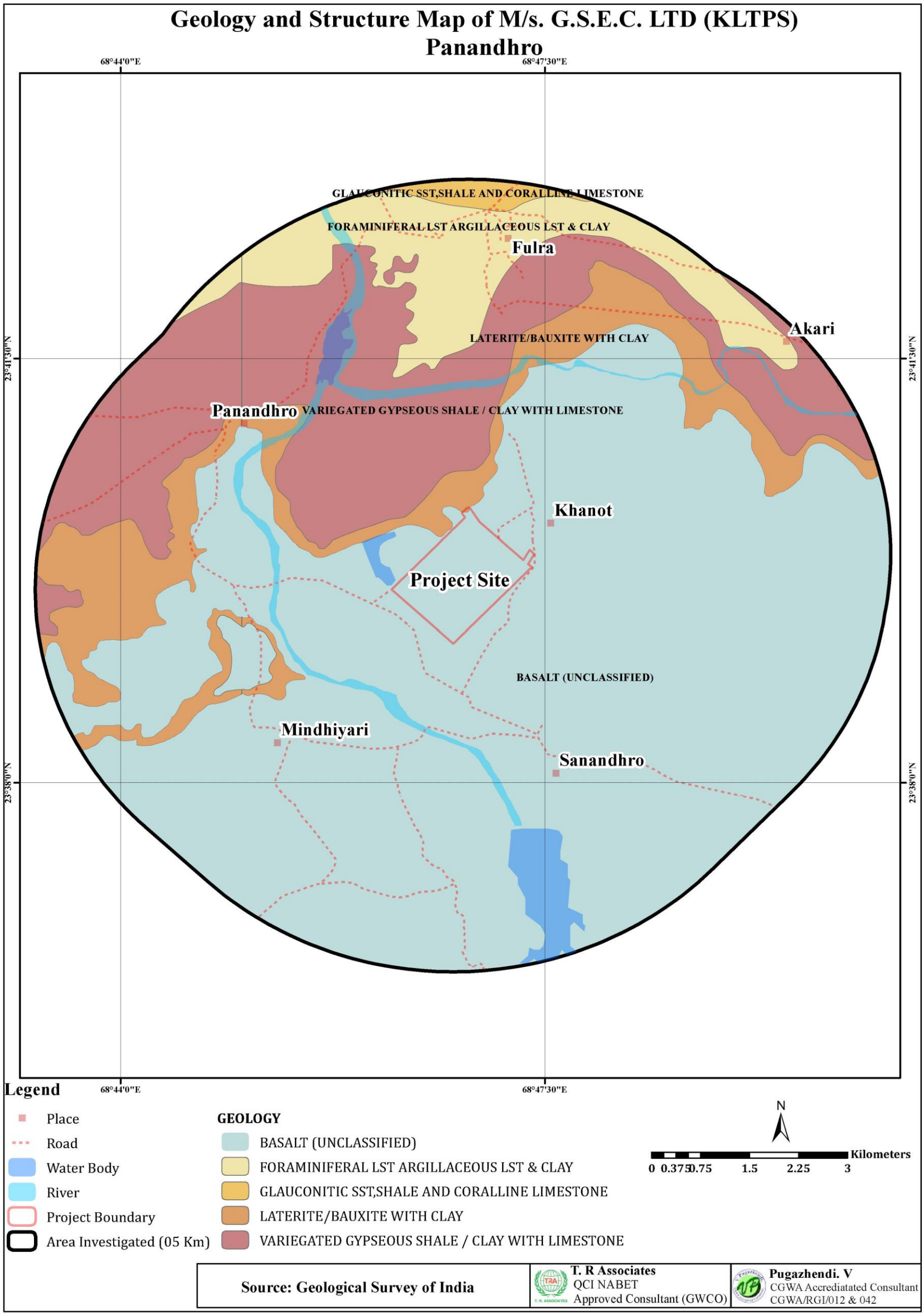


Plate 10: Geology and Structure

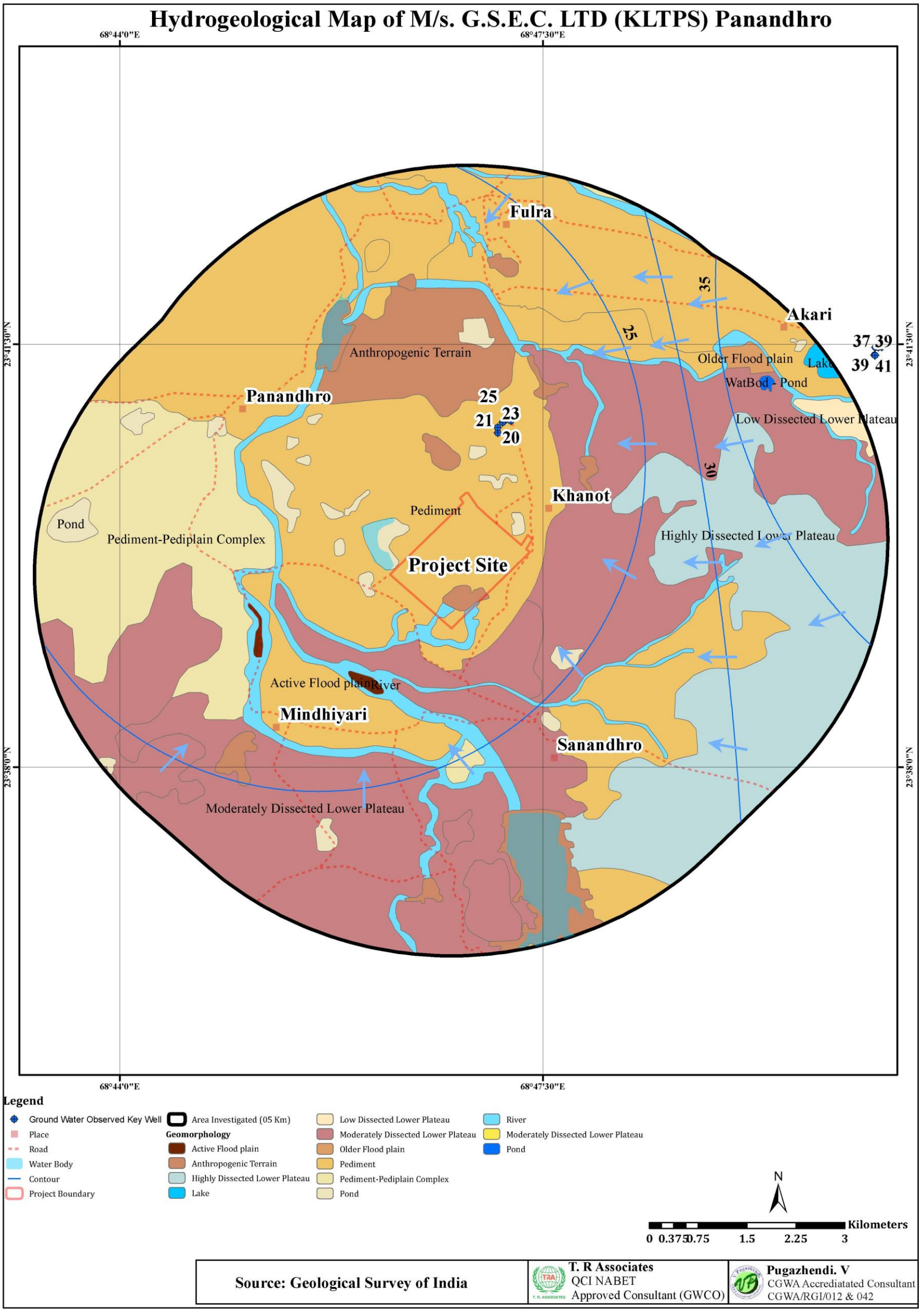


Plate 11: Ground Water Prospects

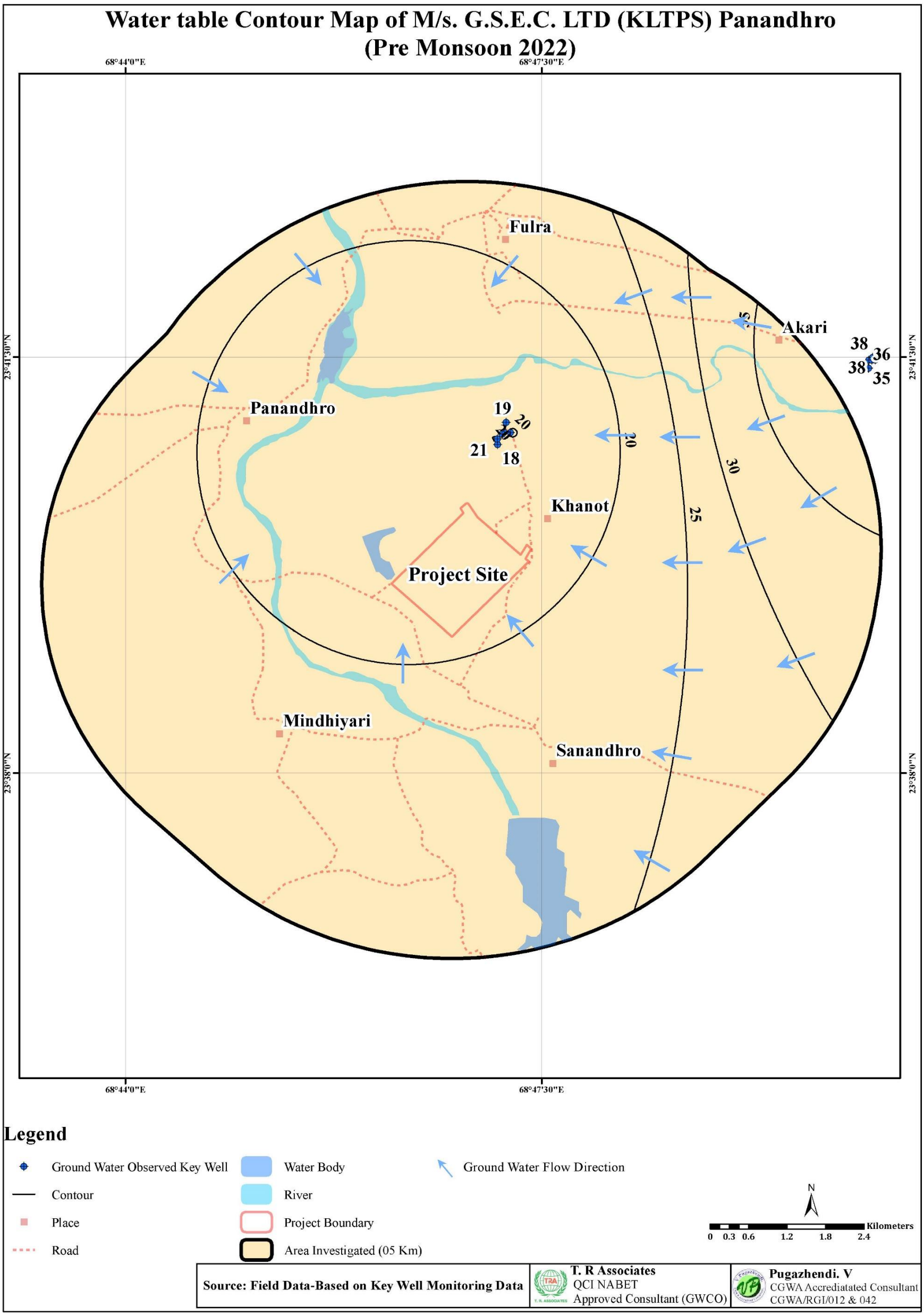


Plate 12: Ground water Table (Pre-Monsoon)

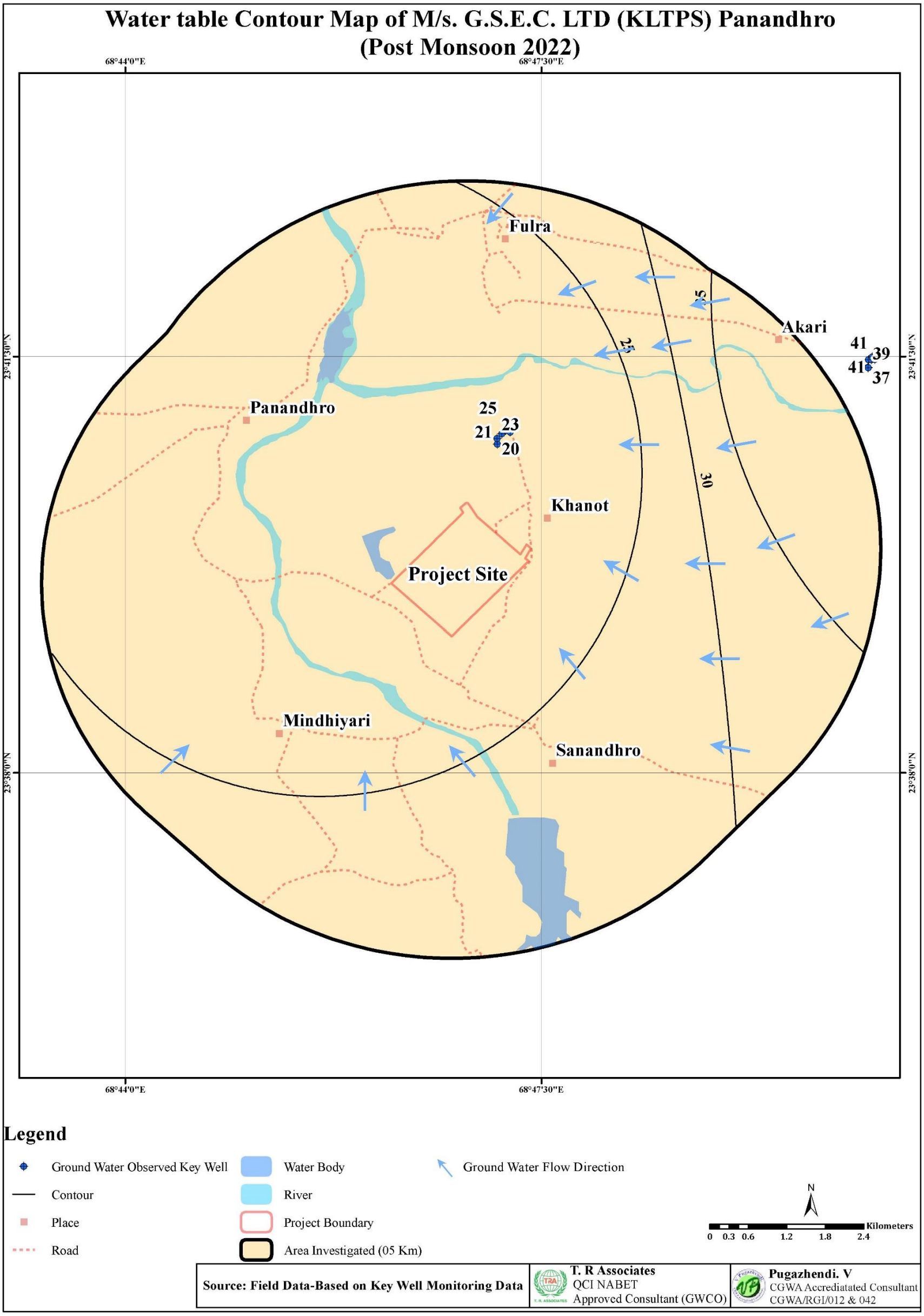


Plate 13: Ground water Table (Post-Monsoon)

