

BEFORE THE NATIONAL GREEN TRIBUNAL

AT CHENNAI

NO. 196/2021

IN THE MATTER OF:

T M UMASHANKAR & ORS

PETITIONER

VERSUS

UNION OF INDIA & ORS

RESPONDENTS

REPLY AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 6, THE CENTRAL POLLUTION CONTROL BOARD

INDEX

| S.No | Contents | Pg No |
|-------------|--|----------------|
| 1. | COUNTER AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 6, THE CENTRAL POLLUTION CONTROL BOARD (CPCB) | 1 - 17 |
| 2. | Annexure R6/1: Copy of EC granted to M/s Karnataka Waste Management Project in 2014 | 18 - 22 |
| 3. | Annexure R6/2: Copy of EAC Minutes of the Meeting dated 28-29 January, 2020 | 23 - 95 |



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| | | |
|----|---|------------------|
| 3. | Annexure R6/3: Copy of Hon'ble NGT Order dated 06.09.2021 in O.A No. 196 of 2021 | 96 - 102 |
| 4. | Annexure R6/4: Copy of Memorandum dated 12.11.2021 issued by KSPCB for constitution of Joint Committee | 103 - 104 |
| 5. | Annexure R6/5: Copy of Hon'ble NGT Order dated 26.09.2019 in O.A No 654 of 2019 | 105 - 108 |
| 6. | Annexure R6/6: Copy of Tippagondanahalli Reservoir Notification No. FEE 215 ENV 2000, dated 18.11.2003 | 109 - 114 |
| 7. | Annexure R6/7: Copy of the application for grant of EC (amendment) for the project in 2020 | 115 - 124 |

DATE: 26th November 2021



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(S SURESH)
DEPONENT

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IN THE NATIONAL GREEN TRIBUNAL AT NEW DELHI

NO. 196/2021

IN THE MATTER OF:

T M UMASHANKAR & ORS

PETITIONER

VERSUS

UNION OF INDIA & ORS

RESPONDENTS

REPLY AFFIDAVIT ON BEHALF OF THE RESPONDENT NO 6, THE CENTRAL POLLUTION CONTROL BOARD

I, S Suresh, s/o S Sathyanarayana aged 59 years, working as Scientist 'E' and Regional Director, Regional Directorate (Bengaluru), Central Pollution Control Board, 1st & 2nd floors, Nisarga Bhawan, A-Block, Thimmaiah Main Road, 7th D Cross, Shivanagar, Bengaluru – 560 079, do hereby solemnly affirm and sincerely state as follows:

2. That I am presently working as Scientist 'E' / Additional Director in the Central Pollution Control Board (hereinafter and called for short as CPCB) and I am well conversant with the facts of the application from the records maintained by the offices of the CPCB. I am competent to swear this independent response on behalf of the CPCB. That I have carefully perused a copy the original application served on the CPCB and have understood the contents therein.



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3. That I have read and understood the contents of the present Reply Affidavit. The contents thereof are true and correct and nothing material has been concealed therefrom.
4. It is submitted at the very outset that this Respondent No.6 denies each averment and/or submission made in the Original Application, that are contrary to and inconsistent with the averments made and facts stated in the present reply. It is submitted that nothing stated in the petition may be deemed to have been admitted by this Respondent unless and until the same is expressly admitted in the present reply.

PARA-WISE COMMENTS:

1. It is submitted that, the Applicant has filed the present Application under Section 14, 15 and 20 of the National Green Tribunal Act, 2010 raising a substantial question relating to the environment arising out of blatant and gross violation caused by Respondent No. 5 by running the Red Category Hazardous Facility i.e., Integrated Common Hazardous Waste Treatment and Storage and Disposal Facility of Karnataka Waste Management Project Division.
2. This Respondent submits that the averments made in Points I & II of the Application invites no comments from this answering Respondent.
3. That the averments contained in para III (a) to (d) of the application refers to issues raised against the Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (ICHWTSDF). In this regard, the answering Respondent submits the following;
 - (a) That with regard to the issue raised on operation of ICHWTSDF without Environmental Clearance, M/s Karnataka Waste Management Project (KWMP), (A Division of Ramky Enviro Engineers Ltd.), is located at KIADB Industrial Area, Nelamangla Taluk, Bangalore Rural District, Karnataka. It



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commenced operation during June 2008 after obtaining Consent to Establish vide Order No. KSPCB/HWMC/2007-08/425A dated July 06, 2007; Consent to Operate vide combined consent order No. H-362 dated June 19, 2008 and authorization vide order No. KSPCB/HWM/H-361 dated July 19, 2008 issued by Karnataka State Pollution Control Board. Whereas, subsequent Consent beyond July 01, 2016 was refused by KSPCB vide letter No. PCB/WMC/1933/HWM/2017-18/H-1435 dated 06.02.2018 and the same was appealed before Karnataka State Appellate Authority by the CHWTSDF.

- (i) It is submitted that, as per Schedule under Environment Impact Assessment (EIA) – 2006 notified on 14.09.2006, Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDFs) are listed as (7d) in the Projects or Activities Requiring Prior Environmental Clearance. Accordingly, the facility sought Environmental Clearance from MoEF & CC under the Environment Impact Assessment Notification – 2006 for setting up of incinerator within the existing site of TSDF during March 2013 to May 2014. EC for setting up incinerator at TSDF, Dabaspet, Bangalore, Karnataka by M/s Ramky Enviro Engineers Ltd, Bangalore was issued by MoEF&CC vide order F. No. 10-65/2012-IA.III/ dated 19.04.2014. Copy of EC granted to M/s Karnataka Waste Management Project is appended as **Annexure I**. The facility is now operating as Integrated Common Hazardous Waste Management Facilities having incineration & landfill, falling under Category A.
- (ii) It is submitted that, the facility has completed all the required procedures as per Rule 8 of the Hazardous Waste (Management and Handling) (Amendment) Rules, 2003, viz., Identification & Selection of suitable site, Notification of site for TSDF purpose,



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Environment Impact Assessment Study, Technical Advisory Committee of KSPCB review for satisfaction of EIA report, Public Awareness Campaign, Public Hearing conducted by DC, Approval of State Government and Order for acquiring the site, by the time EIA Notification 2006 notified by MoEF&CC on 14.09.2006. The application for obtaining NOC from KSPCB was submitted 2 days before EIA Notification (12.09.2006).

- (iii) It is humbly referred that, the Circular of MoEF&CC dated 21.11.2006 stipulates that, *“application received for NOC by the SPCB before 14th September, 2006 may be considered as the per provisions of Water Act, 1974 and Air Act, 1981. However, they will have to obtain Environmental Clearance from the relevant authority by June 30th 2007 if the category requires EIA clearance as per EIA Notification. In such cases unit can meanwhile carry on with the commencement of their project activities. The projects not seeking clearance under EIA Notification 2006 by 30th June 2007 will be treated as violation cases under Section 15 of Environment (Protection) Act, 1986.”* In this regard, it appears that the facility was allowed and found in operation only with valid Consent for Operation from inception i.e. May, 2008 till its refusal by KSPCB on 06.02.2018. Also, the requirement of EC was not raised by the concerned authorities till such time i.e. 06.02.2018.
- (iv) It is hereby, submitted that, in compliance to Order of Hon’ble NGT dated 26.09.2019 in Original Application No.654 of 2019, M/s




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Karnataka Waste Management Project, (A Division of Ramky Enviro Engineers Ltd.,) submitted the application for grant of EC (amendment) for the project in question in prescribed format within the stipulated time i.e. two months from the date of judgment for both Landfill and Incinerator.

(v) The application for EC came up for consideration before the Expert Appraisal Committee – Infra-2 ('EAC') in its 48th Meeting dated 28-29 January, 2020 conducted by MoEF & CC. EAC considered the application in the background of the entire chronology of event in relation to project in question.

(vi) In the minutes of said meeting dated 28-29 January, 2020, it was recorded that the EAC noticed that EC for setting up the incinerator at TSDF, Dobaspet, Bangalore by M/s Ramky Enviro Engineers Ltd., has been granted by MoEF&CC vide letter dated 19.09.2014, wherein it was clearly mentioned that the proposal of project involved setting of incinerator facility within the existing TSDF of KWMP to dispose the Incinerable waste in scientific manner so that the facility becomes Integrated Common Hazardous Waste Management Facility (ICHWMF). Further, the EAC also expressed its view that earlier, while granting the Environmental Clearance, the Ministry had endorsed the existence of the landfill site along with the proposal of incinerator. Copy of the Minutes of the Meeting dated 28-29 January, 2020 is appended as **Annexure II**.

(b) With regard to the issue raised on violation of the locational criteria issued by the Central Pollution Control Board and Office Memorandum dated 29.08.2016



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issued by MoEF & CC, it is submitted that Hon'ble NGT vide order dated 06.09.2021 appointed a Joint Committee consists of (1) a Senior Scientist from MoEF&CC; (2) a Senior Scientist from Central Pollution Control Board, Integrated Regional Office, Bangalore, (3) a Senior Scientist from Karnataka State Pollution Control Board and (4) a Senior Scientist from Indian Institute of Science, Bangalore to inspect the unit in question and submit a factual as well as action taken report, if there is any violation found. Copy of Hon'ble NGT Order dated 06.09.2021 is appended as **Annexure III**. In compliance with the above directions of Hon'ble NGT, the Karnataka State Pollution Control Board being the nodal agency in the matter constituted the Joint Committee vide Memorandum dated 12.11.2021. Copy of Memorandum is appended as **Annexure IV**.

- (i) The Joint Committee visited the site on 18.11.2021 to ascertain whether the unit had committed any violation of environmental laws in establishing and running the unit without obtaining necessary permission and in violation of the direction issued by the Principal Bench in O.A No. 654 of 2019. Copy of Hon'ble NGT Order dated 26.09.2019 is appended as **Annexure V**.
- (ii) The TSDF facility falls under the classification of "Large Size Landfill" which has got area more than 20 hectares. The Joint committee made observations w.r.t the compliance of Location Criteria as specified in the "Criteria for Hazardous Waste Landfills" published by CPCB vide Series HAZWAMS/17/2000-01. It stipulates that, "**Habitation:** Landfill shall be at least 500 M from a notified habituated area and a Zone of 500 m around a landfill boundary should be declared a no-development buffer zone after landfill location is finalized."




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- (iii) The Joint Committee observed Compliance of Location Criteria by the TSDF in terms of distance of location of facilities from Lake/Pond, River, Flood Plain, Highway, Habitation, Public parks, Critical Habitat Area, Wetlands, Airport Zone, Water supply well, Coastal Regulation Zone, Ground Water Table Level. However, 500 meter around the landfill boundary is not declared as non-development buffer zone after landfill location finalization till date. This landfill is developed within the KIADB Industrial Area, Dobbaspet. The TSDF site is complying with the location criteria except notification of no development buffer zone.
- (c) With regard to issue raised on violation of the Notification No. FEE 215 ENV 2000 dated 18.11.2003 known as Tippagondanahalli, the Joint Committee observed that the Central Government in exercise of the powers conferred under section 23 of the Environment (Protection) Act, 1986 have delegated the power to give direction vested with them under section 5 of the said Act to the State Government of Karnataka vide Notification No. S.O. 152 (E), dated 10.02.1988. The State Government of Karnataka in exercise of the aforementioned power to give direction under section 5 of the Environment (Protection) Act, 1986, issued Notification No. FEE 215 ENV 2000, dated 18.11.2003 (**Annexure-VI**), with a view to protect the catchment area of Tippagondanahalli Reservoir to prevent any activity that would lead to contamination of the reservoir.
- (i) The aforementioned Notification dated 18.11.2003 categorized the Tippagondanahalli Reservoir catchment area in to Four Zones based on vicinity and sensitivity comprising of areas specified in column (2) of the Schedule falling under the corresponding zone specified in column (1) thereof and also specify the nature of restricted or




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regulated activities in these areas in column (3) and the Authorities responsible for regulating the activities in column (4). The TSDF falls within Zone-I. The Schedule to the aforementioned notification in respect of Zone -1 is given below.

| Zone | Area covered | Nature of restricted / regulated activities | Authorities responsible for regulation |
|--------|--|---|--|
| (1) | (2) | (3) | (4) |
| Zone-1 | Entire Tippagondan ahalli Reservoir (TGR) catchment area specified in annexure to this Notification. | <p>a. Regulation and checking of over exploitation of ground water</p> <p>b. No fresh leases or license for mining, quarrying and stone crushers shall be granted</p> <p>c. No person shall dispose solid as well as liquid waste in this area without scientific processing.</p> | <p>Director, Mines and Geology Department</p> <p>1. Department of Urban Development</p> <p>2. Bangalore Water Supply and Sewerage Board.</p> <p>3. Nelamangala Planning Authority.</p> |



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| | | | |
|--|--|---|---|
| | | d. To ensure adoption of rainwater harvesting systems in all the new and existing buildings, within six months from the date of issue of this order | |
| | | e. To promote organic farming including bio-Fertilizer and bio-pesticide. | Secretary, Department of Agriculture / Horticulture |

It is noted that as per above schedule, no mining, quarrying and stone crushing activities are being carrying out in the TSDF and hence the establishment is not in violation of Tippagondanahalli Reservoir (TGR) catchment area Notification.

- (d) It is hereby, submitted that, in compliance to Order of Hon'ble NGT dated 26.09.2019 in Original Application No.654 of 2019, M/s Karnataka Waste Management Project, (A Division of Ramky Enviro Engineers Ltd.,) submitted the application for grant of EC (amendment) for the project in question in prescribed format within the stipulated time i.e. two months from the date of judgment for both Landfill and Incinerator.



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- (i) The application for EC came up for consideration before the Expert Appraisal Committee – Infra-2 ('EAC') in its 48th Meeting dated 28-29 January, 2020 conducted by MoEF & CC. EAC considered the application in the background of the entire chronology of event in relation to project in question.
- (ii) In the minutes of said meeting dated 28-29 January, 2020, it was recorded that the EAC noticed that EC for setting up the incinerator at TSDf, Dobaspet, Bangalore by M/s. Ramky Enviro Engineers Ltd., has been granted by MoEF&CC vide letter dated 19.09.2014, wherein it was clearly mentioned that the proposal of project involved setting of incinerator facility within the existing TSDf of KWMP to dispose the Incinerable waste in scientific manner so that the facility becomes Integrated Common Hazardous Waste Management Facility (ICHWMF). Further, the EAC also expressed its view that earlier, while granting the Environmental Clearance, the Ministry had endorsed the existence of the landfill site along with the proposal of incinerator.

4. That averments made in Para 1 & 2 of the Application refers to brief description of parties and invites no comments from this answering Respondent.
5. That averments made in Para 3 of the Application refers to issues raised by the applicant with regard to ICHWTSDf operating without obtaining prior EC, ICHWTSDf operating in violation of siting criteria of CPCB and MoEF&CC, Violation of TGR Notification and siting criteria guidelines for TSDf issued by KSPCB, Orders of Hon'ble NGT in O.A No 654 of 2019 vide order dated 26.09.2019 directing the Project Proponent to obtain the requisite EC.

In this regard, this answering Respondent wants to reiterate the comments specified in **Para 3** above.




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It is submitted that, with regard to siting of TSDF by KSPCB, initially two sites i.e. one in Siddalaghatta taluk in Kolar district and the other in Dabaspet, Bangalore Rural District were short listed by the KSPCB for setting up TSDF. Finally, Dabaspet site was found more suitable and identified for setting up TSDF to cater the need of the entire state. The KIADB acquired land for TSDF site. The Dabaspet site was notified for the TSDF purpose by the Government of Karnataka on 21.02.2003.