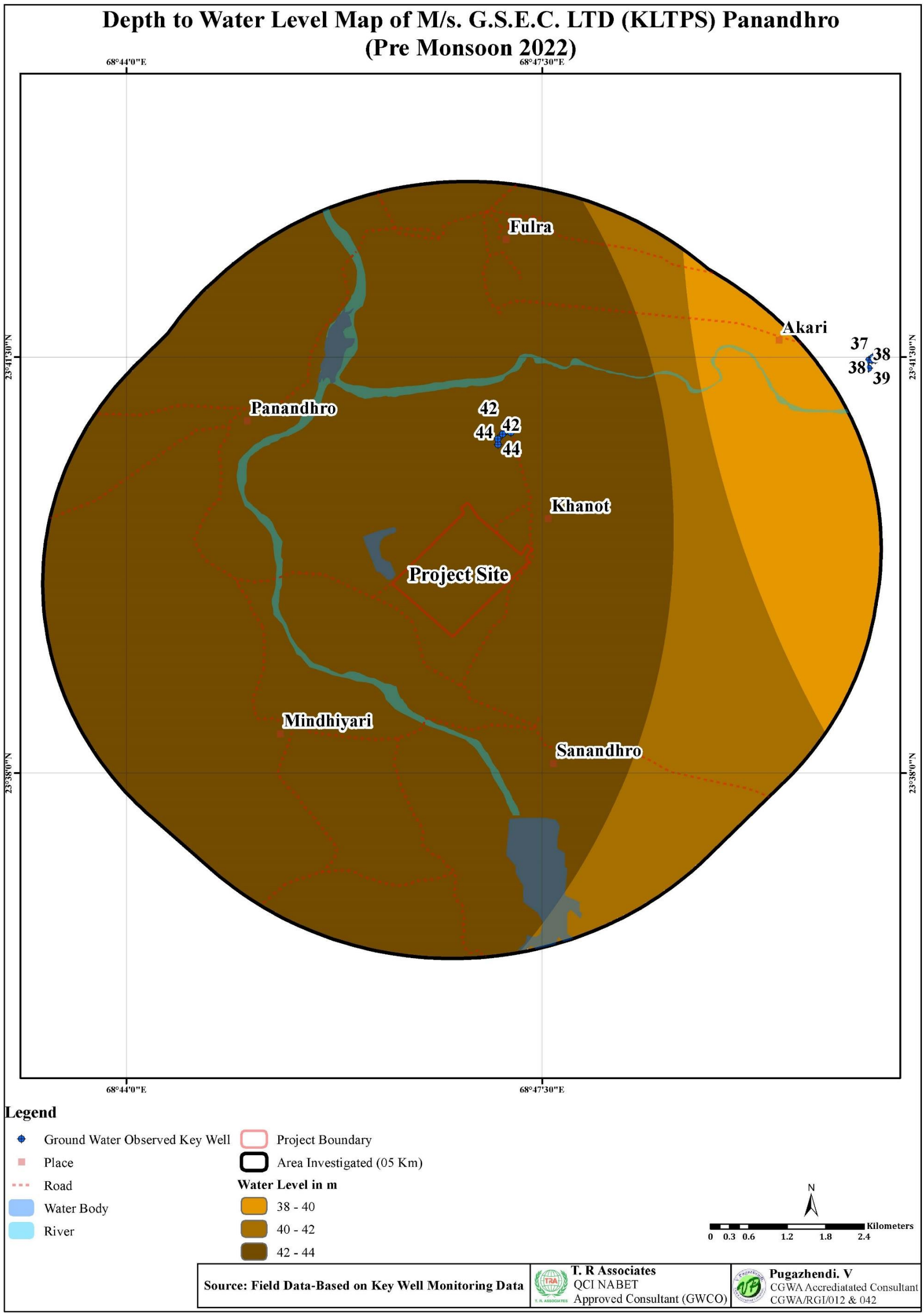


Plate 14: Ground water level zone (Pre-Monsoon)

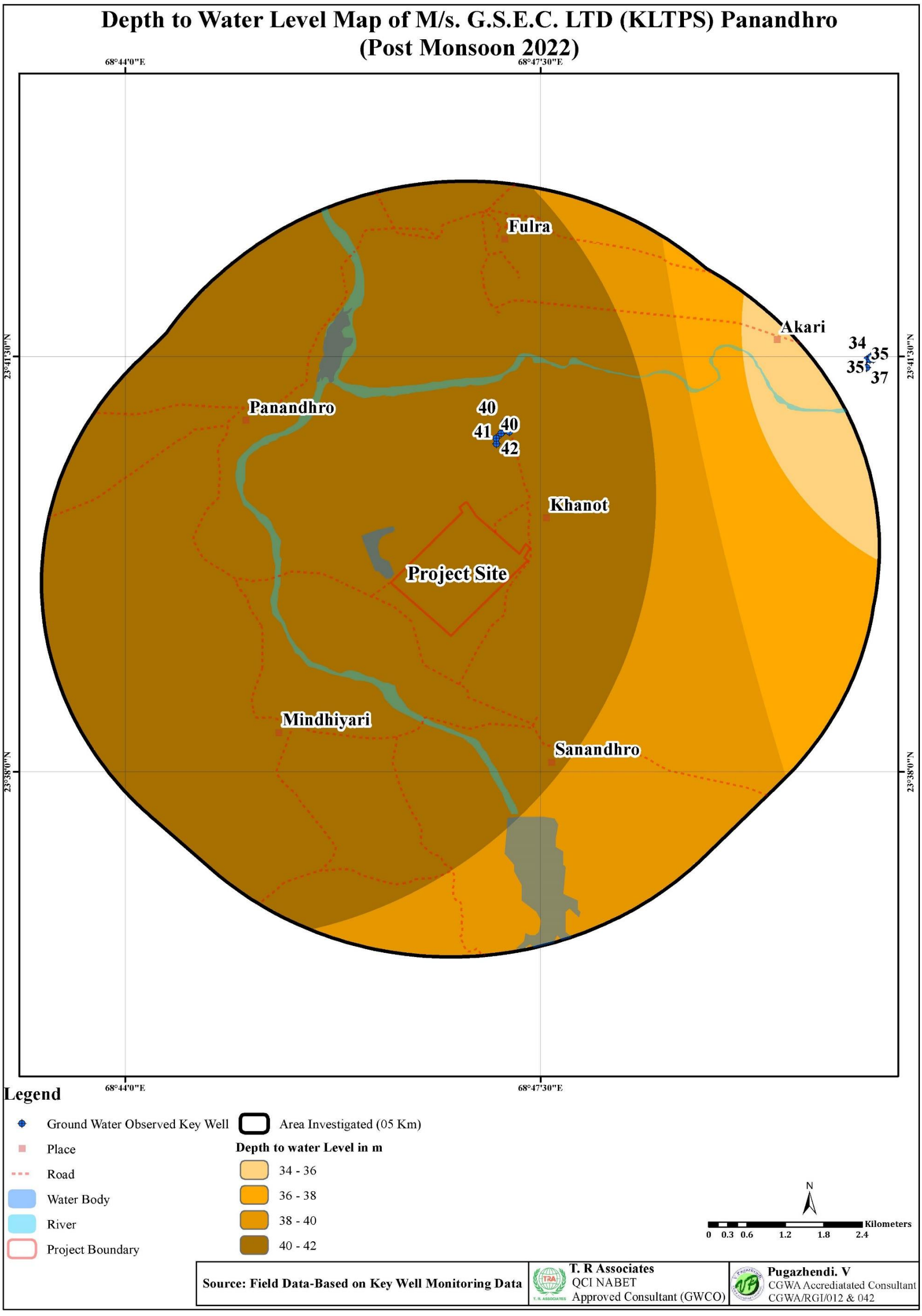


Plate 15: Ground water level zone (Post-Monsoon)

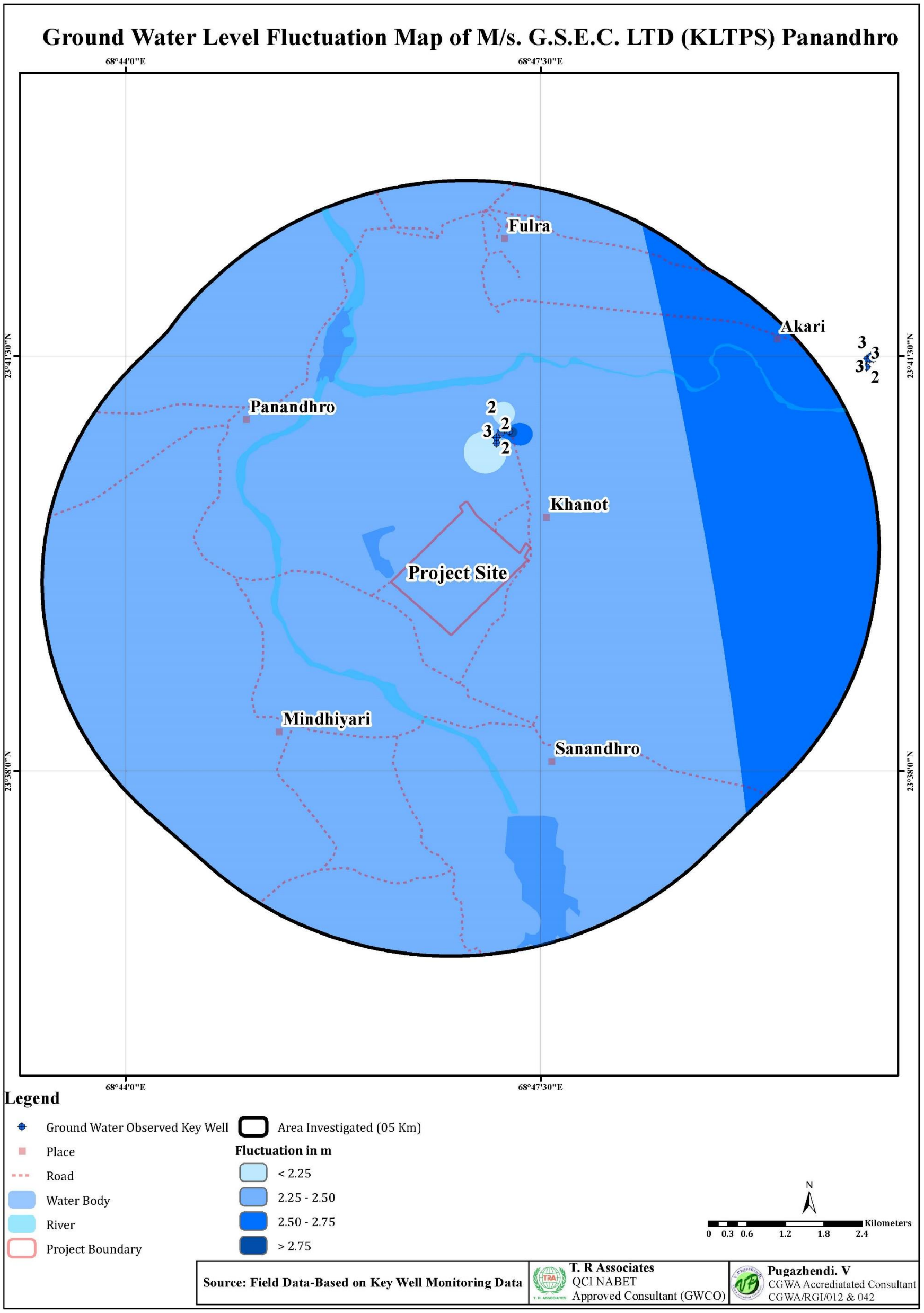


Plate 16: Ground water level fluctuation

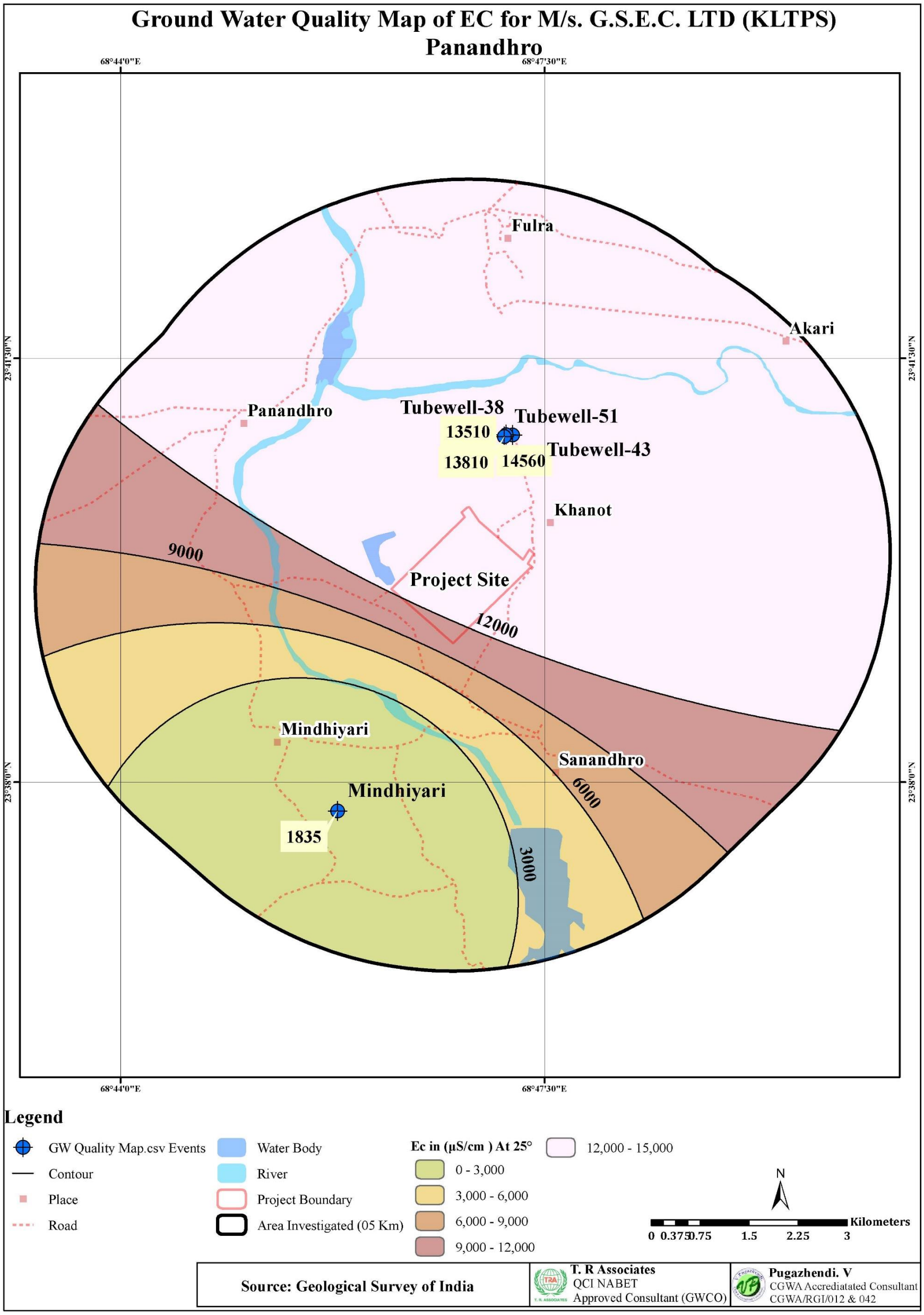


Plate 17: Spatial Distribution of EC concentration in Ground water

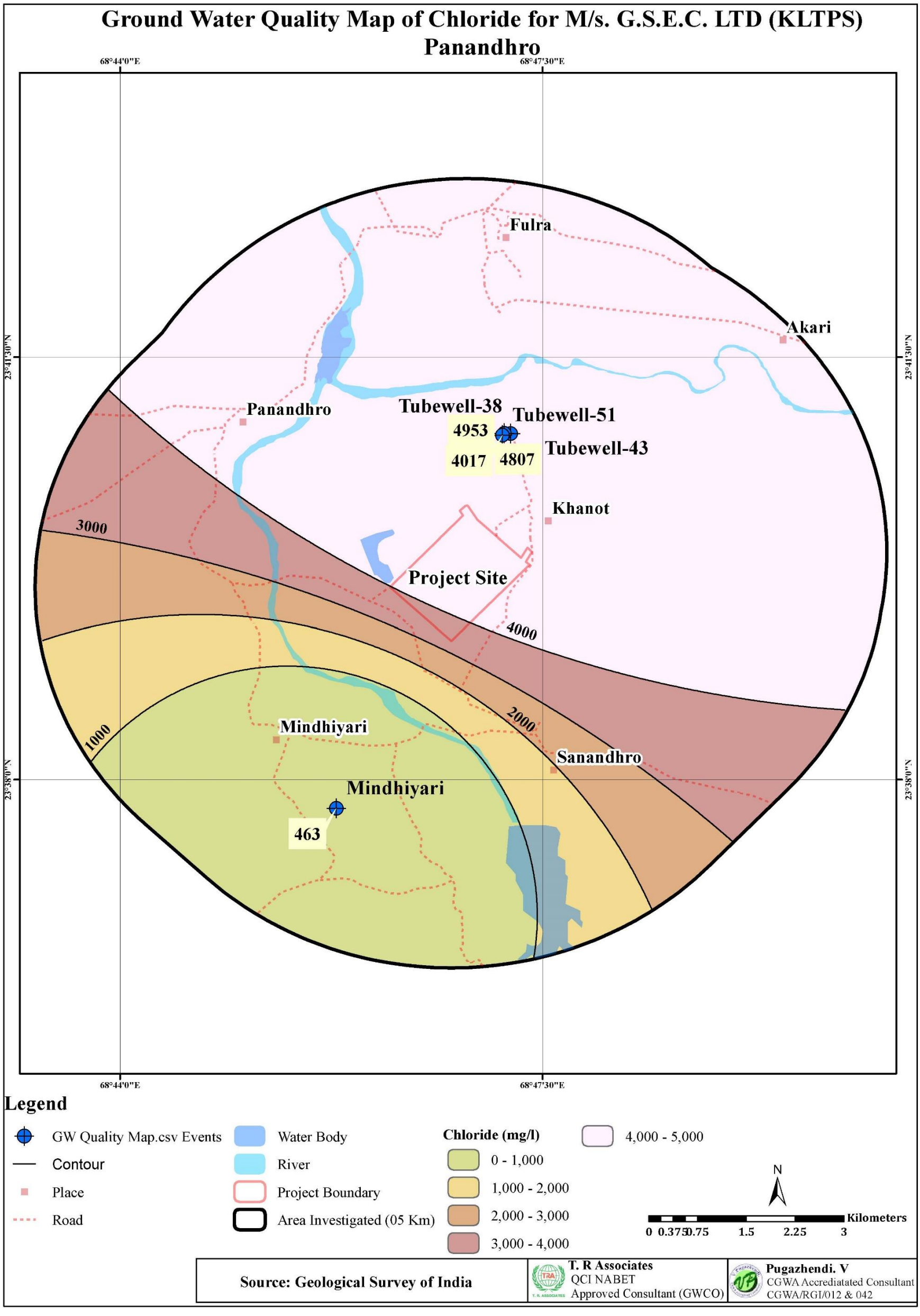


Plate 18: Spatial Distribution of Chloride concentration in Ground water

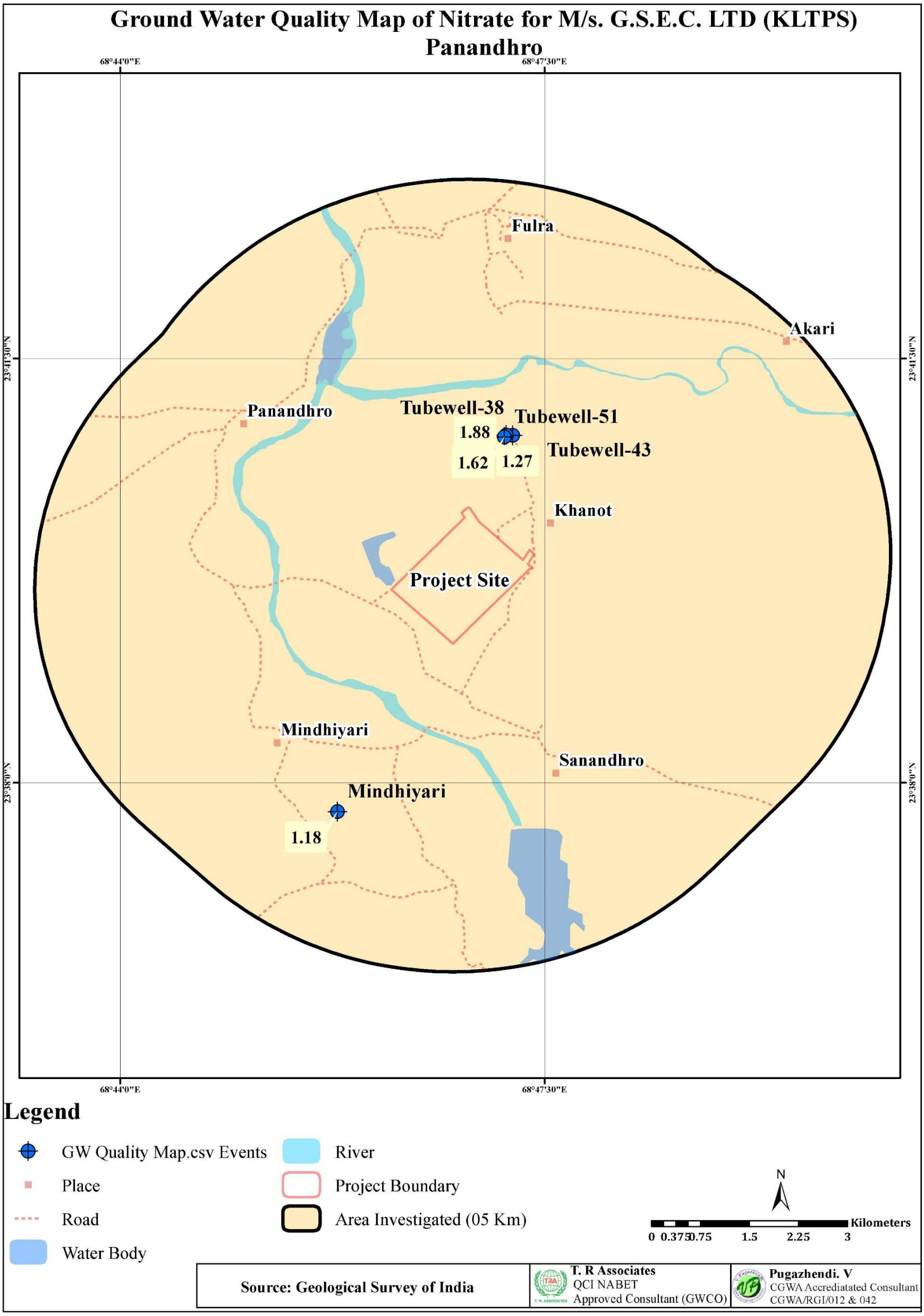


Plate 19: Nitrate concentration in Ground water

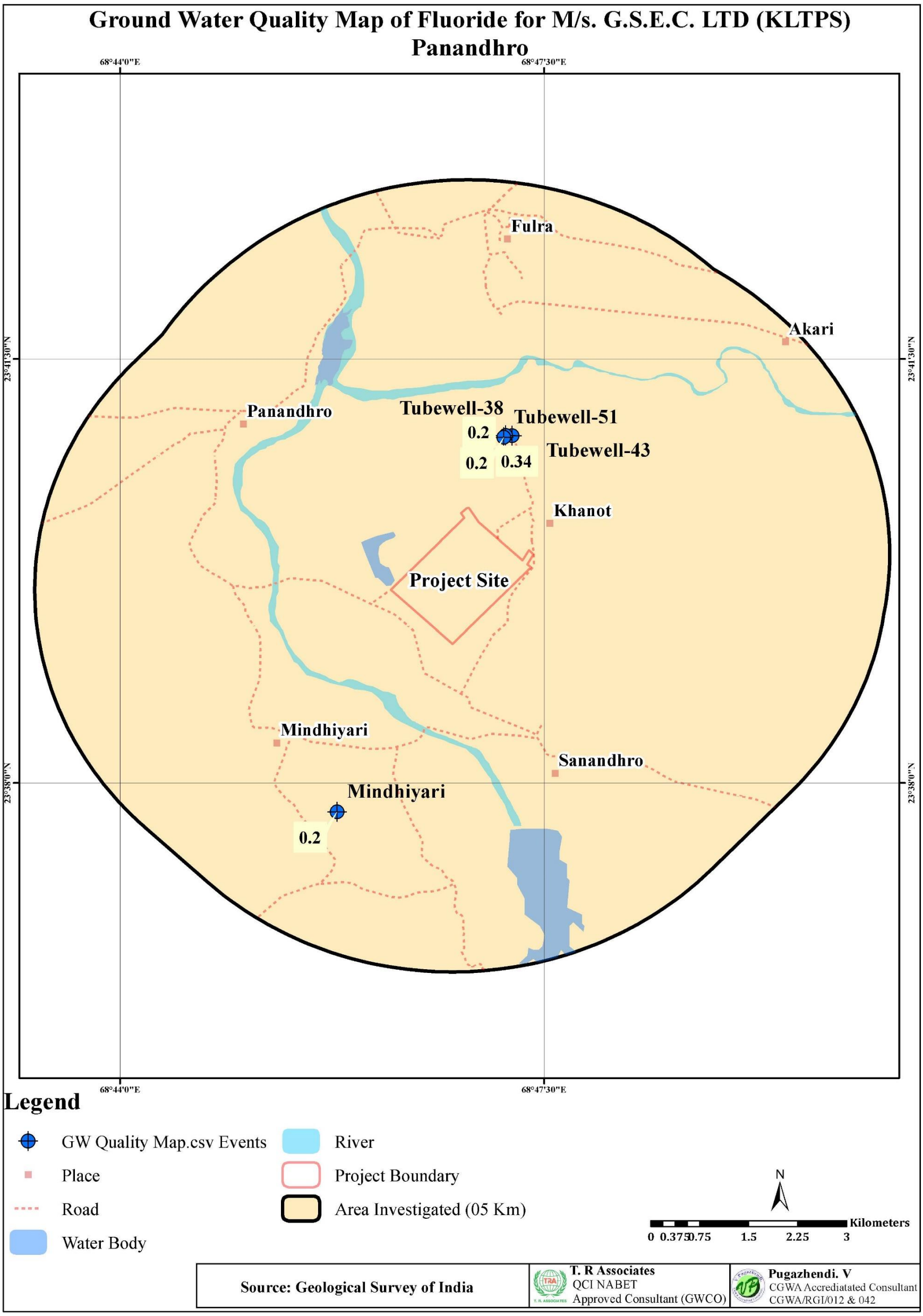


Plate 20: Fluoride concentration in Ground water

Annexure 1: GMDC NOC Letter

R-3/1

GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED
(A Government of Gujarat Enterprise)
Lignite Project, Panandhro, Tal: Lakhpat, Dist:Kutch, Pin- 370 601
Mail id:panadhro@gmdcltd.com
Ph. (02839) 294429, 294432, 294221, Fax: 02839-294428

GMDC/LG/ENV/ 977 /2017-18 DTD: 22.06.2017

INWARD No 42443 27 JUN 2017

To
Chief Engineer(Gen)
GSECL
KLTPS
Panandhro(Kutch)

Sub: NOC to KLTPS Panandhro to permit consent to drill additional bore wells in GMDC mines area.

Ref: (1) KLTPS letter vide GSECL/KLTPS/CEG/3980 DTD.18.06.2017
(2) Approval Note: GMDC/ENV/64/2017-18 dtd.20.06.2017

Dear sir
We hereby issue consent to GSECL, KLTPS Panandhro for operation of existing bore wells at our premises as well as to drill additional wells if required subject to the following conditions.

1. KLTPS will take NOC from Central ground Water Authority (CGWA) for the extraction of ground water from already existing bore wells in GMDC mine area.
2. KLTPS will take NOC from Central ground Water Authority for additional proposed new bore wells if required for the extraction of ground water before the initiation of drilling work.
3. Locations for drilling of new bore wells within the GMDC mine area has to be selected mutually by GMDC and KLTPS.
4. Drilling, Construction, Operations as well as maintenance etc. of these bore wells shall be the responsibility of KLTPS as well as KLTPS will also provide water from these bore wells to GMDC for his use as per mutual understanding and requirements.
5. KLTPS will have to submit undertaking that if any legal liabilities/requirements occur due to extraction and operation of existing as well as new bore wells, KLTPS shall be fully responsible for the same.
6. KLTPS will follow all the rules and regulations of all the statutory bodies as well as GMDC.

This NOC under above condition is issued with reference to the approval of competent authority.

This is for kind information and necessary please.

Yours faithfully
For GMDC Ltd.

22/06/2017
General Manager(Project)

Cc to: Mines Manager, Panandhro./ HR Deptt Panandhro/Survey Deptt Panandhro.

Annexure 2: Copy of work order and Memorandum of Understanding with accredited ground water agency

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK Verma Nagar , Taluka Lakhpat, Dist Kutch - 370601
e-mail: cekltps.gsecl@gebmail.com Websitewww.gsecl.in CIN: U40100GJ1993SGC019988

By R.P.A.D.
No: KLTPS/TECH/LOI-106822/Effi/WE-46/2021-22/ 1296 Date: 08 APR 2022
E-Urja PO No:106822

To,
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.

Letter of Intent

Sub: LOI for Work of preparation of area impact assessment report along with modeling study for ground water withdrawal from existing borewells as per Format & guideline of CGWA(Central Ground Water Authority)

Ref.: 1) This office Tender No: KLTPS-16/2021-22/3491, Dated: 28.08.2021, WE-46
2) Your quotation No. Nil: Tech bid opened on Dtd:30.09.2021; Price bid opened on Dtd:08.03.2022

Dear Sir,

In context to above subject and references, GSECL-KLTPS is pleased to accept your offer for the subject work as per the terms and conditions mentioned in the subject tender.

Based on your offer, the total work order value of the work will be_____ **Including GST** The price quoted by you as above shall remain firm throughout the contract period and no price escalation shall be admissible, if otherwise mentioned in order.