6. That averments made in Para 4 & 5 of the Application refers to brief background and past litigation concerning ICHWTSDF, therefore, invites no comments from this answering Respondent.
7. That averments made in Para 6 of the Application refers to Directions passed by the Hon'ble Tribunal in O.A No 654 of 2019. Hon'ble Tribunal directed that, "7. *In view of above, while we do not interfere with the functioning of the TSDF, we direct that the TSDF must comply with the law and the requisite EC may be obtained. The project proponent may apply for EC within two months. The Appellate Authority may deal with the appeal said to be pending for about three years expeditiously in accordance with law.*
The application is disposed of "

- (i) In view of the directions, M/s Karnataka Waste Management Project (KWMP) (A Division of Ramky Enviro Engineers Ltd.) has submitted the application for grant of EC (amendment) for the project in question in prescribed format within the stipulated time i.e. two months from the date of judgment for both Landfill and Incinerator (**ANNEXURE – VII**).
- (ii) It is submitted that the above application for Environmental Clearance (EC) came up for consideration before the Expert Appraisal Committee – Infra -2 ('EAC') in its 48th Meeting dated 28-29 January, 2020. The proposal regarding




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the application for EC was considered at Agenda Item No.48.4.2. The EAC has considered the application in the background of the entire chronology of event in relation to project in question.

- (iii) In the minutes of said meeting, it was noted that the EAC noticed that EC for setting up the incinerator at TSDF, Dobaspet, Bangalore by M/s. Ramky Enviro Engineers Ltd., has been granted by MoEF&CC vide letter dated 19.09.2014, wherein it was clearly mentioned that the proposal of project involved setting of incinerator facility within the existing TSDF of KWMP to dispose the Incinerable waste in scientific manner so that the facility becomes Integrated Common Hazardous Waste Management Facility (ICHWMF). The relevant part of minutes of meeting dated 28-29 January, 2020 is enclosed as **ANNEXURE-I**.
- (iv) That the EAC has clearly expressed its opinion that while granting the said environmental clearance on 19.09.2014, the Ministry has endorsed the existence of the landfill site along with the proposal of incinerator as the project proponent has not proposed any expansion of the existing facility.
- (v) However, in the concluding part, the EAC has opined that the project proponent may approach the Hon'ble NGT for seeking clarification on further requirement of EC in view of the EC granted to the project proponent vide letter dated 19.09.2014 and deferred the proposal. The proposal shall be reconsidered after the above details are addressed and submitted.

8. That averments made in Para 7 of the Application refers to appeal before Hon'ble Supreme Court invites no comments from this answering Respondent.
9. That averments made in Para 8 (a) to (f) of the Application refers to issues raised by the applicant with regard to ICHWTSDF operating without obtaining prior EC, Orders of Hon'ble NGT in O.A No 654 of 2019 vide order dated 26.09.2019 directing the



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Project Proponent to obtain the requisite EC, ICHWTSDF operating in violation of siting criteria of CPCB and MoEF&CC.

In this regard this answering Respondent wants to reiterate the comments specified in **Para 3** above.

10. That averments made in Para 8 (g) of the Application refers to issues raised by the applicant with regard to vicinity of two villages i.e. Thimmanayakanhalli situated 200 meters from the unit and Pemmanahalli village situated 150 meters from the unit. In this regard, it is submitted that M/s KWMP has been established in 93.18 acres within the KIADB Industrial Area, Dobbaspet, Bangalore Rural Dist. This land is acquired by the KIADB and handed over to the operator of the TSDF i.e. M/s Ramky Enviro Engineers Ltd. consortium.

- (i) The TSDF site located about 1 Km away from the National Highway (NH-4) i.e. Bangalore-Pune Highway and NH 207 (Doddaballapura road) is passing adjacent to the boundary of the TSDF premises. The TSDF is surrounded by industrial plots and industries on three sides and private open lands and Thimmanayakanahalli village on Northern side. There are different kinds of industries established and operating around the TSDF site viz., Bulk drug and Pharmaceutical, Iron & Steel Foundries, Electroplating, e-waste dismantling & recycling, Biomedical Waste treatment & disposal facility (incinerator), Tyre pyrolysis, Aluminium, Wind power blades production unit etc.
- (ii) The industrial area is provided with normal open storm water drains, which by natural course may reach downstream lakes in case of heavy rain. The nearby water bodies are as follow:
 - a) Pemmanahalli Tank – 800 meters on upstream
 - b) Dabaspeta lake– 750 meters on upstream
 - c) Nidavanda Lake – 1 km
 - d) Lakkur Lake – 780 meters




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11. That averments made in Para 8(h) of the Application refers to CPCB guidance document “Criteria for Hazardous Waste Landfill” and MoEF’s OM dated 29.08.2016, invites no comments from this answering Respondent.
12. That averments made in Para 8 (i) to 8 (k) of the Application refers to issues raised by the applicant with regard to violation of TGR Notification. In this regard this answering Respondent wants to reiterate the comments specified in Para 3(c) above.
13. That averments made in Para 8 (l) to 8 (n) of the Application refers to issues raised by the applicant with regard to ICHWTSDF operating in violation of the Hon’ble NGT Order dated 26.09.2019 in the matter of O.A 654 of 2019. In this regard, this answering Respondent wants to reiterate the comments specified in Para 3(d) above.
14. That the averments with respect to Para 9 A to E under the heading ‘Grounds’, this answering respondent wants to reiterate the comments mentioned in Para 3 above.
15. That the averments with respect to 9 F to H under the heading ‘Grounds’ requires no comments from this answering Respondent.
16. That the averments with respect to 9 I under the heading ‘Grounds’, it is submitted that no significant non-compliance on the Environmental monitoring data of ambient air quality, ground water quality, etc. and no major violations as claimed by the applicant was observed by the joint committee during the inspection conducted on 18.11.2021. But there is always scope to further improve the system. In view of the facts stated above, the committee did not assess any environmental compensation.



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17. That the averments with respect to 9 J to R under the heading 'Grounds' requires no comments from this answering Respondent.

PRAYER

In light of above submissions, it is respectfully prayed that this answering Respondent No. 6, Central Pollution Control Board humbly submits as under:

- i. The Joint Committee Report prepared has been filed by KSPCB and may be considered in compliance with the Orders of the Hon'ble Tribunal dated 06.09.2021 in O.A No 196 of 2021.
- ii. CPCB shall comply with any further directions of the Hon'ble NGT in the matter.



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F.No.10-65/2012-IA.III
Government of India
Ministry of Environment, Forests & Climate Change
(IA-III Division)

Vayu Wing, 3rd Floor,
Indira Paryavaran Bhawan,
Jor Bag Road, Aliganj,
New Delhi - 110 003.

Dated: 19th September, 2014

To
M/s Ramky Enviro Engineers Ltd.,
Ramky House, Site No. 25-30,
2nd Cross, Raghavendranagar,
Hennur Ring Road, Kalyan Nagar (Post),
Bengaluru - 560 043, Karnataka

Subject: Environmental Clearance for setting up of incinerator at TSDF, Dobaspet, Bangalore, Karnataka by M/s Ramky Enviro Engineers Ltd. -Reg.

This has reference to your letter No. Nil dated Nil and subsequent letters dated 21.03.2013 and 29.11.2013 seeking Environmental Clearance under the Environment Impact Assessment Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the Environment Impact Assessment Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Form-I, EIA, EMP, and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 13th - 14th May, 2013, 20th - 23rd November, 2013 and 19th - 21st May, 2014.

2. It is interalia, noted that the proposal involves setting up of incinerator facility of capacity 5.5 Million Kcal/Hr(1000 - 1500 kg/hr) within the existing Hazardous Waste Treatment and Disposal Facility of Karnataka Waste Management Project (KWMP) at Sy.No.7, 8, 9, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84 and 85 at Dobaspet, Bangalore Rural District, Karnataka State to dispose the Incinerable waste of the industries in a scientific manner, so that the existing TSDF will become an Integrated Common Hazardous Waste Management Facility (ICHWMF). Total Area of CHWTSDF is 93.5 Acres (37.83 Ha) and in which the proposed incinerator area is 0.33 Acres (0.13 Ha). Total water required for incinerator facility is 108 KLD. The wastewater generated from the proposed unit will be recycled and zero discharge will be maintained. The incineration will be provided with a stack meeting MOEF guidelines (minimum 30m), spray dryer, multi-cylone, bag house, wet scrubber for control of air pollutants. Mitigation measures are proposed to minimize the adverse impacts if any due to the proposed activity in the form of EMP. The budget proposed for implementation of EMP measures is Rs. 5.0 Crores is capital cost and Rs. 75 Lakhs /per annum is recurring cost. The capital cost the proposed project is Rs. 28 Crores.

3. As estimated by Karnataka State Pollution Control Board (KSPCB) vide letter No. PCB/SEO/WM/12-13/936 dated 21.09.2012, presently out of

30362.76 MT of Incinerable waste generated from the industries those who have MoU with TSDF, about 14000 to 15000 MT is being disposed by captive and other incinerators. Remaining quantity of 15000 to 16000 MT of incinerable waste needs to be disposed by means of hazardous waste incinerator in a scientific way.

4. The above proposal was considered by the EAC in its meetings held on 18th - 19th October, 2012 and 13th - 14th May, 2013. The EAC exempted the Public Hearing for the project, since it is located in notified industrial area. The Committee noted that a representation was received by the Ministry and also by the members of the Committee from Shri Jagadish regarding the proposal of M/s Ramky Enviro Engineers Ltd, (REEL) Bangalore. It has been mentioned by the complainant that MoEF has already accorded Environmental Clearance (EC) to M/s Bangalore Eco Park Pvt. Ltd. (BEPPL) for common incineration facility at Dobaspet, which is at a distance of ½ km from the proposed facility of M/s Ramky Enviro Engineers Ltd. It has also been mentioned in the complaint that Karnataka State Pollution Control Board, Bangalore has already provided consent to establish to BEPPL. It has been mentioned that the KSPCB has accorded the consent to establish and consent to operate to REEL only for land dumping facility.

5. The Committee advised Ministry to communicate with the KSPCB for their comments with respect to the direction/ guidelines of Hon'ble High Court, requirement of the facilities, whether both the facilities are required or only one facility is required and which one has to be provided the clearance in case only one facility is to be located. The Ministry sent a communication to KSPCB and it has been informed by KSPCB vide letter No PCB/WMC/SEO/63693/2013-14/854 dated 28.02.2014 that there is no such guidelines/ direction on number of facilities to be accommodated in a specific area.

6. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project. Accordingly, the Ministry hereby accords necessary Environment Clearance for the above project as per the provisions of Environment Impact Assessment Notification, 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

A. SPECIFIC CONDITIONS:

- (i) "Consent for Establishment" shall be obtained from State Pollution Control Committee under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) The Karnataka State Pollution Control Board (KSPCB) will ensure that the two facilities i.e. Ramky Enviro Limited and Eco Park Limited, should not release pollutants simultaneously in the ambient environment more than the load beyond permissible limit for that area.

- (iii) Guidelines of CPCB for Common Hazardous Wastes Incinerators shall be followed.
- (iv) Necessary provision shall be made for fire fighting facilities within the complex.
- (v) On line monitoring shall be provided to monitor the air pollutants. The details of monitoring shall be recorded and be submitted along with the six monthly monitoring report.
- (vi) Transportation and handling of Hazardous Wastes shall be as per the Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008
- (vii) An on Site Emergency Management Plan shall be prepared and implemented.
- (viii) Periodical air quality monitoring in and around the site shall be carried out.
- (ix) Use only low sulphur diesel. No other oil shall be used.
- (x) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (xi) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.
- (xii) Project proponent should develop green belt all along the periphery of the site with plant species that are significant and used for the pollution abatement.

B. GENERAL CONDITIONS:

- (i) The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (ii) Full support shall be extended to the officers of this Ministry/ Regional Office at Bangaluru by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (iii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bengaluru regarding the implementation of the stipulated conditions.
- (iv) Ministry of Environment, Forests & Climate Change or any other competent authority may stipulate any additional conditions or

modify the existing ones, if necessary in the interest of environment and the same shall be complied with.

- (v) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (vi) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forests & Climate Change.
- (vii) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (viii) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been made received while processing the proposal.
- (ix) Safety provision such as bus bays, service roads intersection improvement etc., will be carried out by the project proponent. The project proponent shall provide adequate facilities as per IRC norms/guidelines.
- (x) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

7. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 2006, including the amendments and rules made thereafter.

8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

9. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forests & Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bengaluru.

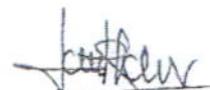
10. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

11. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

12. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

13. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

14. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.



(Lalit Kapur)
Director (IA-III)

Copy to:

- (1) The Secretary, Department of Environment, Government of Karnataka, Bangalore.
- (2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110 032.
- (3) The Member Secretary, Karnataka Coastal Zone Management Authority & Director, Environment Technical Cell, Department of Forests, Ecology and Environment, Govt. of Karnataka.
- (4) The Member Secretary, Karnataka State Pollution Control Board, "Parisara Bhavan, 4th & 5th Floor, # 49, Church Street, Bangalore-560 001.
- (5) The CCF, Regional Office, Ministry of Environment, Forests and Climate Change (SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bangalore - 560 034.
- (6) IA - Division, Monitoring Cell, MOEF&CC, New Delhi - 110003.
- (7) Guard file.

(Lalit Kapur)
Director (IA-III)

MINUTES OF THE 48th MEETING OF THE EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD ON 28-29 JANUARY, 2020

Venue: Conference Hall (Indus), Jal Wing, Ground Floor, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 3

Day- 1: Tuesday, 28th January, 2020

Time: 10:30 AM

48.1 Opening Remarks of the Chairman**48.2 Confirmation of the Minutes of the 47th Meeting of the EAC (Infra-2) held on 26-27 December, 2019 at New Delhi.**

The minutes of the 47th Meeting of the EAC (Infra-2) held on 26-27 December, 2019, was confirmed.

48.3 Consideration of Proposals**Agenda item No. 48.3.1.****Construction of new Terminal building (T3) & allied works at Biju Patnaik International Airport (B.P.I), Bhubaneswar by M/s Airports Authority of India - Terms of Reference**

(IA/OR/MIS/131282/2019; F.No. 10-6/2020-IA-III)

48.3.1.1. The project proponent and the accredited Consultant M/s Gaurang Environmental Solutions Pvt. Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) The proposal is for grant of Terms of Reference (ToR) proposed construction of New Domestic Terminal (T3) Building & allied works {Separate service block, landscaping, Sewage treatment plant (STP), Under Ground (UG) water storage tanks & PHE works} at BPI Airport, Bhubaneswar by Airports Authority of India, BPI Airport, Bhubaneswar. The proposed expansion project is located at Biju Patnaik International Airport (BPI), Bhubaneswar, District Khordha, Odisha.
- (ii) The project/activity has applied under category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006 and its amendments. The Aerodrome Reference Point (ARP) Coordinates of the Aerodrome (AD) are Latitude 20°14'48" N and Longitude 85°49'07" E.
- (iii) Environmental Clearance had been obtained for existing terminal building vide letter F.No. 10-17/2008-IA.III dated 07.05.2008.
- (iv) The total airport area is 340.73 Ha and the area earmarked for the proposed expansion works is 10.085 Ha (service block: 1.24 Ha) within the existing airport premises. There is no additional requirement of land for the proposed developmental works.
- (v) The details of proposed new terminal building are as below. The plot area for proposed expansion is 1,00,850 sqm. (10.085 ha). Total built up area of the new terminal building will be 64,650 sqm. The number of floors will be Ground, Mezzanine & First. The height of terminal building will be 34.5 m. The green area will be approx. 12850 sqm. Details of other built up area are as under:

| Particular | Detail |
|--------------------|--|
| Service Block Area | Service Block: 2550 sqm. Pump Room: 2550 sqm. Basement for Plumbing Tanks & substation area: 2850 sqm Ground Floor for Electrical Sub: 1205 sqm First Floor staff office area: 595 sqm |

- (vi) AAI is following GRIHA (Green Rating for Integrated Habitat Assessment) system for sustainable and environment friendly design. The new terminal building will be constructed as per the ECBC

(Energy Conservation Building Code) norms and designed to achieve the 4 star rating under GRIHA V-2015. Solar photo voltaic (PV) plant of capacity 500 KWp shall also be installed.