You shall have to pay % of the order value as SECURITY DEPOSIT which will be **Rs.**_____by Demand Draft in favor of "Gujarat State Electricity Corporation Limited", payable at Bank of Baroda, SKV Nagar, Panandhro branch OR through **RTGS/NEFT within 10 days from the date of LOI and attend this office within 30 Days from the receipt of this letter of intent to sign the contract failing which your tender will be rejected and EMD will be forfeited.**

Alternatively you may pay the entire Security Deposit in the form of Bank Guarantee (For amount Rs. and above only) of any Nationalized Bank or A-class schedule bank as per RBI guideline except co-operative Banks. **The validity of bank Guarantee should cover a period of validity of work order plus one month.**

Time Limit: The time limit for completion of this contract works, if awarded, is 12 (Twelve) months from date of commencement. However the contract will be extended as per GSECL's rules

The detailed work order with all terms & conditions, as per the KLTPS tender documents will be issued to you on receipt of required Security Deposit. This letter of intent is issued to enable you to make necessary arrangement for payment of Security Deposit and mobilizing your resources for subject work after receipt of commencement letter. This is without any prejudice to the GSECL rights in terms of this contract.

Bank account details of GSECL KLTPS are as under:
Name of bank:
IFSC Code :
Account NO :
Kindly provide paid receipt details on email ID invariably:
coakltps.gsecl@gebmail.com & srastact5kltps.gsecl@gebmail.com

Thanking You.

Encl:
(1) Format of Bank guaranty
(2) Performa of Agreement
(3) Performa of Indemnity bond

For & on Behalf of GSECL
8/4/22
Chief Engineer (G)
KLTPS, GSECL

MEMORANDUM OF UNDERSTANDING (MoU)

This agreement was made on 01st January 2022, by and between

T. R. ASSOCIATES (TRA)

Located at A-401, S G Business hub, Between Sola Bhagwat and Gota Overbridge, Sarkhej - Gandhinagar Hwy, Ahmedabad, Gujarat 380060, Represented by Mr. T.R. Patel - Proprietor

And

MR. PUGAZHENDI VAIDYALINGAM

Located at A6 Balaji Arcade, 140 Arcot Road, Virugambakkam, Chennai – 92

T. R. Associates hereafter referred as TRA was originally established in year 2006 by Director Mr. T. R. Patel; as an Environmental Consultancy firm. TRA is in the field of preparation of environmental impact assessment reports, since 2009 and serving laboratory service under NABL accreditation since 2014. Moreover, T.R. Associates is QCI NABET Approved consultancy (GWCO) for preparation of hydrogeological impact assessment report.

Mr. Pugazhendi Vaidyalingam is associated with T.R Associates for preparation of impact assessment report (as per CGWA guidelines i.e. with and without modelling studies) and Comprehensives Hydrogeological Report preparation (as per CGWA guidelines i.e. with and without modelling studies)

SCOPE AND The purpose of this MEMORANDUM OF UNDERSTANDING (MoU) is to do Subcontracting by jointly outlining the process, tasks and timeframe to use **Mr. Pugazhendi Vaidyalingam** resources for preparation of Impact Assessment Report with and without ground water modelling as well as Comprehensives Hydrogeological Report as per CGWA guidelines i.e. with and without modelling studies.

Under this MEMORANDUM OF UNDERSTANDING; **Mr. Pugazhendi Vaidyalingam** intends to provide following,

Scope and Commitments of Mr. Pugazhendi Vaidyalingam:

A. Mr. Pugazhendi Vaidyalingam shall provide consultancy services for preparing Impact Assessment Report preparation with and without modelling studies (as per CGWA guidelines) within stipulated time period as mention in work order.

B. Comprehensives Hydrogeological Report preparation with and without modelling studies (as per CGWA guidelines) within stipulated time period as mention in work order.

C. Ground Water modelling including conceptualization, data collection, calibration & validation, hypothesis preparation and conclusion will be provided as per CGWA guidelines.

D. Answer of Queries raised by the concern authority in Impact Assessment Report and modelling studies.

E. Site visit (with TRA representative)

F. Primary field monitoring (Well inventory, Resistivity survey, Remote sensing study, Water quality monitoring etc. as per project requirements; As per the Scope finalization during taking up any project.)

G. Secondary data collection and validation of primary data as well as required for Modelling studies.

H. Presentation in front of Expert Committee (in presence of TRA representative and Project Proponent)

Commitments of T.R. Associates:

A. Work order of the project will be provided in the name of T.R. Associates.

B. T.R. Associates will give relevant projects to Mr. Pugazhendi Vaidyalingam.

C. CGWA application preparation, upload and answer to the queries raised by the concern authority.

D. Correspondence with project proponent will be done by T.R. Associates.

E. Laboratory Analysis report (as per T.R. Associates NABL accredited laboratory scope)

F. All payments will be made through bank

Financial Terms and conditions:

A. T.R. Associates will be paying Mr. Pugazhendi Vaidyalingam on project-to-project basis as per mutual understanding during validity of this agreement.

B. To & Fro Accommodation will be provided by T.R. Associates.

C. M/s. T.R. Associates will give payment 40% in advance for preparation of Impact Assessment Report with modelling studies

D. M/s. T.R. Associates will give payment of 40% before Submission of Impact Assessment Report preparation with modelling studies to concern authority

E. M/s. T.R. Associates will give payment of 20% after getting NOC from CGWA

Page No. 2 of 3

MISCELLLANEOUS:

a. The details for the efficacious implementation of this MEMORANDUM OF UNDERSTANDING shall be jointly worked out on mutually acceptable terms of both the organizations.

b. The parties to this MEMORANDUM OF UNDERSTANDING may, by mutual consent, add modify, amend, delete, review or revise any term(s) and condition(s) of this agreement with due permission from both side.

c. The MEMORANDUM OF UNDERSTANDING shall remain in force for a period of **"Two year"** from the date of its signature and seal, and may be terminated by either side by giving a six months' notice to that effect in writing. However, notwithstanding the notice of the intent to terminate the MEMORANDUM OF UNDERSTANDING, all rights, obligations and corresponding duties and subsisting therein shall be respected and mandated till the finalization and accomplishment thereof.

d. The parties to this MEMORANDUM OF UNDERSTANDING undertake to treat as CONFIDENTIAL AND PRIVILEGED information of the other institution, which is so classified in advance.

The terms of confidentiality and mode of disclosure shall be as per mutually acceptable terms.

Agreed and Sign there under:

For T.R. Associates, Ahmedabad	For Mr. Pugazhendi Vaidyalingam
Sign : Mr. T.R. Patel	Sign: Mr. Mr. Pugazhendi Vaidyalingam
Organization Seal	Organization Seal

T.R. ASSOCIATES AHMEDABAD

V. PUGAZHENDI, M.Sc., M.Phil., PGDCA, (Ph.D)
CGWA ACCREDITED GROUND WATER PROFESSIONAL,
A5- Balajr Arcade, 140 Arcot Road,
Virugambakkam, Chennai-600 092, Tamil Nadu.
Cell: 9443192134 / E-mail: vp.gal60@gmail.com

Annexure 3: Copy of Consent to Establish

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

By R.P.A.D.

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution)-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management & Transboundary Movement) Rules-2016, framed under the Environmental (Protection) Act1986.The board has granted the consent order no.AWH-60261vide letter no. PC/CCA-KUTCH-79(5)/GPCB ID–17838/204297 Date: 13/02/2014.

And whereas Board has received application inward No. **138449** dated 24/05/2018 for the **Renewal Consolidated Consent and Authorization** (CC&A) of this Board under the provisions / rules of the aforesaid Acts. Consents & Authorization are hereby granted as under:

CONSENTS AND AUTHORISATION:
(Under the provisions /rules of the aforesaid environmental acts)

To
G.S.E.C. Ltd (KLTPS) Panandhro,
Plot No: 236P, 255P,
Kutch Lignite Thermal Power Station,
Pandandhro,
Tal: Lakhpat,
Dist: Kutch-370601

1. Consent Order No. **AWH-94499**, Date of Issue: 13/07/2018.
2. The consent shall be valid up to **25/07/2023** for producing electricity:

Sr. No.	Product	Capacity Per Year
1.	Electricity	
	Unit I	70 MW
	Unit II	70 MW
	Unit III	75 MW
	Unit IV	75 MW

SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS:

1. You shall comply with all conditions stipulated in Environment Clearance vide letter no. J013012/6/2002. IA-II(T), dated 20/01/2005.
2. No ground water shall be withdrawn without obtaining prior permission from competent authority.

3. You shall operate centralize dusting facility and cover conveyor belts to control fugitive emission in the premises as well as surrounding area.
4. You shall comply with Fly Ash Notification and amendments from time to time.
5. You shall have to comply with all the conditions mentioned in the coal handling guideline.
6. Online Monitoring system shall be provided.
7. The regular maintenance of valve, pump, and other machinery shall carry out control and minimized the fugitive emission.

3. <u>CONDITIONS UNDER WATER ACT 1974:</u>

3.1 The quantity of industrial effluent generated from manufacturing process and other ancillary industrial operations shall be 16809 KL/day.

3.2 The final treated effluent shall be recycled and reused in the process and shall be utilized in the dust suppression and sprinkling purpose to minimize dusting.

3.3 The quantity of domestic waste water (Sewage) shall not exceed 72 KL/day.

3.4 The quality of the sewage shall dispose through septic tank / soak pit.

4. <u>CONDITIONS UNDER AIR ACT 1981:</u>

4.1 The following shall be used as fuel in the Boiler as following rates.

Sr. No.	Name of Fuel	Quantity per Month
1.	Lignite	224800 MT
2.	FO/LDO	500 MT
3.	Lime (for Unit IV having CFBC technique)	1800 MT

4.2 The applicant shall install & operate air pollution control system in order to achieve flue gas emission norms as prescribed below.

Sr. No.	Stack attached to	Stack height in Meters	APCM	Parameter	Permissible limit
1.	Boiler (Unit I)	230 (Common Stack)	Electro Static Precipitator	PM SO_2 NOx	150 mg/Nm^3 600 mg/Nm^3 600 mg/Nm^3
2.	Boiler (Unit II)		Electro Static Precipitator		

GPCB

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(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

Sr. No.	Stack attached to	Stack height in Meters	APCM	Parameter	Permissible limit
3.	Boiler(Unit III)	190	Electro Static Precipitator	PM SO_2 NOx	150 mg/Nm^3 600 mg/Nm^3 600 mg/Nm^3
4.	Boiler(Unit IV)	190	Electro Static Precipitator		

4.3 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder as per National Ambient Air Quality Standards issued by Ministry of Environment and Forest dated 16th November-2009.

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient air in µg/m^3
1.	Sulphur Dioxide (SO_2)	Annual 24 Hours	50 80
2.	Nitrogen Dioxide (NO_2)	Annual 24 Hours	40 80
3.	Particulate Matter (Size less than 10 µm) OR PM_{10}	Annual 24 Hours	60 100
4.	Particulate Matter (Size less than 2.5 µm) OR $PM_{2.5}$	Annual 24 Hours	40 60

4.4 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.

4.5 The concentration of Noise in ambient air within the premises of industrial unit shall not exceed following levels:

Between 6 A.M. to 10 P.M.: 75 dB (A)
Between 10 P.M. to 6 A.M.: 70 dB (A)

5. **Authorization under Hazardous and Other Waste [Management & Transboundary Movement] Rules, 2016 & amended.**

5.1 Authorization Number: AWH- 94499 and shall valid up to 25/07/2023.

5.2 G.S.E.C. Ltd (KLTPS)is hereby granted an authorization to operate facility for following hazardous wastes situated at Plot No: 236P, 255P, Kutch Lignite Thermal Power Station, Pandandhro, Tal: Lakhpat, Dist: Kutch-37060.

Sr. No.	Waste	Quantity per Annum	Category	Facility
1.	Used Oil	30 MT	I-5.1	Collection, storage. Transportation and disposal by selling out to authorized recyclers.
2.	Discarded Containers	0.5 MT	I-33.1	Collection, storage, Transportation and disposal by Selling to authorized vendor.
3.	Spent Iron Exchange resin containing Toxic metal	10 MT	I-35.2	Collection,storage,Transportation and disposal by Sending to authorized common facility only.
4.	Waste residual containing Oil	0.2 MT	I-5.2	Collection,storage,Transportation and disposal by Sending to authorized common facility only
5.	Oil Containing Cargo Residual	0.05 MT	I-3.1	Collection.storage.Transportation and disposal by sending to authorized common facility only
6.	Insulated Copper Wire Scrap	5 MT	IV-7	Collection, storage, transportation and disposal by selling out to actual recyclers site processor
7.	Discarded Asbestos	0.5 MT	I-15.2	Collection, storage, transportation and disposal by sending to authorized common facility only

GPCB

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Website : www.gpcb.gov.in

5.3 The authorization is granted to operate a facility for collection, storage. within factory premises. transportation, and ultimate disposal of Hazardous wastes by selling out to registered recyclers, TSDF and Incineration facility.

5.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

5.5 **GENERAL CONDITIONS OF AUTHORIZATION:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act. 1986, and the rules made there under
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend. sell transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages. fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment Forest and Climate Change or Central Pollution Control Board from time to time
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year

7. GENERAL CONDITION:

7.1 Unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within premises, the unit shall tie up with local agencies like gram panchayat, school, social forestry office etc. for the plantation at suitable open land in nearby locality and submit an action plan of plantation for next three years to GPCB

7.2 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per acre of land and a green belt of **10** meters width is developed.

7.3 The applicant shall have to submit the returns in prescribed form regarding water consumption and shall have to make payment of water cess to the Board under the Water (Prevention and Control of Pollution) Cess Act- 1977.

7.4 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board

7.5 The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the Water (Prevention and Control of Pollution) Act-1974, the Air (Prevention and Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.

7.6 The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering control like acoustic insulation hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act 1986 & Rules.

7.7 Applicant is required to comply with the manufacturing. Storage and Import of Hazardous Chemicals Rules-1989 framed under the Environment (Protection) Act-1986

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, **Gandhinagar** 382 010
Phone : (079) 23222425
(079) 23232152
Fax : (079) 23232156
Website : www.gpcb.gov.in

7.8 If it is established by any competent authority that the damage is caused due to their industrial activities to any person or his property in that case they are obliged to pay the compensation as determined by the competent authority.

7.9 Applicant shall have to comply with all the guidelines / Directive issued / being issued by MoEF&CC / CPCB / DoEF from time to time.

7.10 Applicant shall not use/withdraw ground water either during construction and /or operation phase.

7.11 Environmental cell shall be setup and shall be responsible for the total Environmental management.

7.12 Monitoring in respect to Air, Water, Noise level shall be carried out and results shall be submitted to GPCB on quarterly basis.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(Sushil Vegda)
Senior Environment Engineer

NO: PC/ CCA- KUTCH- 79(9)/GPCB ID – 17838/ Date:

ISSUED TO:

G.S.E.C. Ltd (KLTPS) Panandhro,
Plot No: 236P, 255P,
Kutch Lignite Thermal Power Station,
Pandandhro,
Tal: Lakhpat,
Dist: Kutch-370601

Annexure 4: Ground water Quality report

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Survey No. 272/3, Opp. New Gujarat High Court, Behind Satyamev Complex, Near Car Box, S.G. Highway, Ahmedabad - 380060. Gujarat. | Mo. : +91 97241 49806, +91 96011 44196 | E : lab.trassociates@gmail.com

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T. R. ASSOCIATES LABORATORY

TC-7896

TEST REPORT

Report No: TRA- 10/0791GW01/22

Reporting Date: 12.10.2022

Company Name	G.S.E.C. Ltd (KLTPS) Panandhro	Sample Code & Sample Description	10/0791GW01/22
Address	Plot No: 236P, 255P, Kutch Lignite Thermal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.		Ground Water
		Nature of Sample	Water sample
		Quantity	1 L +1 L +500 ml+100ml
		Date of Sampling / Sampling Period	06.10.2022
Sample Received Date	07.10.2022	Sampling Method	IS-3025/APHA
Analysis Starts on	07.10.2022	Sample Drawn By	Bhargav Patel, Gaurang Patel, Vanraj
Analysis Completion On	12.10.2022	Environmental Condition During Testing	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	10/0791GW01/22 (Borewell No 38)	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.54	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.3	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (23rd Ed)2120 B	5	15
4.	EC	mS	14.56	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4807**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3	mg/L	1.27	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	0.34	APHA (23rd Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (23rd Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (23rd Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (23rd Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9904	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	228	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

# indicates these parameters are subcontracted to NABL/MoEF Laboratory.
NS= Not Specified, BDL=Below Detectable Limit, DL= Detectable Limit
**Indicate these limit is not covered in under NABL Scope

Analyzed By: Vaidehi Bhatt Sign: Designation: Environment Chemist	Authorized Signatory: Darshit Dave Sign: Designation: Technical Manager	Checked By: Malav Dalwadi Sign: Designation: Quality Manager

Terms & Conditions:

- Analysis is subjected to the conditions received at the laboratory
- Report cannot be used as evidence anywhere without prior permission of laboratory

END OF TEST REPORT

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T. R. ASSOCIATES LABORATORY

TC-7896

TEST REPORT

Report No: TRA- 10/0791GW02/22 **Reporting Date: 12.10.2022**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	10/0791GW02/22 Ground Water
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.	**Nature of Sample**	Water sample
		Quantity	1 L +1 L +500 ml+100ml
		Date of Sampling / Sampling Period	06.10.2022
Sample Received Date	07.10.2022	**Sampling Method**	IS-3025/APHA
Analysis Starts on	07.10.2022	**Sample Drawn By**	Bhargav Patel, Gaurang Patel, Vanraj
Analysis Completion On	12.10.2022	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	10/0791GW02/22 (Borewell No 42)	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.65	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.0	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (23rd Ed)2120 B	5	15
4.	EC	mS	13.51	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4953**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3	mg/L	1.88	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	B.D.L(DL=0.2)	APHA (23rd Ed)4500 F D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (23rd Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (23rd Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (23rd Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9188	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	140	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

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NS= Not Specified, BDL=Below Detectable Limit, DL= Detectable Limit
**Indicate these limit is not covered in under NABL Scope

Analyzed By: Vaidehi Bhatt Sign: Designation: Environment Chemist	Authorized Signatory: Parshit Dave Sign: Designation: Technical Manager	Checked By: Malay Dalwadi Sign: Designation: Quality Manager

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T. R. ASSOCIATES LABORATORY

TC-7896

TEST REPORT

Report No: TRA- 10/0791GW03/22 **Reporting Date: 12.10.2022**

Company Name	**G.S.E.C. Ltd (KLTPS) Panandhro**	**Sample Code & Sample Description**	10/0791GW03/22 Ground Water
Address	Plot No: 236P, 255P, Kutch Lignite Themal Power Station, Panandhro, Tal: Lakhpat, Dist: Kutch – 370601.	**Nature of Sample**	Water sample
		Quantity	1 L +1 L +500 ml+100ml
		Date of Sampling / Sampling Period	06.10.2022
Sample Received Date	07.10.2022	**Sampling Method**	IS-3025/APHA
Analysis Starts on	07.10.2022	**Sample Drawn By**	Bhargav Patel, Gaurang Patel, Vanraj
Analysis Completion On	12.10.2022	**Environmental Condition During Testing**	25±2°C
Condition During Sample receive	Satisfactory		
Reference to Sampling Plan	N.A.		

Sr. No.	Parameters	Unit	10/0791GW03/22 (Borewell No 51)	Testing Method	Acceptable Limits	Permissible Limits
1.	pH	-	6.68	IS 3025 (Part 11)	6.5-8.5	No Relaxation
2.	Temperature	°C	25.2	IS 3025 (Part 9)	--	--
3.	Colour	CU	B.D.L(DL=5)	APHA (23rd Ed)2120 B	5	15
4.	EC	mS	13.81	IS 3025 (Part 14)	--	--
5.	Chloride	mg/L	4017**	IS 3025 (Part 32)	250	1000
6.	Nitrate as NO_3	mg/L	1.62	IS 3025 (Part 34)	45	No Relaxation
7.	Fluoride as F	mg/L	B.D.L(DL=0.2)	APHA (23rd Ed)4500 F - D	1.0	1.5
8.	Phosphorus	mg/L	B.D.L(DL=1)	APHA (23rd Ed) 4500 P D	--	--
9.	Copper	mg/L	B.D.L(DL=0.5)	APHA (23rd Ed) 3500 Cu C	0.005	1.5
10.	Hexavalent Chromium	mg/L	B.D.L(DL=0.5)	IS 3025 (Part 52)	--	--
11.	Residual Chlorine	mg/L	B.D.L(DL=1)	APHA (23rd Ed) 4500 Cl B	0.2	1
12.	TDS	mg/L	9392	IS 3025 (Part 16)	500	2000
13.	TSS	mg/L	112	IS 3025 (Part 17)	--	--
14.	Oil & Grease	mg/L	B.D.L(DL=5)	IS 3025 (Part 39)	--	--

# indicates these parameters are subcontracted to NABL/MoEF Laboratory.
NS= Not Specified, BDL=Below Detectable Limit, DL= Detectable Limit
**Indicate these limit is not covered in under NABL Scope

Analyzed By: Krushna Mehta Sign: Designation: Environment Chemist	Authorized Signatory: Parshit Dave Sign: Designation: Technical Manager	Checked By: Malav Dalwadi Sign: Designation: Quality Manager

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Gujarat Laboratory
Since 1986

F-16,17, Madhavpura Market,
Shahibaug, Ahmedabad-380004
Ph. : 079-25626040, 25624821
Email : gujlab@gmail.com
gujlab.info@gmail.com
Web : www.gujaratlaboratory.com

TEST REPORT

Doc. No : GL/D/7.5/02

Report Issued To :	**T.R.Associates** Opp. New Gujarat High Cour,B/h Satymev Complex, Nr Sheetal Tyre,Lane-Royal Enfield, S.G.Highway, Sola,, Ahmedabad, Gujarat **Phone No :** 9825371099 **Email :** trassolab@yahoo.com	**Test Report No** **Date of Receipt** **Date of Issue** **Customer's Ref. No**	**: GL/03221010009/NS** : 10/10/2022 : 15/10/2022 : N.M

Sample Described as	**: Water.**		
Sample Qty	: 1 Ltr	**Mfg. Date**	: N.M.
Packing Mode	: Sample Packed in Plastic Bottle	**Exp. Date** **B.No**	: N.M. : N.M
Sample Condition	: Satisfactory		
Marking	: Location / Village Name : Borewell No.38, Type Of Water : Ground Water, Sample Bottle Code : GW1		
Sample Drawn By	: Customer		
Date of Starting of Test	: 10/10/2022	**Date of Completion**	: 15/10/2022

Sr No	Quality Characteristics	Result	Test Method
Biological Water			
1	Faecal Coliform Per 100 ml	Not Detected	IS:1622:1981

Note : NM = Not Mentioned

*** END OF REPORT ***

FOR, GUJARAT LABORATORY

Dhwani Patel
Autho. Signatory

Note : General Terms & Conditions as mentioned overleaf

Gujarat Laboratory
Since 1986

F-16,17, Madhavpura Market,
Shahibaug, Ahmedabad-380004
Ph. : 079-25626040, 25624821
Email : gujlab@gmail.com
gujlab.info@gmail.com
Web : www.gujaratlaboratory.com

TEST REPORT

Doc. No : GL/D/7.5/02

Report Issued To :	**T.R.Associates** Opp. New Gujarat High Cour,B/h Satymev Complex, Nr Sheetal Tyre,Lane-Royal Enfield, S.G.Highway, Sola,, Ahmedabad, Gujarat **Phone No :** 9825371099 **Email :** trassolab@yahoo.com	**Test Report No** **Date of Receipt** **Date of Issue** **Customer's Ref. No**	**: GL/03221010010/NS** : 10/10/2022 : 15/10/2022 : N.M

Sample Described as	**: Water.**		
Sample Qty	: 1 Ltr	**Mfg. Date**	:N.M.
Packing Mode	: Sample Packed in Plastic Bottle	**Exp. Date**	: N.M.
		B.No	: N.M
Sample Condition	: Satisfactory		
Marking	: Location / Village Name : Borewell No.43, Type Of Water : Ground Water, Sample Bottle Code : GW2		
Sample Drawn By	: Customer		
Date of Starting of Test	: 10/10/2022	**Date of Completion**	: 15/10/2022

Sr No	Quality Characteristics	Result	Test Method
Biological Water			
1	Faecal Coliform Per 100 ml	Not Detected	IS:1622:1981

Note : NM = Not Mentioned

*** END OF REPORT ***

FOR, GUJARAT LABORATORY

Dhwani Patel
Autho. Signatory

GUJARAT LABORATORY AHMEDABAD

Note : General Terms & Conditions as mentioned overleaf

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TEST REPORT

Doc. No : GL/D/7.5/02

Report Issued To :	**T.R.Associates** Opp. New Gujarat High Cour,B/h Satymev Complex, Nr Sheetal Tyre,Lane-Royal Enfield, S.G.Highway, Sola,, Ahmedabad, Gujarat **Phone No :** 9825371099 **Email :** trassolab@yahoo.com	**Test Report No** **Date of Receipt** **Date of Issue** **Customer's Ref. No**	**: GL/03221010011/NS** : 10/10/2022 : 15/10/2022 : N.M

Sample Described as	**: Water.**		
Sample Qty	: 1 Ltr	**Mfg. Date**	: N.M.
Packing Mode	: Sample Packed in Plastic Bottle	**Exp. Date**	: N.M.
		B.No	: N.M
Sample Condition	: Satisfactory		
Marking	: Location / Village Name : Borewell No.51, Type Of Water : Ground Water, Sample Bottle Code : GW3		
Sample Drawn By	: Customer		
Date of Starting of Test	: 10/10/2022	**Date of Completion**	: 15/10/2022

Sr No	Quality Characteristics	Result	Test Method
Biological Water			
1	Faecal Coliform Per 100 ml	Not Detected	IS:1622:1981

Note : NM = Not Mentioned

*** END OF REPORT ***

FOR, GUJARAT LABORATORY

GUJARAT LABORATORY AHMEDABAD

Dhwani Patel
Autho. Signatory

Note : General Terms & Conditions as mentioned overleaf

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TEST REPORT

Doc. No : GL/D/7.5/02

Report Issued To :	**T.R.Associates** Opp. New Gujarat High Cour,B/h Satymev Complex, Nr Sheetal Tyre,Lane-Royal Enfield, S.G.Highway, Sola,, Ahmedabad, Gujarat **Phone No :** 9825371099 **Email :** trassolab@yahoo.com	**Test Report No** **Date of Receipt** **Date of Issue** **Customer's Ref. No**	**: GL/03221010012/NS** : 10/10/2022 : 15/10/2022 : N.M

Sample Described as	**: Water.**		
Sample Qty	: 1 Ltr	**Mfg. Date**	: N.M.
Packing Mode	: Sample Packed in Plastic Bottle	**Exp. Date**	: N.M.
		B.No	: N.M
Sample Condition	: Satisfactory		
Marking	: Location / Village Name : Mindhiyari, Type Of Water : Ground Water, Sample Bottle Code : GW4		
Sample Drawn By	: Customer		
Date of Starting of Test	: 10/10/2022	**Date of Completion**	: 15/10/2022

Sr No	Quality Characteristics	Result	Test Method
Biological Water			
1	Faecal Coliform Per 100 ml	Not Detected	IS:1622:1981

Note : NM = Not Mentioned

*** END OF REPORT ***

GUJARAT LABORATORY AHMEDABAD

FOR, GUJARAT LABORATORY

Dhwani Patel
Autho. Signatory

Note : General Terms & Conditions as mentioned overleaf

M/s. G.S.E.C. Ltd (KLTPS) Panandhro

Plot No: 236P, 255P, Pandandhro,
Taluka: - Lakhpat, District- Kutch,
Gujarat-370601, India

TRUE COPY
ADVOCATE

ANNEXURE-R-15

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK VermaNagar , Taluka Lakhpat, DistKutch - 370601Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434e-mail: ceklтps.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

No. KLTPS/CE(G)/SE(M-1)/Effi/Env/44 G&H/2025/ 935 Dt: 12.07.2025

// Email-online upload followed by **RPAD //**

To,
The Member Secretary,
Gujarat Pollution Control Board,
Paryavaran Bhavan, Sector 10-A,
Gandhinagar – 382 010**.**

Email: uh-gpcb-kutw@gujarat.gov.in
nuh-gpcb-kutw@gujarat.gov.in

Sub: Request for Clarification Letter Regarding Ground water Abstraction for Submission to CGWA.
Ref: 1) Consent to Operate No. AWH-94499 dated 13-07-2018 (valid up to 25-07-2023)
2) Application Number : 21-4/3255/GJ/IND/2017 (KLTPS application to CGWA for Ground water
3) CGWA & GSECL MOM dt:08.04.25
4) TOL vide no:KLTPS/CE(G)/SE(M-1)/Effi/Env/44 G&H/2025/173 dated: 26.04.25
5) NGT hearing order of application no.54 of 2024 (WZ), IA no.220 of 2024 (WZ) dt:23.06.25

Respected Sir,

We respectfully submit that M/s. Gujarat State Electricity Corporation Limited (GSECL) – Kutch Lignite Thermal Power Station (KLTPS), located at Kutch, Gujarat, had obtained Consent to Operate (CTO) bearing number AWH-94499, issued on 13-07-2018 with validity up to 25-07-2023 for its four power generation units. A copy of the CTO (under ref. 1) is enclosed herewith as Annexure 1.

We would like to highlight that the said Consent to Operate does not explicitly mention the abstraction of groundwater; however, during the application process on the XGN portal, the source of water was clearly indicated as ground water.

Despite this declaration, our application for groundwater withdrawal submitted to the Central Ground Water Authority (CGWA) was rejected on 16-09-2021, citing Clause 7.10 of the CCA which states: "The applicant shall not use/withdraw groundwater either during construction or operation phase." A copy of the CGWA rejection letter is annexed as Annexure 2 (under ref.2).

We are currently facing proceedings before the Hon'ble National Green Tribunal (NGT), where one of the key issues raised pertains to the absence of a valid CGWA No Objection Certificate (NOC). In our multiple communications and personal meeting on 08.04.25 with the CGWA officials, Approved MOM dt:08.04.25 (under ref.3) and attached as Annexure 3 in which CGWA has been conveyed that submission of a clarification from GPCB — confirming that the abstraction of groundwater was declared in the earlier CTO application — will serve as critical documentary evidence to support our NOC application and may facilitate resolution of the issue. Such matter is also reflect in NGT hearing order dt:23.06.25, which attached as Annexure-4 (under ref.5).

Accordingly, Once again this office has requested the GPCB to issue a clarification letter stating that the abstraction of groundwater through borewell was duly declared by the unit during the online CTO application process and was known to the Board at the time of issuance of CTO No. AWH-94499.

We shall remain obliged for your kind support in this matter and look forward to your positive response at the earliest, to enable further submission to CGWA and for necessary compliance in the NGT proceedings.

Thanking you.