- (vii) During operation phase, net fresh water requirement is ~ 968 KLD and it shall be sourced from local municipal sources /ground water after obtaining due permission from CGWA. Waste water generated from operations will be treated in proposed STP and treated water will be reused for landscaping, sanitation & flushing etc. within airport premises.
- (viii) The total power requirement is 3200 kW (4000 kVA) to be sourced from 33/0.433 KV of proposed Substation and 4 Nos. 2000 kVA; (3W +1S) of DG Sets will used as backup source. Project Site elevation 138 ft. or about 42 metres above MSL. No tree cutting is proposed. Only site clearing will be done.
- (ix) ESZ boundary of Chandaka Dampara Wildlife Sanctuary is at ~ 1.5 km towards NNW direction. Following protected & reserve forests fall in the study area i.e. 10 km radius of the project site: Ghatikia P.F. ~3.7 km NW, Bharatpur P.F.~4.2 km NNW, Nuapalli P.F. ~7.0 km NNW, Bharatpur P.F. ~8.3 km NNW, Mendhashala P.F. ~9.0 km WNW.
- (x) There are no natural water bodies or courses within the core zone. Following water bodies fall in the study area i.e. 10 km radius of the project site: Gangua Nala ~4.3 km SE, Daya River ~5.1 km SSE, Bhargabi River ~6.3 km ESE, Khushabdra Nadi ~9.5 km ENE.
- (xi) Following protected monuments of cultural importance as per Odisha State Archaeology, Govt. of Odisha, also fall within the study area: Yameshwar Temple ~2.0 km SE, Mohini Temple ~2.3 km ESE, Dakara Bhivisanesvara Temple ~2.3 km ESE, Lingaraja Temple ~2.4 ESE, Svarnajalesvara Temple ~2.6 km SE, Parsuramesvara Temple ~2.7 km ESE, Rajrani Temple ~3.1 km ESE, Sukhmesvara Temple ~ 3.2 km SE, Udaygiri & Khandagiri Caves ~3.4 km WNW, Panchu Pandava Caves ~3.7 km East, Brahmeshwar temple ~4.0 km ESE, Dhauligiri Shanti Stupa ~6.8 km SSE, Ashoka Rock edicts ~7.3 km SSW.
- (xii) Total Cost of the project is Rs. 913.08 Crore.
- (xiii) No litigation is pending against the project.
- (xiv) Employment potential: During the project operation stage, for the purposes of day-today professional and maintenance works, about 3100 nos. staff is envisaged.
- (xv) Benefits of the project: The project will boost economic growth benefiting the whole region through the generation of both direct and indirect economic value. The construction and operation of new terminal building will generate direct employment opportunity, indirectly contributed jobs through supply chain, enhance induced impact through tourism. The project will also lead to development in the nearby areas through proposed CER activities

48.3.1.2. During deliberations, the EAC noted the following:-

- (i) The proposal is for grant of Terms of Reference to the project "Construction of new Terminal building (T3) & allied works" at Biju Patnaik International Airport (B.P.I), Bhubaneswar by M/s Airports Authority of India.
- (ii) The project/activity is covered under category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) Earlier, Environmental Clearance for construction of terminal building & allied works (peak hour passenger capacity of 800) was granted by MoEF&CC, vide letter F.No. 10-17/2008-IA.III dated 07.05.2008.

48.3.1.3. *The EAC was informed that Biju Patnaik International (BPI) Airport (IATA: BBI, ICAO: VEBS) located in Bhubaneswar is the only main international airport in the state of Odisha & is well connected to all the major cities of India through regular flights. BPI Airport has two active scheduled passenger terminals i.e. Terminals 1 and 2 for domestic and international passengers respectively. During the*

year 2017-18, Bhubaneswar Airport handled 3.25 million passengers, becoming the 15th busiest airports in India. The existing traffic trend at the BPI airport exceeds its terminal capacity of 2.5 million, therefore the AAI has proposed new Domestic Terminal (T3) Building & allied works to meet the requirements of increased passenger traffic. The area earmarked for the proposed expansion works is 10.085 Ha & for service block is 1.24 Ha within the existing airport premises. There is no additional requirement of land for the proposed developmental works.

Consent to Operate for the Existing project was granted by State Pollution Control Board, Odisha vide Consent order no. 2800 dated 05.04.2016 and was valid up to 31.03.2019. The application for renewal of consent to operate was submitted to SPCB, Odisha on 23.03.2019 is under process.

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

- (i) Importance and benefits of the project.
- (ii) Submit status of clearance from National Board for Wild Life (NBWL).
- (iii) Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearances issued to the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.
- (iv) The EIA will discuss the compliance to the Pollution Control Laws and the notifications under the E.P. Act 1986 and get a certified report from the Pollution Control Board.
- (v) The E.I.A. will give a justification for land requirements along with a comparison to the guidelines established by the Airport Authority of India/Ministry of Civil Aviation in this regards.
- (vi) A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet (including all eco-sensitive areas and environmentally sensitive places).
- (vii) Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- (viii) Cost of project and time of completion.
- (ix) Submit Fire NOC for existing project from concerned Department.
- (x) The impacts of demolition and the activities related thereto shall be examined and a management plan drawn up to conform to the Construction and Demolition rules under the E.P. Act, 1986.
- (xi) The report shall examine the details of excavations, its impacts and the impacts of transport of excavated material. A detailed Management Plan shall be suggested.
- (xii) Detail plan for 'deplane waste' and impact of noise on the sensitive environment specially the wildlife sanctuaries and national parks.
- (xiii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (xiv) The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.

- (xv) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xvi) A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
- (xvii) Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
- (xviii) Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modeling and noise modeling shall be carried out for the emissions from various types of aircraft.
- (xix) The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.
- (xx) The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.
- (xxi) The management plan will include compliance to the provisions of the MSW Rules, 2016.
- (xxii) A detailed management plan, drawn up in consultation with the competent District Authorities, shall be submitted for the regulation of unauthorized development and encroachments within a 05 Km radians of the Airport.
- (xxiii) The E.I.A. will also examine the impacts of construction and operation of the proposed STP and draw up a detailed plan for management including that for odour control.
- (xxiv) Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.
- (xxv) Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA.
- (xxvi) Noise monitoring shall be carried out in the funnel area of flight path.
- (xxvii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xxviii) Ground water abstraction and rain water recharge shall be as prescribed by the CGWA. A clearance/permission of the CGWA shall be obtained in this regards.
- (xxix) Details of fuel tank farm and its risk assessment.
- (xxx) The E.I.A. should present details on the compliance of the project to the Fly Ash notification issued under the E.P. Act of 1986.
- (xxxi) The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios.
 - (a) Trash collected in flight and disposed at the Airport including the segregation mechanism.
 - (b) Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - (c) Maintenance and workshop wastes.
 - (d) Wastes arising out of eateries and shops situated within the airport.
- (xxxii) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any

notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

- (xxxiii) Submit an affidavit signed by the Board of Directors, that there is no violation and no part of the project has been implemented without Environmental Clearance.
- (xxxiv) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- (xxxv) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 01.05.2018 shall be prepared and submitted along with EIA Report.
- (xxxvi) A tabular chart with index for point wise compliance of above ToR.

It was recommended that 'ToR' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA/ EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

Agenda item No. 48.3.2.

Development of Greenfield 'Jewar International Airport' Phase-I & II, Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation, Government of Uttar Pradesh - Reconsideration for Environmental Clearance

(IA/UP/MIS/74694/2018; F.No. 10-31/2018-IA-III)

48.3.2.1. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project Development of Greenfield 'Jewar International Airport' Phase-I & II, Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation, Government of Uttar Pradesh.
- (ii) The project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central Level by sectoral EAC.
- (iii) ToR was granted by MoEFCC vide letter F.No.10-31/2018-IA-III dated 12.06. 2018.
- (iv) Public hearing was conducted on 27.11. 2018 at Primary School, Village Kishorepur, Jewar.
- (v) The proposal was earlier considered by the EAC (Infra-2) in its 42nd meeting held during 10-12 July, 2019, wherein the EAC observed that the EIA/EMP report submitted by the project proponent does not cover the all environmental aspect of the proposed airport. After detailed deliberation EAC asked the project proponent to submit additional details. Project Proponent has submitted the additional information on Ministry's website on 04.01.2020.

48.3.2.2. *The project proponent has submitted point wise reply to the queries raised by the EAC in its previous meeting held during 10-12 July, 2019. The details are as follows:*

(i) Status of permission for tree cutting from Forest Department.

Forest Department has granted the permission for felling of 11,460 trees standing within the proposed site vide letter no. 2307/22-1 dated 10.12.2019 and 2342/22-1 dated 12.12.2019. Total 11,460 trees need to be felled/ shifted due to the project. The details of trees are as follows:

| S. No. | Village Name | Number of Trees need to cut | Number of Trees need to shift | Total |
|--------|--------------|-----------------------------|-------------------------------|--------------|
| 1. | Ranhera | 4659 | 61 | 4720 |
| 2. | Rohi | 3204 | 12 | 3216 |
| 3. | Parohi | 153 | 0 | 153 |
| 4. | Kishorepur | 554 | 06 | 560 |
| 5. | Dayantpur | 2680 | 99 | 2779 |
| 6. | Banwaribans | 32 | 0 | 32 |
| | Total | 11282 | 178 | 11460 |

(ii) **Afforestation plan for plantation.**

Afforestation Action Plan has been prepared by DFO Gautam Buddha Nagar as follows:

| S. No. | No. of Trees to be planted | Proposed Location | Proposed Area (ha) | Cost for Afforestation (Rs.) | Period |
|--------------|----------------------------|--|--------------------|------------------------------|---------------------------|
| 1 | 60,000 | Proposed green belt of Sector- 22D and Sector 29-30 | 30 | 1,42,63,000 | 2019-20 to 2022-23 |
| 2 | 52,820 | 11 ha in Murshadpur forest block and 15.5 ha in Gulistanpur forest block | 26.5 | 1,21,32,718 | |
| Total | 1,12,820 | | 56.5 | 2,63,95,718 | 2019-20 to 2022-23 |

The cost for Compensatory Afforestation is 10 times i.e. Rs. 2,63,95,718 has been already transferred to Forest Department vide cheque no. 275502 dated 13.12.2019 and also the tree feeling cost has been given to the Forest Department vide cheque no. 275503 dated 13.12.2019

(iii) **Restoration plan for water bodies including channels.**

Restoration plan for water bodies including channels present and proposed scenario - wise is as follows:

| Name of drain | Present Scenario | Proposed Scenario |
|-----------------------------------|--|--|
| Pathwaya Nala | Pathwaya Nala, running north-south at east end needs diversion for the development of airport. | Pathwaya Nala is 74.4 km in length. This is a natural drain. From 49.0 km to 54.4 km of this drain would get affected as this stretch falls within proposed airport site. Total cost of re-establishment has been proposed as Rs.2479.35 lakhs. |
| Drainage of Bajauta Distributory | Bajauta Distributory is 23 km in length having peak discharge of 52 cumec. | From 0 km to 0.450 km of this distributor need to be diverted since it is falling within proposed air port site. Hence, by providing head regulator and cross regulator the diversion of Bajauta Distributory has been proposed for about 1km. |
| Dayantpur Minor | Dayantpur Minor is 3.1 km in length having peak discharge of 23 cumec. | From 1.765 km to 3.100 km of this drain is falling within the project site having command area in 340 ha of within proposed boundary of Jewar Airport. Hence, Dayantpur Minor has been handed over for the development of Airport Project. Thus, the length of Dayantpur Minor will be curtailed from 0.000 km to 1.765 km and re-establishment of this drain has been proposed. |
| Drainage of the Kishorepur Minor: | Kishorepur minor, running from NW to SE is cutting the site diagonally. | Kishorepur Minor is 4.8 km in length having peak discharge of 5.5 cumec and Cultural Command Area of 610 ha. Since the drain entirely falling within proposed project site, it has been handed over for the project. Head to tail of Kishorepur Minor and its command area is falling within project site, hence it has been handed over for the project. |

(iv) Conservation plan for Birds and Fauna in consultation with Wildlife Institute of India (WII).

Wildlife Institute of India (WII) has been engaged for development of Conservation Plan for Birds and fauna. Interim Report and Inception Report prepared by WII has been submitted. The Final Report in this regard is expected by end of July, 2020. Proponent will ensure the implementation of WII's recommendation throughout the project cycle during preconstruction, construction and operational stages.

The present document summarizes work done between 02.11.2019 – 15.12.2019 including field surveys and lab-based work. A total of six species of mammals were observed in the proposed GJIA site as well as within its 10 km buffer. A total of 60 species of bird species were recorded during the present survey. A total of 28 independent groups of Blackbuck were observed during the present survey. In the proposed Greenfield Jewar International Airport (GJIA) site, they can be observed on the eastward of the Jewar-Bulandshahar road towards the south-east corner. A total of 21 independent groups of Nilgai were observed during the present survey. During survey, Golden Jackal (*Canis aureus*) on two separate occasions comprising two individuals on each occasion were observed. Jungle Cat (*Felis chaus*) was observed twice as a single individual in the proposed GJIA site. In total, 64 sarus cranes in 21 independent observations were observed across the landscape during the survey. Egyptian vulture (*Neophron percnopterus*) is an endangered species that was recorded at a few places on four different occasions during the survey. A total of 24 independent observations of Indian Peafowl were made across the GJIA landscape. A total of 99 perennial water bodies were recorded across the GJIA landscape

(v) Study on filling of 14 ponds and mitigation measures especially with respect to water conservation.