On & Behalf of GSECL

Chief Engineer (G), KLTPS

Encl: Ann-1, 2, 3 & 4

Cfwcs to: **1)** Regional Officer, GPCB, Katira commercial complex, 1st Floor,
Nr. Manglam Char rasta, Bhuj-370001-- email followed by RPAD.

CC to : **1)** Chief Engineer (Gen), GSECL, Vadodara... by email

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Application for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

ANNEXURE-R-16

1. **General Information:**

Water Quality:	Saline/ Brackish
Application Type Category/ Type of Application:	Power generation unit
(i) **Name of Industry:**	M/S. G.S.E.C. LTD (KLTPS) PANANDHRO

(ii) **Location Details of the Industrial Unit- (Attach Approved Site Plan with Location Map) ($)**

Address Line 1 :	PLOT NO: 236P, 255P, KUTCH LIGNITE THERMAL POWER STATION, TALUKA: - LAKHPAT, DISTRICT- KUTCH
Address Line 2 :	
Address Line 3 :	
State:	GUJARAT
District:	KACHCHH
Sub-District:	LAKHPAT
Village/Town:	Panandhro
Latitude:	23.662758
Logitude:	68.784155
Area Type :	Non-Notified
Area Type Category :	Safe
Whether industry is MSME:	No
Whether the project falls in Wetland Area:	No

(iii) **Communication Address**

Address Line 1:	KUTCH LIGNITE THERMAL POWER STATION
Address Line 2:	PANANDHRO
Address Line 3:	PLOT NO: 236P, 255P, TALUKA: - LAKHPAT, DISTRICT- KUTCH, GUJARAT-370601
State:	GUJARAT
District:	KACHCHH
Sub-District:	LAKHPAT
Pincode:	370601
Phone Number with Area Code:	2839
Mobile Number:	91 7567797632
Fax Number:	
E-Mail:	seekltps.gsecl@gebmail.com

(iv) **Salient Features of the Industrial Activity:**

M/s. G.S.E.C. Ltd (KLTPS) is located at Lakhpat Taluka, Kutch District of Gujarat State. It is located at Pandandhro-Subhashpar Highway, Highway 0.5 km from Project site.

(v) **Land Use Details of the Existing / Proposed Industrial Unit Premises Ownership of the Land :**

5/8/2024
I/c Chief Engineer (Gen)
GSECL, KLTPS

634

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

Land Use Details	Existing (sq meter)	Proposed (sq meter)	Grand Total (sq meter)
Green Belt Area	1870.00	0.00	1870.00
Open Land	2062116.00	0.00	2062116.00
Road/ Paved Area	63550.00	0.00	63550.00
Rooftop area of building/ sheds	107460.00	0.00	107460.00
Total	2234996.00	0.00	2234996.00

(vi) Drainage in the Area (River/ Nala etc) :

(vii) Source of Availability of Surface Water for Infrastructure Use (Submit Water Availability / Non Availability Certificate):($)

(viii) Average Annual Rainfall in the Area (in mm):

(ix) Townships / Villages (Within 2km Radius of the Industrial Unit):

(x) Whether Ground Water Utilization for: Existing Industry

Date of Commencement Industry: 29/03/1990

Date of Expansion :

2. Details of Water Requirement (Fresh and Recycled Water Usage):
(Please Enclose Water Balance Flow Chart of Activities and Requirement of Water at each Stage) ($)

(i) Total Water Requirement (a+b+c+d) (m3/day)

	Existing	Proposed	Total
Water Requirement Details (Fresh Water) (m3/day)			
(a) Ground Water Requirement (m3/day):	12600.00	0.00	12600.00
(b) Surface Water Available (Canal, River, Ponds etc.) (m3/day):	0.00	0.00	0.00
(c) Water Supply from Any Agency (m3/day):	0.00	0.00	0.00
Total Fresh Water Requirement (a+b+c)(m3/day):	**12600.00**	**0.00**	**12600.00**
(d) Recycled Water Usage (m3/day):	0.00	0.00	0.00
Total Water Requirement : (a+b+c+d)(m3/day)	**12600.00**	**0.00**	**12600.00**

(ii) Breakup of Water Requirement and Usage:

Activity	Existing Requirement (m3/day)	Proposed Requirement (m3/day)	Total Requirement (m3/day)	No. of Operational Days in a Year	Annual Requirement (m3/year)
Industrial Activity	12600.00	0.00	12600.00	365	4599000.00
Residential / Domestic	0.00	0.00	0.00	0	0.00
Greenbelt Development /Environment Maintenance	0.00	0.00	0.00	0	0.00

I/c Chief Engineer (Gen)
GSECL, KLTPS

635

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

Other Use	0.00	0.00	0.00	0	0.00
Grand Total	12600.00	0.00	12600.00		4599000.00

(iii) Breakup of Recycled Water Usage:

	(m3/day)	(Days)	(m3/year)
(a) Total Waste Water Generated :	7859.00	365	2868535.00
(b) Quantity of Treated Water Available	0.00		
i). Reuse in Industrial Activity:	0.00	0	0.00
ii). Reuse in Green Belt Development:	0.00	0	0.00
iii). Other Uses:	0.00	0	0.00
(c) Total Treated Water Utilized:	0.00		0.00

Net Ground Water Requirement: 12600.00 (m3/day)

3. (a). Groundwater Abstraction Structure- Existing:

Number of Existing Structures: 09

SNo.	Type of Structure Name / Year of Construction	Depth(Meter) / Diameter(mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours(Day) / Days(Year)	Mode of Lift Name	Horse Power of Pump	Whether Fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
1	Borewell / 1990	180.00 / 250	104.00	60.00	13 / 365	Submersible Pump	50.00	Yes	No / -
2	Borewell / 1990	180.00 / 250	105.00	60.00	13 / 365	Submersible Pump	50.00	Yes	No / -
3	Borewell / 1995	150.00 / 200	96.00	60.00	13 / 365	Submersible Pump	50.00	Yes	No / -
4	Borewell / 1995	150.00 / 200	96.00	60.00	13/ 365	Submersible Pump	50.00	Yes	No / -
5	Borewell / 1995	150.00 / 200	96.00	60.00	13/ 365	Submersible Pump	50.00	Yes	No / -
6	Borewell / 1995	150.00 / 200	96.00	60.00	13 / 365	Submersible Pump	50.00	Yes	No / -
7	Borewell / 1995	150.00 / 200	96.00	60.00	12 / 365	Submersible Pump	50.00	Yes	No / -
8	Borewell / 2015	150.00 / 200	96.00	60.00	12 / 365	Submersible Pump	50.00	Yes	No / -
9	Borewell / 2015	150.00 / 200	96.00	60.00	12 / 365	Submersible Pump	50.00	Yes	No / -

5/8/024
I/c Chief Engineer (Gen)
GSECL, KLTPS

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Application for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

(b). Groundwater Abstraction Structure- Proposed:

Number of Proposed Structures: 8

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours(Day) / Days(Year)	Mode of Lift Name	Horse Power of Pump	Whether fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
1	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
2	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
3	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
4	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
5	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
6	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
7	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -
8	Borewell / 2024	180.00 / 250	104.00	60.00	12 / 365	Submersible Pump	50.00	No / -	No / -

4. **Groundwater Availability (Please Enclose a Comprehensive Report / Note on Groundwater Condition in and Around the Area) Applicable to Industries Consuming Greater Than 500 m3/day: ($)**

5. **Details of Rrainwater Harvesting and Artificial Recharge Measures Proposed / Implemented. If Ground Water Recharge outside the Industrial Unit Premises, then provide NOC from the Concern Authority / Agency if Already implemented, details may be furnished. (Attach Rainwater Harvesting /Artificial Recharge Proposal).($)**

6. **Consent to Operate / Estibilish / Approval Letter from Statutory Bodies viz Ministry of Environment & Forests(MoEF) or State Pollution Control Board(SPCB) or State Level Expert Appraisal Committee(SEAC) or State Level Environment Impact Assessment Authority(SLEIAA):($)**

Attached Consent/ Approval of Government Agency(Previous: Referral Letter) No Attachment Found!

Letter Number

7. **Have You Applied Earlier for Groundwater Clearance from CGWA / State Government Agency:**

If Yes, so Details thereof with Status:

INDUSTRIAL USE- Self Declaration

☑ I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will

Chief Engineer (Gen)
GSECL, KLTPS

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Application for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

1. Application proforma is subject to modification from time to time.

2. Application will be submitted online on website http://cgwa-noc.gov.in to following office.

Regional Director,Central Ground Water Board West Central Region, Swami Narayan College, Building, Shah Alam Tolnaka, AHMADABAD, GUJARAT, 380022

3. Incomplete application will be summarily rejected.

Scanned copy of last page of application with signature and seal should be attached at presribed place before submission of application.

4. Reciept of Processing Fee of Rs. 10000.00/- (Rupees Ten Thousand Only) submitted through NON TAX RECEIPT PORTAL (https://bharatkosh.gov.in) should be attached in online application at prescribed place before submission of application.

Bharatkosh Details:-

Bharat Kosh Transaction Ref. No:-	2907240025301
Bharat Kosh Transaction Date:-	29.07.2024

Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.

5. Hard copy of application required: No

6. Ground Water Quality Approved	Not Define	Ground Water Charge Required:	Not Define
Ground Water Charge Recieve:	No	Ground Water Charge Amount:	
		Ground Water Arear Amount:	

Attached Files:

1). Site Plan with Location Map (Previous: Site Plan) : (Refer: 1 (ii))

No Attachment Found!

2). Certified Revenue Sketch : (Refer: 1 (ii))

No Attachment Found!

3). Documents of Ownership / Lease : (Refer: 1 (v))

No Attachment Found!

4). Source Water Availability/Non-availability Certificate(Previous: Source of Availability of Surface Water) : (Refer: 1 (vii))

S.No	Attachment Name	File Name

5/8/2024
I/c Chief Engineer (Gen)
GSECL, KLTPS

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
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Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

1	Affidavit for more than 10 KLD	Affidavit for more than 10 KLD.pdf

5). Water Balance Flow Chart (Previous: Enclose Flow Chart of Activity and Requirement of Water): (Refer: 2)

No Attachment Found!

6). Hydrogeological Report(Previous: Groundwater Availability Report) : (Refer: 4)

No Attachment Found!

7). Rain Water Harvesting/Artificial Recharge proposal(Previous: Details of Rainwater Harvesting / Artificial Recharge Measures) : (Refer: 5)

No Attachment Found!

8). Authorization Letter (Previous: Authorization) :

No Attachment Found!

10). Ground Water Quality Report(Previous: Non-Polluting Effluent) :

S.No	Attachment Name	File Name
1	Ground water quality report	Ground water quality report.pdf

11). Extra Attachment :

S.No	Attachment Name	File Name
1	GMDC NOC letter for borewell drilling	GMDC NOC letter for borewell drilling.pdf
2	GPCB Consent Copy	Latest GPCB Consent Copy.pdf
3	Plant Layout	Plant Layout.pdf
4	Final KLTPS Plant IAR with GW Modelling Report	Final KLTPS Plant IAR with GW Modelling Report.pdf

12). Scanned Industrial Application :

No Attachment Found!

13). Bharat Kosh Reciept (Porcessing Fee):

No Attachment Found!

14). Application with Signature and Seal:

S.No	Attachment Name	File Name
1	Application with Signature and Seal	Application with Signature and Seal.pdf

15). MSME certificate in case of MSME:

No Attachment Found!

16). Approval from Wetland Authority (in case of project area falling in Wetland zone):

S.No	Attachment Name	File Name

5/8/2024
Ik Chief Engineer (Gen)
GSECL, KLTPS

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Application for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Permission to Abstract Ground Water for Industrial Use (Application For New NOC)

Application Number : 21-4/11810/GJ/IND/2024

1	Affidavit for Wetland	Affidavit for Wetland.pdf

17). Consent to Establish in case of Over Exploited Category:

No Attachment Found!

18). Penalty :

No Attachment Found!

5/8/2024

Date: 05/08/2024

(D.S.Nalwaya)
I/C Chief Engineer (Gen)
GSECL, KLTPS
Name & Signature of the applicant
(With official seal)

Place : KLTPS
Panandhro Kutch
District Gujarat

Associated User : KLTPS
Submitted By User : KLTPS
Submission Date : 26/04/2024

* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

TRUE COPY
ADVOCATE

07/08/2024	**(Evaluation Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	13/08/2024	Approved	Application forwarded for further processing.

ANNEXURE-A-17

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment	Ground Water Recom Per Day	Ground Water Recom Annual
13/08/2024	**(Evaluation Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	08/11/2024	Forward	Forwarded	12600.00	4599000.00
08/11/2024	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	09/11/2024	Return	Return to EO	12600.00	4599000.00
09/11/2024	**(Approval Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	12/02/2025	Forward	Forwarded to AOHQ	12600.00	4599000.00
12/02/2025	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	12/02/2025	Return	Return to EO	12600.00	4599000.00
12/02/2025	**(Approval Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	18/02/2025	Forward	Forwarded to AO	12600.00	4599000.00
18/02/2025	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	**(Regional Director-HQ)** Central Ground Water Authority	19/02/2025	Forward	Forwarded to RDHQ	12600.00	4599000.00
19/02/2025	**(Approval Officer)** Central Ground Water Authority	**(Regional Director-HQ)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	20/02/2025	Return	Return to AO.	12600.00	4599000.00

641

20/02/2025	**(Regional Director-HQ)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	21/02/2025	Return	Return to EO.	12600.00	4599000.00
21/02/2025	**(Approval Officer)** Central Ground Water Authority	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	25/02/2025	Forward	Forwarded to AO	12600.00	4599000.00
25/02/2025	**(Evaluation Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	**(Regional Director-HQ)** Central Ground Water Authority	28/02/2025	Forward	Forwarded to RDHQ	12600.00	4599000.00
28/02/2025	**(Approval Officer)** Central Ground Water Authority	**(Regional Director-HQ)** Central Ground Water Authority	**(Member Secretary)** Central Ground Water Authority	28/02/2025	Forward	Forwarded to MCGWA	12600.00	4599000.00
28/02/2025	**(Regional Director-HQ)** Central Ground Water Authority	**(Member Secretary)** Central Ground Water Authority	**(Chairman)** Central Ground Water Authority	02/03/2025	Forward	Forwarded to Chairman, CGWA with recommendation for approval of NOC from the date of issuance for 3 years in the safe category subject to payment of EC of Rs. 2,23,02,75,000/- and Penalty of Rs. 1,00,000/-	12600.00	4599000.00
02/03/2025	**(Member Secretary)** Central Ground Water Authority	**(Chairman)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	10/03/2025	Approved	Approved for issuance of NOC subject to payment of EC of Rs. 2,23,02,75,000/- and Penalty of Rs. 1,00,000/-	12600.00	4599000.00

TRUE COPY ADVOCATE

NOC Processing

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment
10/03/2025	**(Chairman)** Central Ground	**(Approval Officer)**			In Process	

ANNEXURE-R-18 Colly

JOINT REPORT IN REFERENCE TO HON'BLE NGT MATTER OA 54/2024 (WZ)

MATTER RELATED WITH GSECL – KUTCH LIGNITE THERMAL POWER STATION, PANANDHRO

Jointly Prepared By:

MINISTRY OF ENVIRONMENT FOREST AND CLIMATE CHANGE – RO, GANDHINAGAR

&

GUJARAT POLLUTION CONTROL BOARD – REGIONAL OFFICE, KUTCH (WEST)

April 2025

GSECL

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK VermaNagar , Taluka Lakhpat, DistKutch - 370601Ph. 91-2839-262452, 264423
Fax: 91-2839-262431, 264434e-mail: cekltps.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

No. KLTPS/CE(G)/SE(M-1)/Effi/Env/44 G&H/891 Dt: 16/06/2025

E-mail-Online upload followed **by RPAD**

To,
Regional Officer,
Gujarat Pollution control Board,
Katira Commercial Complex,
Nr Income Tax office,Manglam Char Rasta,
Bhuj – 370001.
By Email: robhujgpcb@gmail.com; ro-gpcb-kutw@gujarat.gov.in

Sub: GPCB & MoEF&CC officials visit at KLTPS on dt: 07.04.25- compliance thereof (ID:17838)
Ref: GPCB, RO officials & MoEF&CC officials joint visit and joint inspection report of visit at KLTPS on 07.04.25

Respected Sir,

In connection to above sub/ref, GPCB, RO, Bhuj officials & MoEF&CC, RO, Gandhinagar official jointly visited KLTPS on 07.04.25. The points instructed and actions taken are as below:

Sr. No	GPCB instructions during visit on 07.04.25	Compliance from KLTPS
2.1 Water & Waste water Point No. (2.1) (a)	Unit has applied for CGWA permission vide application no: 21-4/ 11810/ GJ/ IND/ 2024 for extracting ground water from 38 nos. of borewell with capacity of 27240 m3/day.	Kindly note that, KLTPS applied the for CGWA permission vide application no: 21-4/ 11810/ GJ/ IND/ 2024 for extracting ground water of capacity 12600 m3/day (as per CCA).
Point No. (2.1) (b)	Waste water was found spread and accumulated along the Dyke-A area. (The PP has been instructed to take effective measures to stop the flow of waste water and advised to tapped near the sump for further treatment.)	Upon observation, the minor leakage that previously caused wastewater accumulation near Dyke-A has been fully addressed. **Action taken/ followed by KLTPS to stop the waste water accumulation** : • The area along the Dyke -A has been completely dried up, and there is currently no water accumulation near Dyke-A. (Photo of the same are attached as **Annexure-I** at page no.7). • The wastewater channel and sump are regularly cleaned and monitored to prevent any overflow or leakage incidents. • Regularly monitoring is carried out promptly to identify and address any line leakages or similar occurrences.