14 ponds (Total Area: 3.85 ha) located within proposed site are likely to be getting affected due to the proposed development. The details are as follows:

| Details of ponds located within proposed Jewar International Airport | | | | | | |
|--|--------------------|---------------|---------------|----------------------|-------------|---|
| S. No. | Area of pond (sqm) | Latitude | Longitude | Revenue Village Name | Survey No/s | Remarks |
| 1 | 833.76 | 28°10'54.78"N | 77°34'33.79"E | Dayanatpur | 1014 | Pvt. |
| 2 | 4002.81 | 28°10'42.82"N | 77°34'44.01"E | Dayanatpur | 1054,1055 | 1054 (Pvt.)/1055 (Pvt.) |
| 3 | 1473.32 | 28°10'48.76"N | 77°35'40.95"E | Dayanatpur | 1164,1210 | 1164 (Govt.-Khad Gadde), 1210 (Govt.- Abadi) |
| 4 | 932.299 | 28°10'36.94"N | 77°35'33.45"E | Dayanatpur | 1267 | Pvt. |
| 5 | 2021.32 | 28°10'31.60"N | 77°35'35.80"E | Dayanatpur | 1258 | 1258 (Govt.- Graveyard) |
| 6 | 503.676 | 28°10'28.72"N | 77°35'29.04"E | Dayanatpur | 1827 | Pvt. |
| 7 | 8766.33 | 28°9'56.76"N | 77°35'59.51"E | Kishorpur | 162 | 162 (Govt.-Pond) |
| 8 | 619.148 | 28°10'44.89"N | 77°36'11.35"E | Rohi | 96 | Pvt. |
| 9 | 5357.07 | 28°10'50.97"N | 77°36'31.31"E | Rohi | 46, 48, 49 | 46 (Pvt.), 48 (Pvt. & Govt.), 49 (Pvt. & Govt.) |
| 10 | 1800.63 | 28°09'59.63"N | 77°37'24.88"E | Rohi | 598 | Govt. |
| 11 | 9463.3 | 28°10'07.24"N | 77°37'39.88"E | Rohi | 652, 651 | 652 (Govt.-Pond), 651 (Govt.-Nabin Prati) |
| 12 | 990.611 | 28°10'03.58"N | 77°37'41.01"E | Rohi | 650 | 650 (Govt.-Pond) |
| 13 | 1336.26 | 28°10'01.94"N | 77°37'43.37"E | Rohi | 969 | 969 (Govt.-Pond) |

| | | | | | | |
|-------------------------|--------|---------------|---------------|--------|-----|-------------------|
| 14 | 409.94 | 28°09'35.59"N | 77°37'47.06"E | Parohi | 336 | Private |
| Total Area (sqm) | | | | | | 38,510.474 |
| Total Area (ha) | | | | | | 3.85 |

9 Land parcels of total area **6.3370 ha** in Jewar Tehsil have been allocated by Revenue Department for creation of new pond as a mitigative action. The details are as follows:

| Land Allocated by Collector, Gautam Buddha Nagar for Creation of New Pond | | | | | |
|--|---------------------|-----------------|-------------------|-----------------|------------------|
| Number | Village Name | Land use | Survey No. | Gata No. | Area (ha) |
| 1 | Aakalpur | Barren | 239 | 297 | 1.3590 |
| 2 | Faloda Bangar | Barren | 647 | 746 Kha | 2.5630 |
| 3 | Takipur Bangar | Barren | 338 | 236 Ma | 0.0760 |
| 4 | Takipur Bangar | Barren | 338 | 237 Ma | 0.0250 |
| 5 | Takipur Bangar | Barren | 338 | 246 | 1.0050 |
| 6 | Takipur Bangar | Barren | 338 | 277 Ma | 0.2020 |
| 7 | Takipur Bangar | New Fallow Land | 336 | 236 Ma | 0.0410 |
| 8 | Takipur Bangar | New Fallow Land | 336 | 242 | 1.0120 |
| 9 | Takipur Bangar | New Fallow Land | 336 | 277 Mi | 0.0540 |
| Total Land (ha) | | | | | 6.3370 |

(vi) **Wind rose diagram for one year.**

Submitted

(vii) **Revised Corporate Environment Responsibility (CER) plan as compensatory afforestation cannot be part of CER.**

The estimated capital cost of the project is Rs. 37,540 million for Phase I and Rs. 35,370 million for Phase II. Therefore, CER (Corporate Environment Responsibility) cost is **Rs. 187.895 million** for **Phase I** and **Rs. 177.095 million** for **Phase II**. The allocated CER budget would get allocated in villages like Rampur Bangar, Nilouni, Dungarpur Rilka, Chandpur and Achheja Buzurg.

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-1** of the minutes), while considering for accord of environmental clearance:*

- (i) As proposed, Environmental Clearance is for 'Development of Greenfield 'Jewar International Airport' Phase-I & II, Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation, Government of Uttar Pradesh.
- (ii) The land acquisition / purchase shall be in conformity to the LARR Act, 2013 and any other laws and regulations governing land acquisition.
- (iii) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
- (iv) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (v) Conservation plan for Birds and Fauna in consultation with Wildlife Institute of India (WII) shall be submitted within six month from grant of this clearance and shall be implemented in letter and spirit.

- (vi) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities shall be complied with.
- (vii) Total water requirement is estimated as 17267.5 KLD, while fresh water requirement will be 3040.8 KLD. The water for the project during operation and construction phase will be drawn from Jewar distributary and Kasna STP located at Greater Noida. As proposed, no ground water shall be used in the project.
- (viii) Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- (ix) Waste water generated from the Airport will be treated in Sewage Treatment Plant of 12 MLD capacity. Treated waste water will be used for landscaping and flushing. There will be zero discharge of treated waste water from airport.
- (x) During construction and operational phase AAQ monitoring should include PM₁₀, PM_{2.5}, SO₂, NO_x, NH₃, CO, CH₄ and Benzene.
- (xi) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- (xii) Traffic Management Plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (xiii) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xiv) Top soil shall be separately stored and used in the development of green belt.
- (xv) Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter-alia cover the entire periphery of the Air Port. Plantation activity should be taken up under the expert guidance for forest department of Government of Uttar Pradesh. As far as possible monocultural plantation should be avoided.
- (xvi) The plantation species in and around Airport site should be carefully chosen to avoid bird nesting and to improve pollution control and noise control measures. Water intensive and/or invasive species should not be used for landscaping.
- (xvii) The proposed 10 times compensatory plantation need to be monitored by the Government of Uttar Pradesh so that the target of planting 1,12,820 saplings is achieved in a time bound manner, their survival rate is monitored and mortality is replenished. In case of non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree) shall also be done and maintained.
- (xviii) A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities.
- (xix) Energy conservation measures like installation of LED should be integral part of the project design and should be in place before project commissioning.

- (xx) Initiatives such as Green Infrastructure Development program, adoption of less emission intensive technologies, renewable energy program, electrical vehicles and Airport Carbon Accreditation need to be adopted to reduce its impact on climate change and Green House Gas (GHG) emissions as per environmental best practices governing Greenfield airports.
- (xxi) Provision of Electro-mechanical doors for toilets meant for disabled passengers shall be ensured. Children nursing/feeding room shall be located conveniently near arrival and departure gates.
- (xxii) The project proponent shall comply with the International Best Practices on environment management as applicable to the Airport project.
- (xxiii) The company shall draw up and implement a Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and proposed by the project proponent, an amount of Rs. **187.895 million** for **Phase I** and **INR 177.095 million** for **Phase II @0.5%** of the project cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as **Health Related Facilities** (Construction of toilets and water tank in community as part of Swachh Bharat Abhiyan, Construction of Health Centre, Refurbishment and maintenance of existing Health Centre Organizing Health camps, Organizing Special Health Camps for eye, heart and maternal health Mobile Health Clinic), **Education Related Facilities** (Refurbishment of existing schools, Strengthening of ITI at Jewar and Scholarship for student), **Solid waste Management Facilities** (Providing VATs for Municipal Solid Waste in villages, Developing MSW disposal site with management, Providing training for solid waste management to villagers), **Social Facilities** (Installation of Hand-pumps, Repair and Maintenance of Hand-pumps/deep tube wells used for drinking water, Construction and Maintenance of village roads @ 50 km/year and Providing solar light in village common areas) and **Miscellaneous Facilities** (Skill Development- basic training programmes and Creation of irrigation facilities for farmers. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.3.3.

Construction of New Integrated Terminal Building with Allied Works at Imphal International Airport, Imphal by M/s Airports Authority of India, Imphal - Reconsideration for Environmental Clearance

(IA/MN/MIS/127582/1990; F.No. 10-75/2018-IA-III)

48.3.3.1. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project "Construction of New Integrated Terminal Building with Allied Works at Imphal International Airport, Imphal by M/s Airports Authority of India, Imphal.
- (ii) The project/activity is covered under category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) Terms of Reference (ToR) was granted by MoEF&CC vide letter F.No.10-75/2018-IA-III dated 03.12.2018.
- (iv) Public Hearing was conducted on 18.11.2019 at the Changangei Community Hall (close to the site) by Manipur Pollution Control Board.

- (v) The proposal was considered by the EAC (Infra-2) in its 47th Meeting held during 26-27 December, 2019 wherein, the EAC asked the project proponent to submit additional information.
- (vi) Project Proponent has submitted the additional information on Ministry's website on 09.01.2020.

48.3.3.2. *The project proponent informed the EAC that the new terminal building and allied facilities at Imphal International Airport will be above ground. 120000 Cum earth filling quantity was worked out at preliminary stage. After approval of plans and fixing the plinth level, total earth filling quantity have been worked out as 99166 cum. 20044 cum excavated earth will be generated during excavation of new terminal building foundations, sumps and rainwater pond, etc. from the site. Same shall be used for filling at the site. Balance filling earth requirement is estimated 79122 cum, which will be procured by the contractor from approved borrow areas. Excavated earth will be temporarily stored at the site for further filling at the site. Mitigation measures will be adopted during excavation, storage and filling of earth at the site.*

The existing old passenger's terminal building at Imphal International Airport to handle 500 passengers at a time (250 arriving + 250 departing) is now insufficient and congested for handling increasing numbers of passengers. The existing terminal building at Imphal International Airport has saturated and remains congested. In view of the future traffic growth at Imphal International Airport, there is immediate requirement of new terminal building at the Imphal International Airport. New integrated terminal building has been designed for 200 international and 1000 Domestic passengers at a time with swing operations.

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-1** of the minutes), while considering for accord of environmental clearance:*

- (i) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
- (ii) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (iii) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities shall be complied with.
- (iv) Total water requirement is estimated as 814 KLD, while fresh water requirement will be 300 KLD. Water requirement will be met through rainwater ponds. As proposed, no ground water shall be used in the project.
- (v) Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- (vi) Waste water generated from the Airport will be treated in MBBR based Sewage Treatment Plant of 600 KLD capacity. Treated waste water will be used for green belt, flushing and HVAC. There will be zero discharge of treated waste water from airport.
- (vii) During construction and operational phase AAQ monitoring should include PM₁₀, PM_{2.5}, SO₂, NO_x, NH₃, CO, CH₄ and Benzene.
- (viii) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- (ix) Traffic Management Plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved

upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

- (x) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xi) No tree cutting/transplantation of existing trees has been proposed in the instant project. The landscape planning should include plantation of native species. The plantation species should be carefully chosen to avoid bird nesting and to improve pollution control and noise control measures. Water intensive and/or invasive species should not be used for landscaping. As proposed, 69,687.17 sqm (31.7% of the total area) shall be provided for green belt development and landscaping.
- (xii) A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities.
- (xiii) The company shall draw up and implement a Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and proposed by the project proponent, an amount of Rs. 3.65 Crores @0.5% of the project cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Construction of community toilets at Lamjaotongba, Langing, Taobungkhok, Changangei, Ningombam, Kadampokpi, Ghari Villages, Desilting of Ponds in Lamjaotongba, Langing, Taobungkhok, Changangei, Ningombam, Kadampokpi, Ghari villages for rain water accumulation, Solid waste collection and disposal facilities at Lamjaotongba, Langing, Taobungkhok, Changangei, Ningombam, Kadampokpi, Ghari Villages, Construction of Drainage Channels in Lamjaotongba, Langing, Taobungkhok, Changangei, Ningombam, Kadampokpi, Ghari Villages and Digital Class Room in Lamjaotongba, Langing, Taobungkhok, Changangei, Ningombam, Kadampokpi, Ghari Villages. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.3.4.

Development of Greenfield Non-Major Port at Ramayapatnam in Prakasam District of Andhra Pradesh State by M/s Government of Andhra Pradesh - Terms of Reference

(IA/AP/MIS/136641/2020; F.No. 10-8/2020-IA-III)

48.3.4.1. The project proponent and the accredited Consultant M/s Indomer Coastal Hydraulics (P) Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) The Government of Andhra Pradesh is proposing to develop a green field port at Ramayapatnam in Andhra Pradesh to meet the ever increasing cargo demand in the State. Geographical coordinates of Ramayapatnam where port is proposed are 15°02'55"N latitude and 80°02'50" E longitude. It is planned to develop the port as all-weather port with world class terminal facilities well suited to meet the present and future needs of the trades and also suitable to develop as a major port.

- (ii) The Port will have an artificial deep sea harbour along an open straight sea coast and is protected by providing northern caisson breakwater of length 2.0 km and southern rubble mound breakwater of length 4.4 km with concrete capping for the Phase – 1 development.
- (iii) The approach to the port is through a channel of 14 km in length, dredged to -15.5 m deep and equipped with night navigational facilities. The permissible fully laden draught is 12.6 m to handle Panamax size vessels of 80,000 DWT during Phase – 1 and the vessel size subsequently will be increased to 125,000 DWT to commercially carry bulk cargo of coal, ore, containers and other commodity raw materials, to and from the hinterland and overseas and also through coastal shipping. The approach channel and the turning circle would need to be dredged up to a depth required for berthing of Panamax vessels during first phase and ultimately Cape size vessels during subsequent phases. The estimated dredging quantity is about 27 m cu m for Phase – 1 development. The hydrodynamic and siltation model studies carried out for the port have revealed that about 0.4 m cu m per annum of sand would likely to be deposited in the harbour basin and port channels which require maintenance dredging.
- (iv) The width proposed for the approach channel is 250 m with side slopes of 1:7 for two way traffic flow. A 600 m diameter turning circle that is 2.5 to 3.0 m times the length of the largest vessel is proposed in the harbour basin. Navigational aids along the approach channel consisting of leading lights, breakwater lights and a single station lighthouse onshore would be provided.
- (v) The Ramayapatnam port will be developed in an area of 802 acres during first phase and 3437 acres for the ultimate projected traffic, for the creation of permanent marine facilities for mechanized cargo handling, transportation and storage / retrieval to meet the demands of trade and shipping activities. Green belt will be provided in 37 acres during the first phase and greenery area will be increased to 100 acres during the ultimate phase. No forest land to be acquired for the project.
- (vi) The Feasibility Study carried out in 2016 has estimated a project cost of Rs. 4240 Crores for initial development and the final stage development cost would be around Rs. 10,000 Crores for handling the ultimate stage cargo projected.

48.3.4.2. The EAC noted the following:-

- (i) The proposal is for grant of Terms of Reference to the project Development of Greenfield Non-Major Port at Ramayapatnam in Prakasam District of Andhra Pradesh State by M/s Government of Andhra Pradesh.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. 'Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

48.3.4.3. *The project proponent informed the EAC that the Government of Andhra Pradesh is proposing to develop a green field port at Ramayapatnam in Andhra Pradesh to meet the ever increasing cargo demand in the State. The proposed port location does not have Mangroves, Coral Reefs, Turtles, Sea grass & Seaweeds, Endangered Species, Marine National Park and Marine Sanctuary.*

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA/EMP report:

- (i) Importance and benefits of the project.
- (ii) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
- (iii) Recommendation of the Maharashtra CZMA.
- (iv) Submit superimposing of latest CZMP as per CRZ (2011) on the CRZ map.
- (v) Submit a complete set of documents required as per para 4.2 (i) of CRZ Notification, 2011.

- (vi) Submit Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.
- (vii) Hydrodynamics study on impact of dredging on flow characteristics.
- (viii) Oil spill contingency plan in case of barge collision or grounding.
- (ix) Flooding and related impact on creek and control area during the cyclonic storm should be studied.
- (x) Ship navigational studies for the entrance channel should be carried out.
- (xi) The project proponents shall satisfactorily address to all the complaints/suggestions that have been received against the project till the date of submission of proposals for Appraisal.
- (xii) The EIA would give a detailed analysis of the Impacts of storage and handling and the management plan of each cargo type along with the proposed compliance to the Hazardous Chemicals Storage rules.
- (xiii) Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.
- (xiv) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.
- (xv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xvi) Permission from CGWA in case of groundwater use being proposed for the project.
- (xvii) Wastewater Management Plan.
- (xviii) Details of Environmental Monitoring Plan.
- (xix) To prepare a detailed biodiversity impact assessment report and management plan through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.
- (xx) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- (xxi) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (xxii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xxiii) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (xxiv) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA.

- (xxv) Disaster Management Plan for the project.
- (xxvi) Details and status of court case pending against the project, if any.
- (xxvii) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- (xxviii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 01.05.2018 shall be prepared and submitted along with EIA Report.
- (xxix) A tabular chart with index for point wise compliance of above ToRs.

It was recommended that 'ToR' along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA/EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

Agenda item No. 48.3.5.

Expansion of Waterfront Development Plan for Mundra Port by APSEZ, Mundra, Gujarat by M/s Adani Ports and Special Economic Zone Limited - Amendment in Terms of Reference

(IA/GJ/MIS/131179/2019; F.No. 10-24/2019-IA-III)

48.3.5.1. The project proponent and the accredited Consultant M/s Cholamandalam MS Risk Services Limited gave a detailed presentation on the salient features of the project and informed that:

- (i) The waterfront development has been accorded Environmental and CRZ clearance as per EIA Notification, 2006 and Coastal Regulation Zone Notification, 2011 vide letter No: 10-47/2008-IA.III dated 12.01.2009 and addendum letter No. 10-47/2008-IA.III dated 19.01.2009. The extension of validity for Environmental and CRZ clearance has been given vide letter F.No. 10-47/2008-IA.III dated 07.10.2015 with validity up to 11.01.2019.
- (ii) Since all the activities in-line to existing Environment & CRZ Clearance was not completed, it was utmost importance to restore the current Environment & CRZ Clearance. Hence, proposal for expansion of WFDP with minor modification as per business requirement was prepared and submitted to MoEF&CC for obtaining ToR.
- (iii) MoEF&CC has granted Terms of Reference to the project vide letter F.No.10-24/2019-IA-III dated 17.05.2019 and subsequent amendment dated 27.09. 2019.
- (iv) Now, APSEZ has requested amendment in ToR for public hearing exemption considering the following facts:
 - The current expansion will be taken up within the existing approved area. No additional land will be acquired. Hence No R&R involved.
 - No additional coastal land will be developed beyond the earlier approved master plan and hence no impact on local fishing activity.
 - APSEZ has already undertaken various Public hearings, inline to the EIA Notification, 2006 in the Mundra region since 2008 and have addressed the public views and commitments effectively.
 - Public hearings that has been conducted in the region are as follows-
 - ❖ Waterfront Development Plan in Mundra, Kutch district, Gujarat in Year 2008.
 - ❖ Development of Multiproduct Special Economic Zone in Mundra, Kutch district, Gujarat in Year 2010.

- ❖ Development of Ship breaking facility near Mundra West Port, Mundra, Kutch district, Gujarat in Year 2013.
- ❖ Development of a Commercial Airport at Mundra, Kutch district, Gujarat in Year 2018.
- (v) All the issues raised by people during various Public Hearings have been implemented by APSEZ and as part of expansion proposal all the issues have been addressed.
- (vi) There is no change in any of the components/configuration of the project that has been accorded ToR on 17.05.2019 & amended vide letter dated 27.09.2019.

48.3.5.2. The EAC noted the following:-

- (i) The proposal is for grant of Amendment in Terms of Reference to the Expansion of Waterfront Development Plan for Mundra Port by APSEZ, Mundra, Gujarat by M/s Adani Ports and Special Economic Zone Limited.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. 'Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) The Terms of Reference was granted by MoEFCC vide letter F.No. 10-24/2019-IA-III dated 17.05.2019 followed by amendment in ToR dated 27.09.2019.

48.3.5.3. *The project proponent informed the EAC that the entire port limit is part of notified SEZ as per Ministry of commerce & industry Notification. As per Para 7.III.(i). (b) of EIA Notification 2006 and its subsequent amendment , PH is exempted for all projects or activities located within industrial estates or parks (item 7(c) of the schedule) approved by the concerned authorities.*

There is no additional hydrodynamic impacts are envisaged, all the impacts are predicted & management plan are arrived as a part of CIA. Over all there is positive impact in mangroves (as per NCSCM study), increase mangrove cover – 246 Ha (2011-2017). Overall 4 Public Hearings are conducted in the region. All the issues raised by people during various Public Hearings have been implemented by APSEZ and as part of expansion proposal all the issues have been addressed. All the impacts are predicted & managements plan are arrived. No new impacts are envisaged. Effectively implemented Environmental Management Plan and regularly carrying out Environmental Monitoring

APSEZ has carried out Cumulative Impact Assessment Study (CIA) for Master plan of Port & SEZ for 2030 (including all approved & existing project – 10 km). Cumulative Impact Assessment study was carried out by NABET accredited Environmental Consultant covering baseline data collection, mathematical modelling and other technical studies to identify the potential impacts and develop macro level management plan, which will be jointly implemented in consultation with concerned authorities. APSEZ has made detailed presentation on CIA to EAC committee during 45th EAC meeting, held on 18.10.2019. APSEZ has effectively implemented Environmental Management Plan and has been regularly carrying out Environmental Monitoring for various environmental aspects. Half yearly Compliance reports are regularly submitted to the concerned authorities. Regional office of MoEF&CC has carried out inspection of the entire waterfront Development number of times and there were no non-compliance observed. Last Inspection was carried out on 04.09.2019 (No non-compliance as per RO-MoEF&CC report)

The EAC deliberated upon the information provided by the project proponent and exempted Public Hearing as per para 7(ii) of EIA Notification, 2006 and its subsequent amendments for preparation of EIA/EMP report.

Agenda item No. 48.3.6.

Development of Port facilities at Haldia Dock-II at Mouza Shalukkhali & Rupnarayanachak, P.S. Satahata, District East Mednipore in West Bengal by M/s Kolkata Port Trust - Amendment in Environmental and CRZ Clearance

(IA/WB/MIS/123291/2019; F.No. 11-140/2010-IA-III)

48.3.6.1. The project proponent and the accredited Consultant M/s Envirotech East Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:

- (i) The project of “Development of Port Facilities at Haldia Dock-II at Mouza Shalukkhali & Rupnarayanachak, P.S. Sutahata, District East Mednipore in West Bengal by M/s Kolkata Port Trust” was granted Environmental & CRZ Clearance on 30.07.2015 with 04 numbers dry bulk cargo handling jetty. The project was not implemented due to lack of response from the bidders.
- (ii) Now the instant proposal is replacement of fourth jetty to liquid cargo jetty from the already approved dry bulk cargo jetty at a project cost of Rs. 172.52 Crores on design built, finance operate and transfer (DBFOT) basis to accommodate additional liquid cargo & to ease the congestion at the existing berths of Haldia Dock. The project involves the pre-project activities such as survey, planning and detailed designed of terminal facilities, construction of jetty with accessories, installation of topside facilities, such as, marine unloading arms, flexible hoses, jetty head pipe manifold with headers, jetty infrastructure such as fire fighting system and pollution control including the approach road to the jetty from the nearest road way. The connecting pipeline from the jetty head to tankage to terminal to the users will be respective user agencies. The jetty will be built on RCC piling system around 1200 mm.dia, Approach Trestle and RCC deck structure. This consists of service platforms of size 30 m x 20 m Breasting dolphins, mooring dolphins of size 15 m x 15 m each, 1.5 m wide walkways interconnecting berthing dolphins with mooring dolphins. The length of Approach trestle will be around 1.6 km from the shore having total width of 14 m with access road of 7 m with overhang of 5.8 m to accommodate pipelines for cargo discharge.
- (iii) The jetty will handle different cargo like Paraxylene/edible oil, chemicals, POL products (class ‘A’, ‘B’ & ‘C’) LPG & LNG. The jetty will accommodate ships of LOA 100 m to 230 m with maximum cargo load of 23,000 MT. and draft of 9 m. The cargo will be handled by flexible hose for Paraxylene and other chemical cargo and marine unloading arms for LPG, LNG, petroleum products. The deck elevation will be kept at + 8.7 m above CD. The jetty will have elaborate fire fighting facility as per OISD norm consisting of fire water system, foam system smoke detection, DCP Protection system, tower monitor etc. The power will be obtained from WBSEDCL. The electrical facilities will include Substation building, lighting, flame proof equipment and standby generator set of 500 KVA. The total handling capacity of the jetty will be around 2.43 MMTPA.

Table 1: Basic Reasons for Seeking Amendment in Existing EC

| Project Details | Reasons of Amendment sought for already issued EC and CRZ Clearance on 30.07.2015 | Details of ToR Obtained |
|--|---|---|
| <p>The Environment and CRZ Clearance was obtained on 30.07.2015 for 4 dry bulk cargo handling jetties.</p> <p>The project for which the EC was obtained consisted of 4 nos. dry bulk cargo jetties from Jetty No. 1 to Jetty No. 4 out of which Jetty No. 1 and 4 were multipurpose dry bulk cargo handling jetties where as Jetty No. 2 and 3 were mechanized dry bulk cargo handling jetties.</p> | <p>Because of market demand subsequently developed after the receipt of EC, it was henceforth decided to convert the multipurpose jetty i.e. Jetty No. 4 from dry bulk cargo handling jetty to liquid cargo handling jetty (to handle POL products chemicals, paraxylene, etc. as detailed in Table 2 under 1st amendment of ToR dated 20.09.2016.</p> <p>Subsequent to the development stated above in 2018, it was decided to add LPG and LNG to this liquid cargo handling jetty after excluding the handling of chemicals as envisaged in the year 2016.</p> | <p>The 1st ToR was obtained on 20.09.2016 based on different type of liquid bulk cargo handling facilities as detailed in the table below.</p> <p>Accordingly, application was made for change in liquid bulk cargo profile as detailed in the Table 2 as per 2nd amendment of ToR, which was obtained on 06.09.2018.</p> |
| <p>The amendment in EC and CRZ Clearance sought for will consist of 3 no. dry bulk cargo jetties and 1 no. liquid bulk cargo jetty as per project profile as stated under 2nd amendment of ToR dated 06.09.2018 (Table 2).</p> | | |

N.B.: Till date no construction activity has been undertaken at site.

Table 2: The Salient Features of the Overall Project Scenario

| ATTRIBUTES | As per EC & CRZ (30.07.2015) | As per 1 st Amended ToR (20.09.2016) | As per 2 nd Amended ToR (06.09.2018) |
|-------------------------|--|---|--|
| Capacity | 23.4 MMTPA | 20.89 MMTPA | 21.48 MMTPA |
| Cargo Profile | Dry Bulk 23.4 MMTPA | <ul style="list-style-type: none"> • Dry Bulk 19.05 MMTPA • Liquid Bulk 1.84 MMTPA | <ul style="list-style-type: none"> • Dry Bulk 19.05 MMTPA • Liquid Bulk 2.43 MMTPA |
| Type of Cargo | Coking coal, thermal coal & other bulk cargo | Paraxylene, Phosphoric Acid, Benzene, PY Gas, CBFS, Butadiene, MEG, Ammonia, Acetic Acid, Butene-1, Styrene Monomer | LPG and LNG /Paraxylene Edible Oil & Chemicals / POL Products (Class-A, B & C) |
| No. of Jetty | 4 (all for dry bulk cargo) | 4 (3 for dry bulk cargo & 1 for liquid bulk cargo) | 4 (3 for dry bulk cargo & 1 for liquid bulk cargo) |
| Jetty location & Length | Same | Same | Same |
| Project Area | 160 acres | 160 acres | 160 acres |
| Project Cost | Rs. 1707.5 Crores | Rs. 1474.0 Crores | Rs. 1474.0 Crores |

48.3.6.2. The EAC noted the following:-

- (i) The proposal is for grant of Amendment in Environmental and CRZ Clearance to the project Development of Port facilities at Haldia Dock-II at Mouza Shalukkhali & Rupnarayanachak, P.S. Suthata, District East Medinipur in West Bengal by M/s Kolkata Port Trust.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. 'Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) The Environmental and CRZ Clearance was granted by MoEFCC vide letter F.No. 11-140/2010-IA-III dated 30.07.2015.

48.3.6.3. The EAC was informed that the Environmental and CRZ Clearance was granted by MoEFCC vide letter F.No. 11-140/2010-IA-III dated 30.07.2015. Subsequently, Kolkata Port Trust decided to install one liquid cargo jetty as displacement of one multipurpose dry bulk cargo jetty to make project viable. Accordingly, online application was submitted to MoEF&CC for getting amendment in Environmental Clearance for the revised project. MoEF&CC issued ToR vide letter dated 20.09.2016 for undertaking the EIA study for the revised project. In the meantime, the liquid Cargo profile along with the cargo handling capacity was slightly revised in the context of the prevailing market condition. Accordingly, application was made for Amendment of TOR. MoEF&CC issued Amendment in ToR vide letter dated 20.09.2016 for undertaking the EIA study for the further revised project. The West Bengal State Coastal Zone Management Authority (WBSCZMA) has recommended the proposal vide letter no. 2041/EN/T-II-4/005/2014 dated 17.10.2019.

The Committee deliberated upon the proposal and information submitted by the project proponent. The Committee recommended the following Amendment in the Environmental Clearance letter F.No. 11-140/2010-IA-III dated 30.07.2015:

| ATTRIBUTES | Details as per EC & CRZ Clearance dated 30.07.2015 | Amendment Recommended |
|---------------|--|-----------------------|
| Capacity | 23.4 MMTPA | 21.48 MMTPA |
| Cargo Profile | Dry Bulk 23.4 MMTPA | Dry Bulk 19.05 MMTPA |

| | | |
|----------------------|--|---|
| | | Liquid Bulk 2.43 MMTPA |
| Type of Cargo | Coking coal, thermal coal & other bulk cargo | LPG and LNG /Paraxylene, Edible Oil & Chemicals / POL Products (Class-A, B & C) |
| No. of Jetty | 4 (all for dry bulk cargo) | 4 (3 for dry bulk cargo & 1 for liquid bulk cargo) |
| Project Cost | Rs. 1707.5 Crores | Rs. 1474.0 Crores |

Following additional condition has been recommended:

- (i) All the recommendations and conditions specified by the West Bengal Coastal Zone Management Authority (WBCZMA) vide letter No. 2041/EN/T-II-4/005/2014 dated 17.10.2019, shall be complied with.
- (ii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and proposed by the project proponent, an amount of Rs. 15.37 Crore shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Local Infrastructure Development (Construction and repairing of Metal Road (15 km) in villages (@Rs. 30.0 Lakhs per Km), Construction of W/C/Toilet (2) each - 20 numbers in schools & villages (@ Rs. 3.0 Lakhs per set of 2 Toilets), Street Lighting (solar) provision at suitable public places - 70 nos. (@ Rs. 1.0 Lakh per Solar Light), Development of Parks and Tree Plantation Programme in the nearby villages, Development of local Schools in nearby areas (Construction of buildings etc)) and Other Local Development Activities (Sponsoring the projects for improving Agricultural productivity for the local crops, Training to unemployed educated local youth for skill development youth through National Skill Development Corporation, Govt. of India Scheme, Primary Health Care Centres in the nearby villages, Infrastructure for development of self-help groups among local women). The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

All other Terms and conditions stipulated in the Environmental & CRZ Clearance letter F.No. 11-140/2010-IA-III dated 30.07.2015, shall remain unchanged.