		• Wastewater is currently tapped near the sump and used for further treatment as per norms.
Point No. 2.1 (c)	No such leakage is observed in the Ash slurry pipelines which are laid upto the operational Dyke – D (Abandoned Mine of GMDC Panandhro). However, the pipeline needs to be changed at the earliest. Fly ash is observed along the pipeline area at Abandoned Mine of GMDC Panandhro which needs to be disposed as per guidelines in a time bound manner.	**Action followed by KLTPS to stop the any ash slurry leakages in future.** • KLTPS maintains continuous monitoring for ash slurry line leakages, with a work order already in place for routine attendance and replacement of affected sections. • Bund barrier was built using sand embankments to prevent any passage of ash slurry water towards the Kali River. • A dedicated channel has been built near Dyke-D to ensure that any incidental leakage water is directed exclusively to Dyke-D only. **Action Plan/ taken to replace the Ash slurry pipeline.** • A work order for the comprehensive replacement of approximately 2.5 km of ash slurry pipeline has been placed for an amount of Rs. 3,46,43,679/-. This work is tentatively scheduled for completion within the next six months. (Attached order copy as **Annexure – A** at page no.12). **Action taken/ followed by KLTPS to clear the ash accumulation along ash slurry pipelines:** • The area along the ash slurry pipeline at the Abandoned Mines has been thoroughly cleaned, and the collected ash has been properly disposed of in the KLTPS ash dyke. (Photo of the same are attached as **Annexure-II** at page no.8). • A proposal for future ash lifting and management is currently under process.
Point No. 2.1 (d)	However, the trace marks of water flown out earlier from the premises have been observed during inspection.	**Action taken/ followed by KLTPS.** • May be, these traces are likely residual from periods of heavy rainfall, during which some storm water may have flowed outside the premises. • However, presently no discharge of plant wastewater outside the plant premises.

<table>
<tr><td></td><td></td><td>Also Wastewater is currently tapped near the sump and used for further treatment as per norms.</td></tr>
<tr><td>Point No.
2.1 (e)</td><td>It has been observed that the concentrated water is going out from the plant premises in the form of mist from cooling towers containing anti scaling agents and gets deposited on the plants outside the boundary wall giving whitish appearance on plant leaves. It is advised to install wind barrier to stop any such accumulation as it is hampering the plant growth and ultimately lead to mortality.</td><td>Action taken/ followed by KLTPS to install a wind barrier.
• Foundation work for the proposed wind barrier has already commenced.(Photo of the same are attached as Annexure-III at page no.9).
• Order for the supply and erection of a wind barrier, utilizing steel structures and sheeting, to prevent the dispersion of water mist from IDCT (Induced Draft Cooling Tower) of Unit #3 is currently under approval, with an estimated cost of Rs. 23 lakhs.</td></tr>
<tr><td>2.2
Air Pollution Control and Management

Point No.
2.2 (a)</td><td>Unit no. 3 stack sample was monitored and the results were as below:
PM - 1116 mg/Nm^3 SO2 5072 mg/Nm^3. NOx 272 mg/Nm^3.</td><td>Action taken/ followed by KLTPS.
• During inspection, sample of Unit no.3 was taken and results of PM & SO2 were high. However, KLTPS past environment audit data of stack monitoring are mentioned below for reference:
<table><tr><td>Year</td><td>Yearly average readings</td></tr><tr><td>Environment Audit of 21-22.</td><td>PM-164 mg/Nm^3
SO_2-3841 mg/Nm3
NO_x-87.33 mg/Nm3</td></tr><tr><td>Environment Audit of 22-23.</td><td>PM-152 mg/Nm^3
SO_2-3682 mg/Nm3
NO_x-89 mg/Nm3</td></tr><tr><td>Environment Audit of 23-24.</td><td>PM-138 mg/Nm^3
SO_2-3556 mg/Nm3
NO_x-91.3 mg/Nm3</td></tr><tr><td>Environment Audit of 24-25.</td><td>PM-121 mg/Nm^3
SO_2-3086 mg/Nm3
NO_x-78 mg/Nm3</td></tr></table>However, To meet new standards of Air Pollution Control Measures (APCM) , GSECL will take below mentioned actions for up gradation of APCM:
For Unit no.3 :
• FGD installation to control SO2 emission: KLTPS already conveyed the matter to GSECL Corporate office for further action and presently the matter is under consideration at GSECL head office.</td></tr>
</table>

		• ESP up-gradation to control PM: ESP first two pass material for replacement has been received of Rs 92,15,494/- and will be replaced in upcoming shutdown as per availability of outage (Attached order copy as **Annexure – B** at page no.13). • Other ESP pass material will be replaced in Phase manner. • For further ESP up gradation KLTPS already conveyed the matter to GSECL Corporate office for further action and presently the matter is under consideration at GSECL head office. • KLTPS has utilized 100% ash by disposing in GMDC abended mines used as Dyke -D. **For Unit no.4:** • Unit is under force outage since dt 06.07.2023 and its restoration plan is under approval at GSECL Corporate office.
Point No. 2.2 (b)	Online analyzer provided with the Boiler 3 for PM parameter is not found in operation and parameters SO_2 & NOx shows reading as 3734 ppm & 202 ppm respectively. During the site Visit online analyzer not showing reading on CPCB server.	**Action taken/ followed by KLTPS for put the PM analyzer in service.** • A new analyzer was installed on 23.05.25 at an expense of Rs. 5,35,000/- for purchase and installation. • Real time results of analyzer are now available on GPCB site.
Point No. 2.2 (d)	Fugitive emission is observed from the coal handling and conveying area due to its dilapidated condition which requires maintenance and revamping. It is advised to PP to take lift forward to implement the coal handling guidelines issued by CPCB in time bound manner. The action plan for the same should be submitted to RO MoEF/RO GPCB. The same is applicable for fly ash.	**Action taken/ followed by KLTPS for coal plant to control Fugitive emission and as per CPCB guideline.** There are several arrangements are there in Lignite stock yard to control fugitive emission which are mentioned below: • A truck-mounted dust suppression system with a 60-meter range is utilized daily to sprinkle water on all roads within the coal plant area. [Attached Photo **Annexure – IV (a)** at page no.10].

		• Two portable, trolley-mounted mist cannons are currently used daily in the coal plant area to control fugitive emissions. The procurement of two additional portable mist cannons is under approval. [Attached Photo **Annexure – IV (b)** at page no.10]. • Manual water spraying is continuously carried out by a contractual agency during coal stacking and reclaiming operations. • Conveyor belt and crusher house are covered and these covers are replaced as per requirement. [Attached Photo **Annexure – IV (c) at** page no.10] • A wind barrier is installed in the lignite stockyard. [Attached Photo **Annexure – IV (d)** at page no.10]. • Plant roads and internal areas of the coal plant are regularly swept and cleaned. • A fire emulsifier system is installed and operational also well-equipped fire station is established at plant. • Roof Covering shed on lignite coal stock yard is under approval of estimated amount 5.0 Crore and presently tarpaulin is provided to cover the coal stockyard. • Approximately 100 trees were planted in the coal plant area in June 2025 and another 500 Nos. of Trees will be planted in Plant premises including coal plant area by end of the July -2025. • Plant roads and internal areas of the coal plant are regularly swept and cleaned. • Restoration of water sprinklers at high duct areas (JT-1, Crusher house, Bunker areas) is under progress. Reference Photos of the same are attached as Ann-IV.

Point No. 2.2 (e)	Green belt at plant premises.	**KLTPS actions to improve greenbelt are mentioned below**: • KLTPS planted around 700 nos. of trees in KLTPS colony on this World Environment Day'2025.(Attached Photo **Annexure – V** at page no.11) • KLTPS is planning to plant another 500 Nos. of Trees in Plant premises by end of the July -2025.

We assure you for prompt actions/ compliance to the various directives/instruction issued by GPCB & MoEF&CC for pollution control and Environment protection in the interest of public at large.

Thanking you,

On & behalf of GSECL-KLTPS,

Chief Engineer (Gen)
KLTPS – Panandhro

Encl.: Annexure-I, II, III, IV, V, A,B.

Cfwcs to:

1. Member secreatary , Gujarat Pollution Control Board, Paryavaran Bhavan, sector-10, Gandhinagar-382010 Email: uh-gpcb-kutw@gujarat.gov.in; nuh-gpcb-kutw@gujarat.gov.in;

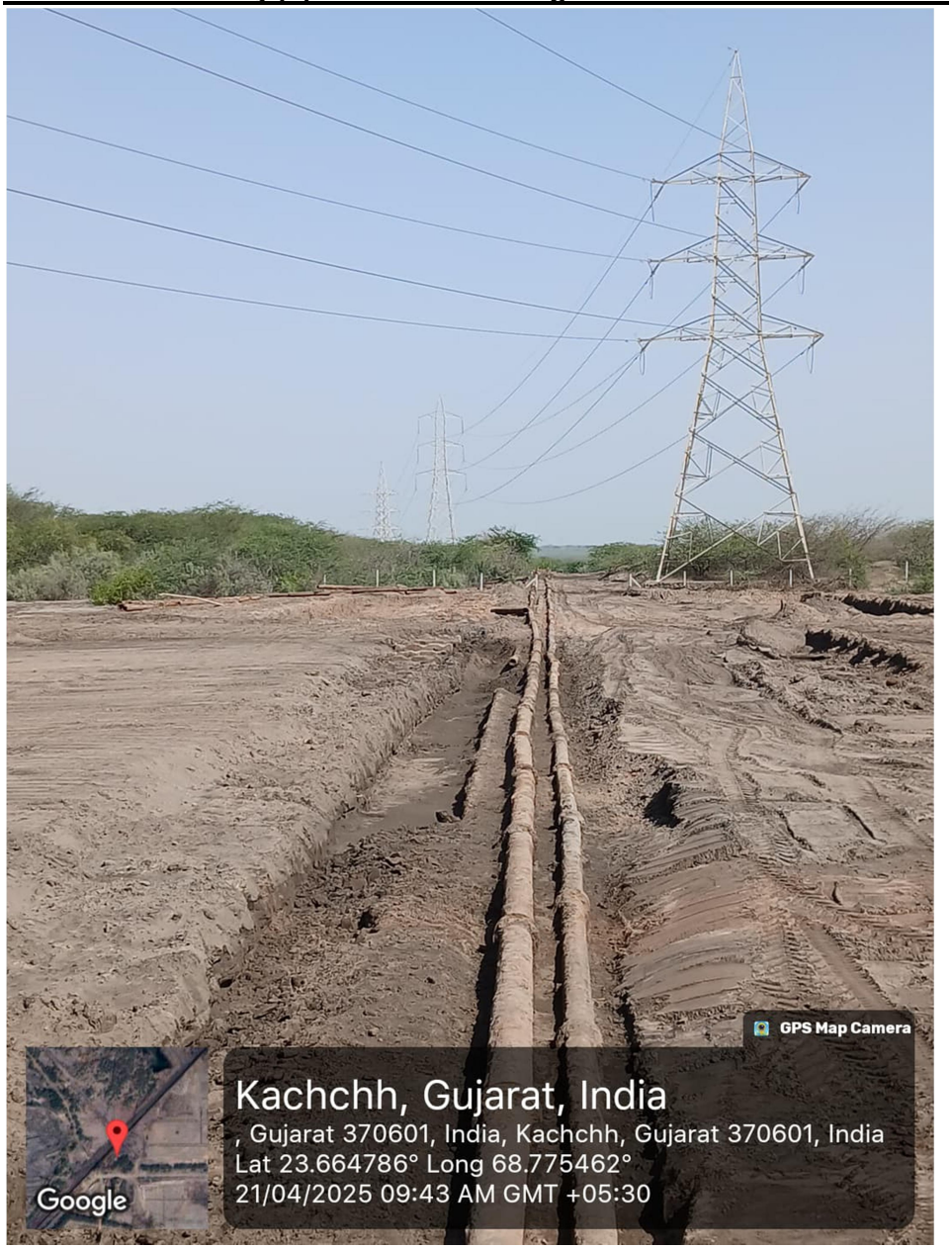
CC to:

1. Chief Engineer (Gen), GSECL Corporate office , Vadodara... by Email
2. Chief Engineer (P&P), GSECL Corporate office, Vadodara.....by Email.

Annexure – I
Photos of area near Dyke A

Annexure - II

Photos of Ash slurry pipeline after cleaning at area of Abondoned mines.