Agenda item No. 48.3.7.

Deepening of Approach Channel for Capesize vessels at Mormugao Port by M/s Mormugao Port Trust - Reconsideration for Environmental and CRZ Clearance

(IA/GA/MIS/94186/2016; F.No. 10-23/2014-IA.III)

48.3.7.1. The EAC noted the following:-

- (i) The proposal is for grant of Environmental and CRZ Clearance to the project "Deepening of Approach Channel for Capesize vessels" at Mormugao Port by M/s Mormugao Port Trust.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.
- (iii) Terms of Reference (ToR) was granted by MoEFCC vide letter F.No. 10-23/2016-IA-III dated 10.10.2016.
- (iv) Public hearing was conducted on 27.04.2017, 02.05.2017, 03.05.2017 and 04.05.2017.
- (v) The project is recommended by Goa Coastal Zone Management Authority (GCZMA) vide Letter No. GCZMA/S/15-16/16/1960 dated 24.01.2019.

- (vi) The proposal was earlier considered by the EAC (Infra-2) in its 42nd Meeting of Expert Appraisal Committee (Infra-2) held during 10-12 July, 2019, wherein, the EAC asked the project proponent to submit additional information.
- (vii) Project Proponent has submitted the additional information on Ministry's website on 18.12.2019.

48.3.7.2. *The EAC also deliberated on the certified compliance report letter No. EP/12.1/26, 30,49,2 of 13-14 & 2 of 15-16/Goa dated 05.04.2019 issued by the MoEF&CC's Regional Office (South Zone), Bangalore. As per the compliance report most of the conditions of the Environmental Clearance are found to be complied.*

The project proponent informed that Source apportionment study was not included in TOR issued by MOEF&CC on 16.02.2016. However, as per the directives of Goa Pollution Control Board, MPT has appointed IIT, Mumbai to carry out source apportionment study. IIT, Mumbai has submitted preliminary report in February 2019, Phase one report in September 2019 and raw data report in December 2019. IIT Mumbai has requested GSPCB for the extension of time for submission of Final Report and the same is consented by GSPCB. Regarding anoxic conditions at bottom dissolved oxygen is less than 2 mg/l, it was informed that CSIR-NIO, Goa has carried out Marine Biodiversity Study. As stated by NIO, Goa the DO values of bottom water samples showed lower values. This is believed to be due to stratification of water columns during post monsoon season. Stratification occurs in the water masses with difference in properties forming a horizontal layer that act as a barrier for mixing. The stratification may occur due to difference in water temperature or other physical properties.

*The EAC, therefore, based on the information submitted, examination of the submitted documents, clarifications provided by the project proponent during appraisal of the project and after detailed deliberations on all the issues recommends the project for grant of environment clearance along with the following additional conditions over and above the Standard EC conditions stipulated by the Ministry for this category of project (specified at **Annexure-4** of the minutes) vide OM dated 04.01.2019, while considering the grant of Environmental and CRZ Clearance:*

- (i) Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (ii) All the recommendations and conditions specified by the Goa State Coastal Zone Management Authority (GCZMA) who has recommended the project vide letter No. GCZMA/S/15-16/16/1960 dated 24.01.2019 shall be complied with.
- (iii) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (iv) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (v) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- (vi) Dredging shall not be carried out during the fish breeding season.
- (vii) Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment including turbidity and turbidity should be monitored during the dredging.
- (viii) No underwater blasting is permitted.
- (ix) Dredged material shall be disposed safely in the designated areas so that the dumped dredge material does not enter Thane creek and some part of the dredged material may also be utilized for beach nourishment. With the enhanced quantities, the impact of dumping on the coastal environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.

- (x) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- (xi) While carrying out dredging, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- (xii) Packaged drinking water will be used in dredgers for workers during dredging phase. The toilets will be equipped with bio digesters.
- (xiii) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, Crabs, Catfishes, Prawns, Silver bellies and Flat fishes etc prepared by CSIR-National Institute of Oceanography (NIO) as given in the EIA-EMP Report shall be complied with in letter and spirit.
- (xiv) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
- (xv) A continuous monitoring programme covering all the seasons on various aspects of the coastal environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xvi) The recommendations of apportionment study carried out by IIT, Bombay should be implemented and a copy of the report should be submitted to MoEF&CC.
- (xvii) Continuous online monitoring of for air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- (xviii) Effective and efficient pollution control measures like covered conveyors/stacks (coal, iron ore and other bulk cargo) with fogging/back filters and water sprinkling commencing from ship unloading to stacking to evacuation shall be undertaken. Coal and iron ore stack yards shall be bounded by thick two tier green belt with proper drains and wind barriers wherever necessary.
- (xix) Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging.
- (xx) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
- (xxi) Rock blasting, which adversely affects the local biota, is planned while dredging.
- (xxii) There are chances of fish mortality due to blasting. During blasting, monitoring should be carried out for the health of fish also.
- (xxiii) Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
- (xxiv) Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986. The provisions of Solid Waste

Management Rules, 2016. E- Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.

- (xxv) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xxvi) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- (xxvii) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- (xxviii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
- (xxix) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxx) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, project proponent has proposed an amount of Rs. 2.17 Crores (0.75% of the project cost) under Corporate Environment Responsibility (CER) Plan for the activities such as Resurfacing of Roads in Mormugao Municipal area, Construction of drain cross drainage works including RCC precast covers over drain wherever required in Mormugao Municipal area, Electrification of public roads using solar power panels, Plantation of saplings in Mormugao Municipal area with three (3) years maintenance through Social Forestry Division. Forest Department Government of Goa, Distribution of saplings to primary secondary school and Higher secondary children alongwith development of Nursery of plants, Woman upliftments and distribution of grant for sanitation facilities for self-help groups in Mormugao Municipal area, Heath Education and importance of hygiene among girls child at Primary, Secondary school and Higher secondary school of Mormugao Municipal area Skill Development among Higher secondary school of Mormugao municipal area and Construction of toilet block facilities for public in Mormugao Municipal area. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.3.8.

Redevelopment of Berths 8, 9 and Barge Berth at the Port of Mormugao, Goa by M/s Mormugao Port Trust - Reconsideration for Environmental and CRZ Clearance

(IA/GA/MIS/93270/2015; F.No. 10-33/2015-IA-III)

48.3.8.1. The EAC noted the following:-

- (i) The proposal is for grant of Environmental and CRZ Clearance to the project "Redevelopment of Berths 8, 9 and Barge Berth" at the Port of Mormugao, Goa by M/s Mormugao Port Trust.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.
- (iii) Terms of Reference (ToR) was granted by MoEFCC vide letter F.No. 10-33/2015-IA.III dated 16.02.2016.
- (iv) Public hearing was conducted on 28.04.2017, 04.05.2017, and 05.05.2017.
- (v) The project is recommended by Goa Coastal Zone Management Authority (GCZMA) vide Letter No. GCZMA/S/18-19/51/1961 dated 24.01.2019.

- (vi) The proposal was earlier considered by the EAC (Infra-2) in its 42nd Meeting of Expert Appraisal Committee (Infra-2) held during 10-12 July, 2019, wherein, the EAC asked the project proponent to submit additional information. Project Proponent has submitted the additional information on Ministry's website on 18.12.2019.

48.3.8.2. *The EAC also deliberated on the certified compliance report letter No. EP/12.1/26, 30,49,2 of 13-14 & 2 of 15-16/Goa dated 05.04.2019 issued by the MoEF&CC's Regional Office (South Zone), Bangalore. As per the compliance report most of the conditions of the Environmental Clearance are found to be complied.*

The project proponent informed that Source apportionment study was not included in TOR issued by MOEF&CC on 16.02.2016. However, as per the directives of Goa Pollution Control Board, MPT has appointed IIT, Mumbai to carry out source apportionment study. IIT, Mumbai has submitted preliminary report in February 2019, Phase one report in September 2019 and raw data report in December 2019. IIT Mumbai has requested GSPCB for the extension of time for submission of Final Report and the same is consented by GSPCB.

*The EAC, therefore, based on the information submitted, examination of the submitted documents, clarifications provided by the project proponent during appraisal of the project and after detailed deliberations on all the issues recommends the project for grant of environment clearance along with the following additional conditions over and above the Standard EC conditions stipulated by the Ministry for this category of project (specified at **Annexure-4** of the minutes) vide OM dated 04.01.2019, while considering the grant of Environmental and CRZ Clearance:*

- (i) Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (ii) All the recommendations and conditions specified by the Goa State Coastal Zone Management Authority (GCZMA) who has recommended the project vide letter No. GCZMA/S/18-19/51/1961 dated 24.01.2019 shall be complied with.
- (iii) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (iv) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (v) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- (vi) Dredging shall not be carried out during the fish breeding season.
- (vii) Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment including turbidity and turbidly should be monitored during the dredging.
- (viii) No underwater blasting is permitted.
- (ix) Dredged material shall be disposed safely in the designated areas so that the dumped dredge material does not enter Thane creek and some part of the dredged material may also be utilized for beach nourishment. With the enhanced quantities, the impact of dumping on the coastal environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.
- (x) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- (xi) While carrying out dredging, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.

- (xii) The recommendations of apportionment study carried out by IIT, Bombay should be implemented and a copy of the report should be submitted to MoEF&CC.
- (xiii) The total fresh water requirement during construction phase has been estimated as 60 m³ will be met from existing sources of Mormugao port. Fresh water requirement during operation phase has been estimated as 40 KLD. The water will be taken from Public Works Department (PWD), Goa.
- (xiv) The quantity of domestic sewage generated during operation phase is about 32 KLD and shall be treated in the existing Sewage Treatment Plants of MPT. Treated water shall be used for green belt development.
- (xv) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, Crabs, Catfishes, Prawns, Silver bellies and Flat fishes etc. prepared by CSIR-National Institute of Oceanography (NIO) as given in the EIA-EMP Report shall be complied with in letter and spirit.
- (xvi) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
- (xvii) A continuous monitoring programme covering all the seasons on various aspects of the coastal environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xviii) Continuous online monitoring of for air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- (xix) Effective and efficient pollution control measures like covered conveyors/stacks (coal, iron ore and other bulk cargo) with fogging/back filters and water sprinkling commencing from ship unloading to stacking to evacuation shall be undertaken. Coal and iron ore stack yards shall be bounded by thick two tier green belt with proper drains and wind barriers wherever necessary.
- (xx) Sediment concentration should be monitored fortnightly at source and disposal location of dredging while dredging.
- (xxi) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
- (xxii) Rock blasting, which adversely affects the local biota, is planned while dredging.
- (xxiii) There are chances of fish mortality due to blasting. During blasting, monitoring should be carried out for the health of fish also.
- (xxiv) Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
- (xxv) Necessary arrangements for the treatment of the effluents and solid wastes/ facilitation of reception facilities under MARPOL must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986. The provisions of Solid Waste Management Rules, 2016. E- Waste Management Rules, 2016, and Plastic Waste Management Rules, 2016 shall be complied with.

- (xxvi) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xxvii) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- (xxviii) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- (xxix) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
- (xxx) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxxi) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, project proponent has proposed an amount of Rs. 2.87 Crores (0.25% of the project cost) under Corporate Environment Responsibility (CER) Plan for the activities such as Paved shoulder for Roads in Mormugao Municipal area to reduce dust emission, Construction of drain cross drainage works including RCC precast covers over drain wherever required in Mormugao Municipal area, Electrification of public roads using solar power panels, Plantation of saplings in Mormugao Municipal area with three (3) years maintenance through Social Forestry Division. Forest Department Government of Goa, Distribution of saplings to primary secondary school and Higher secondary children along with development of Nursery of plants, Woman upliftments and distribution of grant for sanitation facilities for self-help groups in Mormugao Municipal area, Heath Education and importance of hygiene among girls child at Primary, Secondary school and Higher secondary school of Mormugao Municipal area, Skill Development among Higher secondary school of Mormugao municipal area and Construction of toilet block facilities for public in Mormugao Municipal area. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.3.9.

Proposed Recreational Park 'Bharat Vandana Park' at Sector-20 Dwarka, South West Delhi Developed By M/s Delhi Development Authority - Terms of Reference

(IA/DL/MIS/134502/2020; F.No. 21-5/2020-IA-III)

48.3.9.1. The project proponent and the accredited Consultant M/s Amaltas Enviro Industrial Consultants LLP (AEC) gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is new and located at Sector-20, Dwarka, South West Delhi. Site co-ordinates of the project site is 28°34'35.84"N Latitude and 77°3'27.87"E Longitude.
- (ii) The total plot area of the proposed Recreational Park "Bharat Vandana Park" is 8,09,371.28 sqm. FSI area is sqm and total construction (Built-up) area of 16,282 sqm. Recreational Park is planned and proposed to be constructed in lines with green building principles and LEED-IGBC (Indian Green Building Council) platinum rating standards. The park shall serve as a landmark to the city and one of its kinds in Delhi and NCR. The park visions to integrate various experiences and activities that would engage people of all ages and cultures.
- (iii) During construction phase, total water requirement is expected to be 450 ML. which will be met by treated water from DJB during the construction phase, soak pits and septic tanks will be

provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

- (iv) During operational phase, total water demand of the project is expected to be approx. 2,641 KLD and the same will be met by Delhi Jal Board and recycled water. Daily fresh water will be 350 KLD however Recycled water will be 747 KLD. The domestic sewage will be treated through sewage treatment plant of capacity 200 KLD each (5 Nos.), the treated domestic wastewater shall be recycle and re use within premises. The treated sewage will be re used for flushing (550 KLD) greenbelt development (795 KLD), surplus treated water requirement shall be met by CSTP located in sector- 16 Dwarka.
- (v) About 8.019 TPD solid wastes will be generated in the project. The biodegradable waste (4.81 TPD) will be processed in OWC and the non-biodegradable waste generated (2.405 TPD) will be handed over to authorized local vendor.
- (vi) Total power requirement during operation phase is 2.55 MVA and will be met from BSES. Transformer selected total max. Demand loads 2298.27 Kw & Proposed PSS - 4Nos. 800 kVA. In case of power failure, Total max. Demand loads 1166.27 KW DG Selection- 4 Nos. DG sets of - 380 kVA capacities will be provided as power back-up for building.
- (vii) Roof top rainwater of buildings will be collected in 4 Rainwater harvesting storage pits after filtration.
- (viii) Parking facility of 1,634 Nos for 4 wheelers, 250 Nos for 2 wheeler and 20 Nos for bus are proposed to be provided
- (ix) Proposed energy saving measures would save about 8-10% of power.
- (x) It is not located within 10 km of Eco Sensitive areas. Asola Bhatti Wildlife Sanctuary is 22.21 km and Okhla Bird Sanctuary is 25.57 km from the project site. Hence, no NBWL Clearance is required.
- (xi) Forest Clearance is not required:
- (xii) No court case pending against the project.
- (xiii) Investment/Cost of the project is Rs. 530 Crores.
- (xiv) Employment potential: During Construction phase approx. 600 persons shall get employment.
- (xv) Benefits of the project: Wastewater treatment, green belt, energy conservation, parking management, rainwater harvesting, Medical Facility Social.

48.3.9.2. The EAC noted the following:-

- (i) The proposal is for grant of Terms of Reference to the project Proposed Recreational Park 'Bharat Vandana Park" at Sector-20 Dwarka, South West Delhi Developed by M/s Delhi Development Authority in a total plot area of 8,09,371.28 sqm and built-up area of 16,282 sqm.
- (ii) The project/activity is covered under category 'B' of item 8 (b) i.e. Township and Area Development projects' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level by SEIAA/SEAC, Delhi. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC

48.3.9.3. *The project proponent informed the EAC that the Delhi Development Authority envisaged planning, design & construction of BHARAT VANDANA PARK in sector 20, Dwarka South West District of Delhi. The park shall serve as a landmark to the city and one of its kind in Delhi and NCR. The park visions to integrate various experiences and activities that would engage people of all ages and cultures. Recreational Park is planned and proposed to be constructed in lines with green building principles and LEED-IGBC (Indian Green Building Council) platinum rating standards. The project will offer eco-friendly design, energy efficient systems, state of the art technology & compliance to all statutory regulations.*

The Committee deliberated upon the proposal and after detailed deliberations, the Committee recommended the project for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

- (i) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (ii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (iii) The permission of the CGWA for abstraction of ground water, if any, and for basement/excavation dewatering.
- (iv) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (v) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- (vi) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (vii) Submit detailed plan for tree plantation along with proposed cutting/translocation of trees.
- (viii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 01.05.2018 shall be prepared and submitted along with EIA Report.

It was recommended that 'ToR' prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA/ EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Agenda item No. 48.3.10.

Construction of Affordable Housing Project at 48 Nos. of Plot, Khata No. 55, Ward No. 17, Birsanagar, Jamshedpur under Pradhan Mantri Awas Yojana by M/s Jharkhand Urban Infrastructure Development Company Limited - Terms of Reference

(IA/JH/MIS/136341/2020; F.No. 21-6/2020-IA-III)

48.3.10.1. The project proponent and the accredited Consultant M/s Visiontek Consultancy Services Pvt. Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at 22°47'24.54"N Latitude and 86°15'57.12"E Longitude.
- (ii) The project is new. The total plot area is 1,96,893.46 sqm, FSI area is 3,89,070.57 sqm and total construction (Built-up) area of 4,28,521.99 sqm. The project will comprise of 30 Nos. of Buildings. Total 8948 flats (26 Nos. of Type - I Buildings (G+8) & 4 Nos. of Type - II Buildings (G+ 8)) shall be developed. Maximum height of the building is 26.70 m.
- (iii) During construction phase, total water requirement is expected to be 100 KLD which will be met by private water tanker. During the construction phase, soak pits and septic tanks will be

provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

- (iv) During operational phase, total water requirement of the project is expected to be 6040 KLD and the same will be met by 4027 KLD fresh water from Municipal supply and 2013 KLD recycled water. Wastewater generated (5637 KLD) will be treated in 2 STPs of total 6200 KLD capacity. 2478 KLD of treated wastewater will be recycled and re-used (2013 KLD for flushing, 298 KLD for gardening, 167 KLD for general wash etc.). About 2877 KLD during dry season and 3175 KLD during wet season will be disposed in to municipal drain.
- (v) About 22370 kg/day or 22.37 Ton/day solid wastes will be generated in the project. The biodegradable waste (13422 kg/day) will be disposed through Govt. approved agency and the non-biodegradable waste generated (8948 kg/day) will be handed over to authorized local vendor.
- (vi) The total power requirement during construction phase is 500 kVA and will be met from State Electricity Board / DG Set and total power requirement during operation phase is 10,000 kVA and will be met from State Electricity Board.
- (vii) Parking facility for 664 Nos. of four wheelers and 2,788 Nos. of two wheelers is proposed to be provided (according to local norms).
- (viii) The Maximum Demand Load of the whole complex will be 8,000 KW / 10,000 kVA. About 20% of total hot water requirement will be fulfilled by Solar Water Heater. Total Hot Water Requirement will be 894 KLD. About 5% of Maximum Demand Load i.e 500 kVA will be provided by renewable source.
- (ix) It is located within 10 km of Eco Sensitive Zone. Dalma Wildlife Sanctuary is about 9.0 km from the boundary of the project site towards North West. Hence, NBWL Clearance is required for the project
- (x) Forest Clearance is not required.
- (xi) No Court case is pending against the project.
- (xii) Investment / Cost of the project is Rs. 610 Crore.
- (xiii) Employment potential: During the construction phase about 100 persons will be deployed on the site from nearby places. During operational phase also about 100 persons will be deployed from nearby places.
- (xiv) Benefits of the project: This project will increase the economic activities around the area, creating avenues for direct / indirect employment in the post project period. Business like small food vendors, shopping complexes, clubs etc. will be enhanced around the project. Total Population will be about 44,740. It will have a significant impact on the demography of the area. Once the project will become functional, it is expected that existing infrastructure (educational, medical, communication, roads etc) would be eventually enhanced with further development in the surroundings.

48.3.10.2. The EAC noted the following:-

- (i) The proposal is for grant of Terms of Reference to the project Construction of 'Affordable Housing Project' at 48 Nos. of Plot, Khata No. 55, Ward No. 17, Birsanagar, Jamshedpur under Pradhan Mantri Awas Yojana by M/s Jharkhand Urban Infrastructure Development Company Limited for plot area 1,96,893.46 sqm and built-up area of 4,28,521.99 sqm.
- (ii) The project/activity is covered under category 'B' of item 8 (b) i.e. Township and Area Development projects' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level by SEIAA/SEAC, Jharkhand. However, due to absence of SEIAA/SEAC in Jharkhand, the proposal has been appraised at Central level by sectoral EAC

48.3.10.3. *The EAC noted that Dalma Wildlife Sanctuary is 9 km NW from the project site. However, in the Form-1 submitted by the project proponent it is mentioned that the proposal does not involve approval/clearance under the wildlife (Protection) Act, 1972. The EAC asked the project proponent to submit Revised Form-1 along with the EIA /EMP Report and also obtained necessary permission from NBWL. The Committee also asked the project proponent to review their proposal and reduce the number of flats and increase the green/open area and parking space.*

The Committee deliberated upon the proposal and after detailed deliberations, the Committee recommended the project for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

- (i) Submit Revised Form-1.
- (ii) Submit status of clearance from National Board for Wild Life (NBWL).
- (iii) The Air Quality Index shall be calculated for base level air quality.
- (iv) A detailed report on compliance to ECBC norms.
- (v) A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- (vi) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (vii) The permission of the CGWA for abstraction of ground water, if any, and for basement/excavation dewatering.
- (viii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (ix) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- (x) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (xi) Submit detailed plan for tree plantation along with proposed cutting/translocation of trees.
- (xii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 01.05.2018 shall be prepared and submitted along with EIA Report.

It was recommended that 'ToR' prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA/ EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Day-2: Wednesday, 29th January, 2020

Agenda item No. 48.4.1.

Greenfield Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWIF) cum Incineration facility at Plot No. 48, Village Rampara, Tehsil Chotila, District Surendranagar, Gujarat by M/s Varni Enviro Care Private Limited - Reconsideration for Terms of Reference (IA/GJ/MIS/95505/2019; F.No. 10-15/2019-IA-III)

48.4.1.1. The EAC noted the following:-

- (i) The proposal is for grant of Terms of Reference to the project 'Greenfield Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWIF) cum Incineration facility at Plot No. 48, Village Rampara, Tehsil Chotila, District Surendranagar, Gujarat by M/s Varni Enviro Care Private Limited.
- (ii) The project/activity is covered under category A of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) The proposal was earlier considered by the EAC (Infra-2) in its 39th Meeting of Expert Appraisal Committee (Infra-2) held during 26-28 March, 2019. The Committee noted that site-1 at village Rampara, which is proposed for the project is in the vicinity of the Rampara Reserve Forest (0.3 km). Committee also noted that nearest habitation is 0.3 km away from the site which is not in accordance with the CPCB Criteria. The Committee asked the project proponent to re-examine the proposal for its site suitability. The Committee asked the project proponent to submit additional details. The Project Proponent has submitted the additional information on Ministry's website on 18.12.2019.

48.4.1.2. *The project proponent informed the EAC that based on the site alternative criteria, Site 2 (Site near Surai Village) is preferred for the development of TSDF cum Incineration Facility. The EAC noted that now the project proponent has selected site 2 for the proposed TSDF and accordingly revised Form-1 has been submitted. However, revised pre-feasibility report for site-2 has not been prepared and submitted. The EAC deliberated upon the information provided by the project proponent and noted that with the change in site, whole proposal including the name of the project will changed.*

Accordingly, the EAC asked the project proponent to withdraw the instant proposal and apply afresh for the proposed site-2.

Agenda item No. 48.4.2.

Integrated Common Hazardous Waste Treatment Storage and Disposal Facility of Karnataka Waste Management Project, Dobaspet Industrial Area, Pemmanahalli and Village Thimmanayakanahalli, Taluka Nelamangala, District Bangalore Rural, Karnataka by M/s. Ramky Enviro Engineers Limited - Terms of Reference

(IA/KA/MIS/135629/2020; F.No. 10-7/2020-IA-III)

48.4.2.1. The project proponent and the accredited Consultant M/s Ramky Enviro Services Private Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) Karnataka Waste Management Project (KWMP), a division of M/s. Ramky Enviro Engineers Limited (REEL), proposes to obtain environmental clearance for the existing Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (ICHWTSDF) spread in an area of 93.18 acres at plot no. 7,8,9,75,76,77,78,79,80,81,82,83,84 and 85 of Dobaspet Industrial area (notified industrial area), Pemmanahalli and Thimmanayakanahalli Villages, Nelamangala Taluk, Bangalore Rural District, Karnataka with the facilities listed in the table below:

| S.No | Name of the Facility | Existing Capacity |
|------|---|---|
| 1 | Secured Landfill (Direct Landfill (DLF) and Landfill after Treatment (LAT)) | 40,000 TPA |
| 2 | Hazardous waste Incineration | 5.5 Million kcal/hr (1000 - 1500 kg/hr) |

- (ii) The existing Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) is located in the notified Industrial Area of KIADB and land was provided by Government of Karnataka to M/s Ramky Enviro Engineers Limited for development of Treatment, Storage and Disposal Facility (TSDF). The total area of the facility is 93.18 acres and an area of 31.8 acres (33%) has been allocated for greenbelt.
- (iii) A minimum area of 10 m wide all along the boundary has been left for greenbelt. Also, one row of plants (both sides) has been planted along the internal roads within the project site to minimize the environmental impacts of the site on its surroundings. The existing greenbelt shall be further enhanced by increasing the plantation density as much as possible.
- (iv) The total water requirement is 115 KLD which will be sourced from tankers/rainwater harvesting.
- (v) The total power required for operations is 550 kVA which is sourced from Bangalore Electricity Supply Company Limited (BESCOM), DG set with 563 KVA capacity is used for power backup for emergency requirement.
- (vi) Wastewater/leachate generated shall be used in the spray drier connected to the incinerator or sent to solar evaporation pond or for usage in stabilization. Domestic wastewater shall be disposed of through the existing septic tank/soak pit. Incineration ash, sludge etc. generated in the facility shall be disposed of in the landfill, after treatment if necessary.
- (vii) The total cost of the project is Rs. 52 Crores.

48.4.2.2. The EAC noted the following:-

- (i) The proposal is for grant of Terms of Reference to the project 'Integrated Common Hazardous Waste Treatment Storage and Disposal Facility of Karnataka Waste Management Project, Dobaspet Industrial Area, Pemmanahalli and Village Thimmanayakanahalli, Taluka Nelamangala, District Bangalore Rural, Karnataka by M/s. Ramky Enviro Engineers Limited.
- (ii) The project/activity is covered under category A of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

48.4.2.3. The project proponent has explained the chronology of the event before the EAC and informed that:

- The Government of Karnataka and Karnataka State Pollution Control Board (KSPCB) have identified TSDF site. The Government of Karnataka made an agreement with German Technical Cooperation (GTZ) for evolving an effective Hazardous Waste Management (HAWA) strategy in the State of Karnataka. Initially two sites i.e., one in Siddalagahatta Taluk in Kolar District and the other in Dobaspet, Bangalore Rural District were shortlisted by the KSPCB for setting up TSDF. Finally, Dobaspet site was found more suitable and identified for setting up TSDF to cater the need for the entire state. The KIADB acquired land for TSDF site.
- The Dobaspet site was notified for the TSDF purpose by the Government of Karnataka on 21.02.2003. Preliminary investigations and Environmental Impact Assessment (EIA) was completed in January 2004 under the GTZ-HAWA Project. The Technical Advisory Committee of KSPCB in their 272nd meeting held on 15.11.2003 recommended for establishment of TSDF at Dobaspet and authorized KSPCB to put up the project for Public Hearing as per the prevalent EIA Notification, 1994.
- Intensive Public Awareness Campaign about the project was conducted in the surroundings (5 km radius) of Dobaspet site from June, 2003 to January 2004, to appraise the entire stakeholders. The Deputy Commissioner, Bangalore Rural District has conducted Public Hearing on 20.02.2004, as per the provisions contained in the EIA Notification of 1994.

- The report of the public hearing panel was received by KSPCB vide letter no. CAL CR 369/2003-04 dated 18.03.2004. Accordingly, the KSPCB vide letter no. KSPCB/HWMC/AEO-1/EO/2003-04/686 dated 31.03.2004 forwarded the project report including EIA report and details of the public hearing along with its recommendation to the State Government.
- The state government accorded approval, as required under Rule 8 of Hazardous Waste (Management & Handling) Rules, vide a Government Order No. FEE 293 ECO 2002 Bangalore dated 21.04.2004, within the stipulated time. The conceptual design drawings and collection systems relating to TSDF including the final DPR was prepared in June 2004 by GTZ. State Cabinet Clearance has been obtained for the project in the month of June 2005.
- Government of Karnataka has issued final notification for acquisition of 93.18 acres of land. Accordingly, KIADB have acquired land by paying compensation to the land losers as per procedure.
- The KIADB has been designated as Contracting Authority and made responsible for construction of TSDF and they have awarded the work to M/s. Ramky Infrastructure Limited on 01.12.2006 after following detailed procedures. The Land Lease Agreement and Contract Agreement have been signed by Government of Karnataka and KIADB respectively with M/s. Ramky Infrastructure Limited and Ramky Enviro Engineers Ltd. (Consortium) on 1st December 2006.
- Consent for Establishment (CFE) was issued to Ramky in July 2007 by Karnataka State Pollution Control Board for handling of landfillable hazardous waste up to 40,000 TPA. The total area of the facility is 93.18 acres (37.83 hectares), out of which 26 acres is earmarked for Secured Landfill (SLF).
- Consent for Operation (CFO): The facility obtained Consent for Operation in June 2008 and the facility started receiving wastes from July 2008 onwards from member industries, which is disposed of in Secured Landfill (either directly or after stabilization, as required).
- MoEF&CC accorded Environmental Clearance on 19.09.2014 (vide file number 10-65/2012-IA.III) for setting up of 5.5 Million Kcal/hr (1000 – 1500 kg/hr) Incinerator at the existing TSDF, Dobaspet, Bangalore, Karnataka under item 7(d) of the EIA Notification, 2006 (i.e. all integrated facilities having incineration and landfill) so that the existing TSDF will become an Integrated Common Hazardous Waste Management Facility (ICHWMF).