Annexure - III
Photo of ongoing foundation work for wind barrier at cooling tower unit #3

Annexure - IV
Photos of arrangement at Lignite Stock Yard

a) **Mobile Fogger**

b) **Mobile canon fogger in stock yard**

c) **Lignite belt cover**

(d) **Wind Barrier at Coal Plant**

Annexure - V

700 nos. of trees in KLTPS colony on this World Environment Day'2025

Annexure – A (Order copy of Ash slurry pipe replacement)

GSECL	Gujarat State Electricity Corporation Limited Kutchh Lignite Thermal Power Station At : PO S K Varmanagar, Dist. Kutchh – 370 601 CIN:U40100GJ1993SGC019988 email : cekltps.gsecl@gebmail.com An ISO 9001:2015 Certified Company	आज़ादी का अमृत महोत्सव

KLTPS/P&C/PO NO.: 125375/AHP/ME-13/ 1663 DATE: 31/05/2025

e-Urja PO No :125375

Acceptance of Tender (A/T)

To,
M/s Aquatech Engineering Services
KLTPS Site,
Panandhro
Tal: Lakhpat
Dist. KUTCH, Gujrat

E-MAIL ID: devendra.aqua@gmail.com

GST No.: 24AADHG6175P1ZU

Sub.: Supply of 250 NB C.I. Spun Pipes & its fitting and the Work of Design, Engineering, Erection, Commissioning & Testing of 250 NB CI Pipes & 250NB/200NB MS ERW Pipes & its fittings with suitable at AHP-KLTPS (ME-13)

Ref. : 1) This office Tender No.: KLTPS-30/24-25/;ME-13;Date:21.08.24
2) Your Tech bid Opened on dated: 13.12.2024
3) Price bid opened on dated: 07.04.2025
4) KLTPS LOI NO: KLTPS/P&C/LOI/PO NO: 125375/AHP/ME-13/1333 dated: 30.04.2025

Dear Sir(s),

With reference to the above we have to inform you that GSECL has accepted your tender for the supply of material and equipment specified in the Schedule attached, and as per quantity, prices, specifications and conditions now mentioned in this A/T. Any clause, condition or term in your Tender and/or acknowledgement letter which is repugnant to or inconsistent with the terms and conditions of this Acceptance of the Tender and schedule attached hereto shall be void and of no force and effect unless specifically approved and expressly modified by GSECL. If you fail to acknowledge the receipt of this communication within a week, you will be deemed to have accepted this contract on the terms and conditions set out herein. You will also be deemed to be fully aware of GSECL`s General Conditions of Contract for the supply of plant, equipment and materials and any ignorance of these conditions will not exempt you from your liability to abide by the same.

01. The total Ex-works value of the order is **Rs. 2,93,59,050.00** and Total End Cost is **Rs. 3,46,43,679.00** (inclusive of all taxes and duties)

Delivery FOR	: KLTPS MAIN STORE
P&F Charges-	: INCLUSIVE
GST	: **18% Exclusive of Ex-works cost**
Freight Charges	: INCLUSIVE
Transit Insurance.	: INCLUSIVE
Other Charges if any	: ----------

01. **SECURITY DEPOSIT:** The security deposit payable at 10% of the order value is i.e. **Rs 34,64,367/-** On End cost basis). The security deposit is paid by you vide **MR NO. GS115202505419 on Dtd: 27.05.2025.** The security deposit will be refunded after the execution of the order and issue of NOC from user/store department.

02. **Payment Terms:**
80% of FOR destination price from the date of receipt of material against TRC within 30 days on verifying required documents as per A/T conditions, **amount of GST and applicable cess will be kept under retention till submission of documentary proof of payment of GST or till reflection of payment of GST pertain to respective bill amount in GST return for concern order after due verification** and balance 20% of FOR destination Price against S.R. Note within 45 days from the date of receipt of materials at site in good condition. No advance will be paid by the GSECL. Payment will be effected through RTGS/NEFT system of Banks. Hence you are requested to furnish details as: (1) Account Number (2) Type of Account (3) Bank Name (4) Branch Name and address (5) Contact Number of Branch (6) IFSC No. (7) Swift Code.

03. **MODE OF DISPATCH:**
You may book the consignment on FOR KLTPS in the name of Executive Engineer (Stores), C/O, Chief Engineer (Generation) - GSECL, Kutch Lignite Thermal Power Station, Panandhro-370601 with the following transporters

Annexure- B (order copy of ESP spares for replacement)

GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Kutch Lignite Thermal Power Station, PO SK VermaNagar , Taluka Lakhpat, DistKutch - 370601Ph. 91-2839-262452, 264423
e-mail: ceklips.gsecl@gebmail.com Website: www.gsecl.in CIN: U40100GJ1993SGC019988

KLTPS/TECH/PO NO.: 118865/AHP/ME-102/2202 DATE: 15 JUL 2024.
e-Urja PO No : 118865

To,
M/s. NTNN QUEST ENGINEERING PRIVATE LIMITED
66/58,KAMDAR NAGAR, 2nd STREET,
NUNGAMBAKKAM, CHENNAI – 600 034
TAMIL NADU, INDIA.

PH NO:
FAX NO:
E-MAIL ID: engg@ntnn.biz
TIN No:
CIN No:
GST/CST No: 33AAFCN0077J1ZJ

Sub: Supply of spares for ESP of Unit #3 (Model No.: 2HE 24/600 (4+), 5*11, 6/400) at AHP-KLTPS
Ref: 1.This office Tender No. Web -Tender: KLTPS-39/23-24/ME-102,Date:24.01.24
2.Your Tech bid Opened on Date: 06.03.2024
3.Price bid opened on date: 19.04.2024
4.T.O.LOI NO. KLTPS/TECH/LOI/PO NO. 118865/AHP/ME-102/2061 DATE:03.07.2024

Dear Sir(s),
With reference to the above we have to inform you that GSECL has accepted your tender for the supply of material and equipment specified in the Schedule attached, and as per quantity, prices, specifications and conditions now mentioned in this A/T. Any clause, condition or term in your Tender and/or acknowledgement letter which is repugnant to or inconsistent with the terms and conditions of this Acceptance of the Tender and schedule attached hereto shall be void and of no force and effect unless specifically approved and expressly modified by GSECL. If you fail to acknowledge the receipt of this communication within a week; you will be deemed to have accepted this contract on the terms and conditions set out herein. You will also be deemed to be fully aware of GSECL's General Conditions of Contract for the supply of plant, equipment and materials and any ignorance of these conditions will not exempt you from your liability to abide by the same.

The total value of the order is **Rs. 78,09,741.12/-**

Delivery FOR KLTPS/Ex-Godown/Ex-Works	: KLTPS MAIN STORE
Inclusive/Exclusive of P&F Charges-	: INCLUSIVE
Inclusive/Exclusive of Sales tax/G.S.T./VAT/C.S.T.	: **GST18% Exclusive**
Inclusive/Exclusive of freight Charges-	: INCLUSIVE
Inclusive/Exclusive of transit Insurance.	: INCLUSIVE
Other Charges if any	: -------

1. SECURITY DEPOSIT: The security deposit payable at **10%** of the order value is **Rs 9,21,549/-** On end cost basis) The security deposit is paid vide **MR NO. GS115202407128 on Dated:06.07.2024**.The security deposit will be refunded after the execution of the order and issue of NOC from user/store department.

2. PAYMENT:
80% of Ex-Work price including 100% of F&I, Taxes & duties, on receipt on TRC within 30(Thirty) days on verifying required documents as per order conditions, amount of GST and applicable cess will be kept under retention till submission of documentary proof of payments of GST or till reflection of payment of GST pertain to respective bill amount in GST Return for concern order after due verification and balance 20% within 45 days on receipt of S.R. Note from the consignee.

3. MODE OF DISPATCH:
You may book the consignment on FOR KLTPS in the name of Executive Engineer (Stores), C/O. Chief Engineer (Generation) - GSECL, Kutch Lignite Thermal Power Station, Panandhro-370601 with the following transporters having this facility:

(1) TRANSPORT CORPORATION OF INDIA ? TCI Freight
(1) 02832 223239 (2) Mob. No.9979908327, 9327668912 E-mail bhj@tcifreight.in
(2) ASSOCIATED ROAD CARRIERS - ARC
(1) 02832 325967 (2) Mob. No.9426949185, 9328492543 E-mail gdm@arclimited.com
(3) LALJI MULJI TRANSPORT
(1) 02832-325637 (2) Mob. No.9898500424 E-mail gandhidham@lmtco.com
(4) V-Trans (1) 02832-220224 (2) Mob. No.9376643740 E-mail bhuj@vtransgroup.com
(5) Harish Transport:- (1) 02832-226903 (2) 02832-245167 (3) Mob. No.9879545167

If the above mentioned transporters branch offices show reluctance at the time of booking of the consignment on FOR KLTPS, then their branches at Bhuj may be contacted at above Telephone/Mobile No. and e-mail. If the consignment is very small, you may dispatch the materials by Regd. Post Parcel/Courier-Shri Maruti, DTDC, and TIRUPATI. Also, please note that the timings for accepting the delivery of material at our Main

Registered Office: Vidyut Bhavan, Racecourse, Vadodara - 390007

1. Background.

The Applicant Shri Kuldipsinh Khimji Sodha resident of Bhuj, Kutch has filed the application OA No. 54 of 2024 in the Hon'ble National Green Tribunal (WZ), regarding the pollution caused by the Kutch Lignite Thermal Power Plant. Recently the applicant has filed a composite rejoinder affidavit on 29.03.2025 as mentioned in the Hon'ble NGT order dated 01.04.2025. In this reference the Kutch Lignite Thermal Power Station (KLTPS), Panandhro is visited on 07.04.2025 jointly by the officials of MoEF&CC – RO, Gandhinagar & GPCB Regional Office, Kutch (West).

The following officials were part of the inspection team:

1. Yogesh Kumar, Scientist 'C', MoEF&CC – RO, Gandhinagar.
2. Hitesh Sorathia, Scientific Officer, GPCB Regional Office, Kutch (West).
3. Rajendrasinh Gaekwad, Asst. Environmental Engineer, GPCB Regional Office, Kutch (West).

2. Observations during the visit.

The KLTPS belongs to Gujarat State Electricity Corporation Limited (GSECL) is located near Panandhro village in Kutch District. It is a Lignite Based Power Station. There are two units of 70 MW each (Unit no. 1 & 2) and two units of 75 MW (Unit no. 3 & 4) with a total installed capacity of 290 MW. The commissioning dates of unit no. 1 to 4 are 29.03.1990, 25.03.1991, 31.03.1997 & 20.12.2009 respectively. The unit no. 4 is having CFBC boiler and unit is taken under commercial operation from 20.12.2009. The 2 x 70 MW Unit no 1 & 2 have been retired from service w.e.f. 01.01.2020 & the Station Capacity has reduced to 150 MW accordingly w.e.f. 01.01.2020.

KLTPS is operating since 1990 as per the consent given by Gujarat Pollution Control Board (GPCB). Environment clearance is granted by the Ministry of Environment Forest and Climate Change (MoEFCC) for Unit – 4 vide No.J-13012/6/2002.IA-II(T) dated 31.05.2005. At present the unit has valid CCA AWH – 128069 upto 23.08.2028 for Unit – 3 (Power – 75 MWH) & Unit – 4 (Power – 75 MWH).

During the visit, Unit – 3 is found in operation at 59.7 MW power generation rate which is running as per the consent of Gujarat Pollution Control Board. Unit – 4 was not in operation at the time of inspection. It was informed by the project proponent that the unit 4 is non operative since October 2023. The Unit – 3 has been recently resumed operation from 30.03.2025.

In the present scenario the conditions stipulated under the environment clearance can't be verified or certified as the plant is not in operation since 2023. However, the project proponent has submitted the six-monthly compliance report up to March 2025 which highlights the establishments at the site (copy enclosed). Being non-operational neither the stack nor the waste

water consumption and treatment can be monitored or checked or verified for unit 4. However, the conditions mentioned in the consent granted by GPCB are monitored and verified.

2.1 Water and Wastewater Management

The source of water is through Borewell. Unit has total 38 Nos. of borewells, out of which 9 Nos. of borewells are in working condition. As per the records, Unit has applied for CGWA permission vide application no: 21-4/11810/GJ/IND/2024 for extracting ground water from 38 nos. of borewell with capacity of 27240 m3/day.

Unit has provided primary ETP for treatment of wastewater generated from DM plant. The ETP is operated in batch mode. Treated water is reused in dust suppression within premises. Cooling tower bleed is directly utilized for fly ash slurry preparation. Unit has provided online analyzers at the final outlet of ETP and connected with online CPCB & GPCB server.

During the visit, no wastewater is found going outside the premises into the river Kali. However, it was found spread and accumulated along the Dyke-A area. The PP has been instructed to take effective measures to stop the flow of wastewater and advised to trap near the sump for further treatment. No such leakage is observed in the Ash slurry pipelines which are laid upto the operational Dyke – D (Abandoned Mine of GMDC Panandhro). However, the pipeline needs to be changed at the earliest. Fly ash is observed along the pipeline area at Abandoned Mine of GMDC Panandhro which needs to be disposed as per guidelines in a time bound manner. During visit, no seepage is observed from the Dyke – A. Presently Dyke – A is not in use and only water is accumulated in the same, Solar plant is installed in Dyke – E and Dyke – C is abandoned and presently not in use. However, the trace marks of water flown out earlier from the premises have been observed during inspection.

It has been observed that the concentrated water is going out from the plant premises in the form of mist from cooling towers containing anti scaling agents and gets deposited on the plants outside the boundary wall giving whitish appearance on plant leaves. It is advised to install wind barrier to stop any such accumulation as it is hampering the plant growth and ultimately lead to mortality.

The generated domestic wastewater is disposed through soakpit.

During the visit, no wastewater is found going outside the premises into pond of village khanot. During visit, one sample is collected from the Khanot village pond. The analysis results of the same are as below:

Parameter	Analysis Results
pH	8.41
TDS	53016
Chloride	24900
Sulphate	1150

COD	126
BOD (3 days at 27 C)	10
DO	3.06
Color	10
Ammonical Nitrogen	0.56
O&G	BDL
Suspended Solids	64

Note: All parameters are in mg/l except pH and Colour in Pt/Co scale

As per the records of GPCB, The samples of Khanot village are collected previously which shows TDS – 17662 mg/l (15.02.2023), 20009 mg/l (06.08.2016), & 59024 mg/l (29.06.2016).

2.2 Air Pollution Control and Management

During visit, stack sampling is carried out with the stack attached to the Boiler – 3 of the Unit – 3 for the PM, SO_2 & NO_x. 10 Field ESP is provided as APCM with the Boiler – 3, which is observed in operation during the visit. The monitoring results of the same are PM – 1116 mg/Nm^3, SO2 – 5072 mg/Nm^3, NOx – 272 mg/Nm^3. The monitoring results of PM & SO2 for the Boiler – 3 (Unit - 3) are exceeding the prescribed norms of the CCA.

During visit, online analyzer provided with the Boiler – 3 for PM parameter is not found in operation and parameters SO_2 & NO_x shows reading as 3734 ppm & 202 ppm respectively. Unit has connected the online analyzers with CPCB & GPCB server; however during the visit the online analyzers were not showing the readings on CPCB server. The KLTPS has issued LOI to Forbes Marshall Pvt. Ltd. on 26.03.2025 for procurement of opacity analyzer for PM parameter.

It is advised to PP to take a leap forward to implement the coal handling guidelines issued by Central Pollution Control Board (CPCB) in a time bound manner. The action plan for the same should be submitted to RO MoEFCC/RO GPCB. The same is applicable to fly ash guidelines.

During visit, no fly ash dumps are found near coal yard or outside the premises. During the visit, fugitive emission is observed from the coal handling and conveying area due to its dilapidated condition which requires maintenance and revamping.

The condition of green belt is partly complied as the sufficient green cover is not maintained at the plant premises which is required to be increased in a phased manner.

R.R Gaekwad.

Date: 07.04.2025

Rajendrasinh Gaekwad
Asst. Environmental Engineer,
GPCB Regional Office,
Kutch (West).

Hitesh Sorathia
Scientific Officer,
GPCB Regional Office,
Kutch (West).

Yogesh Kumar
Scientist 'C',
MoEF&CC – RO,
Gandhinagar.