The EAC noticed that Environmental Clearance for setting up of incinerator at TSDF, Dobaspet, Bangalore, Karnataka by M/s Ramky Enviro Engineers Ltd has been granted by MoEF&CC vide letter F.No 10-65/2012-IA.III dated 19.09.2014. As per EC letter dated 19.09.2014, "the proposal involves setting up of incinerator facility of capacity 5.5 Million Kcal/Hr(1000 - 1500 kg/hr) within the existing Hazardous Waste Treatment and Disposal Facility of Karnataka Waste Management Project (KWMP) at Sy.No.7, 8, 9, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84 and 85 at Dobaspet, Bangalore Rural District, Karnataka State to dispose the Incinerable waste of the industries in a scientific manner, so that the existing TSDF will become an Integrated Common Hazardous Waste Management Facility (ICHWMF)".

NGT order dated 26.09.2019 disposed off the application vide OA No-654/2019 (WP Nos 51509/2016 & 52176 -52179 / 2016) stating that: "... while we do not interfere with the functioning of the TSDF, we direct that the TSDF must comply with the law and the requisite EC may be obtained. The project proponent may apply for EC within two months. The Appellate Authority may deal with the appeal said to be pending for about three years expeditiously in accordance with law."

It was deliberated that some key issues relating with the TSDF facility is under discussion between the Karnataka Industrial Area Development Board (KIADB) and Karnataka State Government. Further, the EAC was of the view that earlier, while granting the Environmental Clearance, the Ministry had endorsed the existence of the landfill site along with the proposal of incinerator. In the instant case, the project proponent has not proposed any expansion of the existing facility. Accordingly, the EAC opined that the project proponent may approach the Hon'ble National Green Tribunal for seeking

clarification on further requirement of Environmental Clearance in view of the EC granted to the project proponent vide letter dated 19.09.2014. In view, the Committee opined that the Ministry may also seek opinion of the State Government in the matter.

In view of the foregoing observations, the EAC recommended to defer the proposal. The proposal shall be reconsidered after the above details are addressed and submitted.

Agenda item No. 48.4.3.

Integrated Common Hazardous Waste Treatment, Storage, Disposal & Recycling Facility at Industrial Growth Center (IGC), Maneri Village, Mandla District, Madhya Pradesh by M/s Ramky Enviro Engineers Limited - Environmental Clearance

(IA/MP/MIS/117811/2019; F.No. 10-40/2019-IA-III)

48.4.3.1. The project proponent and the accredited Consultant M/s Ramky Enviro Services Private Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) Ramky Enviro Engineers Limited (REEL) proposes to establish an Integrated Common Hazardous Waste Treatment, Storage, Disposal & Recycling Facility in an area of 19.77 acres (8 Ha.) at plot no. 11, 12, 13, 14, 18, 19, 20, 21, 27, 28, 29, 31, 32, 33, 34, 35, 36, 43 and 44, at Industrial Growth Centre (IGC), Maneri (V), Mandla (D), Madhya Pradesh. It shall be noted that MP Industrial Development Corporation Limited (Formerly MP AKVN), while allotting the land, has clubbed all the above plot numbers to a single plot and named it as Plot No. 2, without any change in the land area.
- (ii) Facilities proposed to be developed as part of this project include:

| S. No. | Facility | Capacity |
|--------|---|----------|
| 1 | Secured Landfill (Direct Landfill) | 250 TPD |
| 2 | Landfill after Treatment | 400 TPD |
| 3 | Incineration* | 55 TPD |
| 4 | Bio Medical Waste Treatment | 12.5 TPD |
| 5 | Alternative Fuel and Raw Material Facility (AFRF) | 55 TPD |
| 6 | E-Waste Recycling Facility (with Precious Metal Recovery) | 82 TPD |
| 7 | Drum Decontamination Recycling Plant | 10 TPD |
| 8 | Used / Spent Oil Recycling Facility | 54 KLD |
| 9 | Lead Recycling Facility | 65 TPD |
| 10 | Paper Recycling Facility | 10 TPD |
| 11 | Plastics Recycling Facility | 10 TPD |
| 12 | Solvent Recovery Facility | 27 KLD |
| 13 | Aluminium Dross Reprocessing Facility | 165 TPD |
| 14 | Spent Pot Liner (Carbon Portion) Reprocessing Facility | 165 TPD |
| 15 | Spent Pot Liner (Refractory Portion) Reprocessing and Disposal Facility | 165 TPD |
| 16 | Renewable Energy | 2 MW |
| 17 | Waste to Energy | 2 MW |

* Common incinerator for Hazardous Waste and Bio Medical Waste

- (iii) The total water requirement is estimated to be about 120 KLD. Water requirement shall be met through MP Industrial Development Corporation Limited (formerly known as AKVN)/Tankers/Bore well. It is proposed to treat all the wastewater and leachate within the project premises and it is proposed to reuse the treated water (Zero Liquid Discharge). The power requirement is estimated to be about 375 kVA.
- (iv) Power will be supplied by Madhya Pradesh State Electricity Board (MPSEB) and sufficient quantity of DG sets will be used for emergency power backup.

- (v) Secured Landfill shall be established in-line with the CPCB's 'Criteria for Hazardous Waste Landfills (HAZWAMS/17/2000-01)'. All possible measures shall be adopted at the proposed facility to avoid groundwater contamination. Groundwater monitoring wells (piezometric wells) shall be installed around the landfill site.
- (vi) Incinerator shall be equipped with air pollution control devices such as spray drier, wet alkaline scrubber etc. with a minimum stack height of 30 m to meet the emission standards. It is proposed to equip the incinerator facility with Continuous Emission Monitoring System (CEMS) and the emission data shall be transmitted to SPCB/CPCB.
- (vii) Leachate is expected to be generated from the secured landfill and stabilization operations. Special care shall be taken during monsoon to avoid excess leachate generation. Leachate generated shall be utilized for spraying back on the landfill and the excess leachate, after appropriate treatment, shall be disposed of in the spray drier attached to the incinerator. Greenbelt shall be developed in an area of not less than 33% of the total area. Greenbelt shall be developed with specific species as per CPCB's 'Guidelines for Developing Greenbelts (PROBES/75/1999-2000)'.
(viii) ToR for the project was granted by MoEFCC vide letter F.No 10-40/2019-IA-III dated 05.12.2019.
- (ix) Public Hearing was exempted as per para 7(i) III stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP report, as the site is located in Notified Industrial Area.
- (x) Investment/Cost of the project: Rs. 40 Crores.
- (xi) Employment potential: During Construction and Operation phase Managerial staff -15, Skilled and semi-skilled manpower - 75 and indirect employment during operation will be around 100 persons.
- (xii) Benefits of the project: Facilitating better management of hazardous wastes, provides a one stop solution for the management of various types of wastes, Minimizes pollution load on environment with an additional benefit of green and clean surroundings, Possibility for recovery of materials thereby conserving the natural resources, Management of wastes is relatively easier and economically viable at a common facility, Most viable option in the absence or availability of expertise, Reduced environmental liability due to captive storage of hazardous waste in the premises of industries, Better occupational health and safety at individual industry level and Prevention of natural resource contamination.

48.4.3.2. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project 'Integrated Common Hazardous Waste Treatment, Storage, Disposal & Recycling Facility at Industrial Growth Center (IGC), Maneri Village, Mandla District, Madhya Pradesh by M/s Ramky Enviro Engineers Limited.
- (ii) The project/activity is covered under category A of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) ToR for the project was granted by MoEFCC vide letter F.No 10-40/2019-IA-III dated 05.12.2019.
- (iv) Public Hearing was exempted as per para 7(i) III stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP report, as the site is located in Notified Industrial Area.

48.4.3.3. The EAC deliberated upon the EIA Report submitted by the project proponent and observed a number of deficiencies as follows:

- a. The EIA does not give details of industries, their nature and type of hazardous waste generated that will go into proposed TSDF.

- b. There is mix up of units in the EIA report. Both British system (acres) and metric system (square meters) are used in the report. Single system need to be used.
- c. Fresh water requirement for various activities like gardening, incineration, biomedical waste treatment etc, need to be justified. Explore the possibility of use of treated wastewater for such activity.
- d. There is no data of quantity of different type of waste that would go into incinerator. There is no mention of the capacity of incinerator in the project description.
- e. The project description indicates generation of 2 MW of power each from renewable and Waste to Energy. Lay out plan does not reflect the location of the facility. There is no clarity on how the industry is going to achieve this. The EIA report is silent on Waste to Energy system to be adopted and power generation from Renewable sources.
- f. In baseline data collection, report mentions that data is generated during October to December but is silent on all other aspects like frequency of collection. There is no clarity-if data (including micro-meteorology) is collected twice a week or for the entire duration of the period of study.
- g. No quality assurance of Ecological data. For example-Dalbergia latifolia is said to be present in the buffer zone but common name is indicated as Sitalal (spelling error) *D. sisoo* is different from *D. latifolia*. Among fauna, Green Parakeet (*Psittacara holochlorus*) is mentioned. The species of parakeet mentioned is native of Central America and not found in India.
- h. Impacts and mitigation does not mention incremental increase (for each parameter like air, water, noise, vibration etc,) due to project and project related activities. Quantification is the need in an EIA and mitigation recommended should correspond to the impacts. Treatment descriptions are schematic flow sheets and do not mention the capacities or mass balance. While mentioning odour control it only mentions, as care shall be taken to avoid smell nuisance. What kind of care is to be mentioned.
- i. Additional studies (chapter 7) cover Risk and disaster. It is a stand-alone chapter and findings of this chapter are not integrated on chapter 4-impact and mitigation.

The EAC asked the project proponent to review the EIA and resubmit Revised EIA addressing all deficiencies mentioned in above paras.

In view of the foregoing observations, the EAC recommended to defer the proposal. The proposal shall be reconsidered after the above details are addressed and submitted.

Agenda item No. 48.4.4.

Expansion of existing Common Hazardous Waste Treatment, Storage and Disposal Facilities (CHWTSDF) to Integrated Common Hazardous Waste Treatment, Storage and Disposal Facilities (ICHWTSDF) located at Plot No. 672, Kumbhi village, Akbarpur Tehsil, Kanpur Dehat, Uttar Pradesh by M/s Ramky Enviro Engineers Ltd - Reconsideration for Environmental Clearance (IA/UP/MIS/67005/2017; F.No. 10-49/2017-IA.III)

48.4.4.1. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project 'Expansion of existing Common Hazardous Waste Treatment, Storage and Disposal Facilities (CHWTSDF) to Integrated Common Hazardous Waste Treatment, Storage and Disposal Facilities (ICHWTSDF)

located at plot no. 672, Kumbhi village, Akbarpur Tehsil, Kanpur Dehat, Uttar Pradesh by M/s Ramky Enviro Engineers Ltd.

- (ii) The project/activity is covered under category A of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) ToR for the project was granted by MoEFCC vide letter F.No. 10-49/2017-IA-III dated 08.09.2017.
- (iv) Public Hearing was conducted on 07.02.2018.
- (v) The proposal was earlier considered by the EAC (Infra-2) in its 30th Meeting of Expert Appraisal Committee (Infra-2) held during 29-30 April, 2017, 32nd meeting held on 2-4 July, 2018, 34th meeting held during 24-26 September, 2018 and 47th meeting held during 26-27 December, 2019. The Committee asked the project proponent to submit Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 01.05.2018.
- (vi) Project Proponent has submitted the additional information on Ministry's website on 23.05.2018, 02.08.2018, 02.12.2019 and 09.01.2020.

48.4.4.2. *The project proponent submitted the Corporate Environment Responsibility (CER) as per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018. The project proponent has proposed that an amount of Rs. 0.85 Crores (@ 1% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as health checkups, provision of drinking water supply, farmer trainings, improving sanitation facilities and solid waste management practices, plantation drives, renovation of roads, cross drains, skill development training, installation of solar lights, rain water harvesting and soil conservation measures etc.*

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-2** of the minutes) while considering for accord of environmental clearance:*

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
- (iii) Fresh water of 106 KLD will be met from ground water/Tanker water supply. No ground water abstraction shall be done without prior permission from CGWA.
- (iv) It shall be ensured that all the trees and other plantation are of the non edible varieties and do not in any way encourage the incorporation of toxic materials in the food chain.
- (v) The TSDF should only handle the waste generated from the member units.
- (vi) Analysis of Dioxins and Furans shall be done through CSIR – National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- (vii) The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous Waste Treatment, Storage and Disposal Facilities' published by the CPCB in May, 2010.
- (viii) Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.

- (ix) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- (x) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.
- (xi) Environmental Monitoring Programme shall be implemented as per EIA report and guidelines prescribed by CPCB for hazardous waste facilities. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- (xii) The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- (xiii) On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.
- (xiv) No non hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- (xv) Project Proponent shall develop green belt with native plant species that are significant and used for the pollution abatement. At least 10 m thick greenbelt shall be developed in the periphery of hazardous waste facility.
- (xvi) Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorisation under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.
- (xvii) Pre medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
- (xviii) Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- (xix) Rain water runoff from other hazardous waste management area shall be collected and treated in the effluent treatment plant.
- (xx) The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- (xxi) The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
- (xxii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and as proposed, a fund of Rs. 0.85 Crores (@ 1% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as health checkups, provision of drinking water supply, farmer trainings, improving sanitation facilities and solid waste management practices, plantation drives, renovation of roads, cross drains, skill development training, installation of solar lights, rain water harvesting and soil conservation measures etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.4.5.

Multi Level Parking cum Shopping & Office Complex Project at Plot No. P2, District Centre, Wazirpur (Netaji Subhash Place), New Delhi by M/s Best International Projects Pvt Ltd - Amendment in Environmental Clearance

(IA/DL/MIS/136370/2020; F.No. 21-9/2020-IA-III)

48.4.5.1. The project proponent and the accredited Consultant M/s Grass Roots Research and Creation (GRC) India (P) Ltd gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is a Multi Level Parking cum Shopping & Office Complex at Plot No. P2, District Centre, Wazirpur (Netaji Subhash Place), New Delhi is being developed by M/s Best International Projects Pvt. Ltd and has been granted Environment Clearance from State Level Environment Impact Assessment Authority, Delhi vide letter F. No. 123/DPCC/SEIAA-SEAC/11/2565-2569 dated 16.03.2012 for plot area 3,784.916 sqm and built-up area 25,835.59 sqm.
- (ii) The Project comprises of Offices and Showroom/Commercial as per earlier EC application.
- (iii) Now, amendment in the Environmental Clearance has been sought. There are changes in the usage of commercial area on ground floor and first floor to banquet hall. After change in usage, project will comprises of Offices, Showroom/Commercial and Banquet Hall. Due to which population, waste water generation and STP capacity is increased.
- (iv) Following amendment is sought:

| Details | As per EC accorded | After change in the usage |
|----------------------------|--------------------|---------------------------|
| Population | 1780 Persons | 3457 Persons |
| Domestic water requirement | 37.735 KLD | 126 KLD |
| Waste water generation | 33.96 KLD | 108 KLD |
| STP Capacity | 41 KL | 130 KL |
| Solid waste generation | kg/day | Kg/day |

- (v) All necessary permissions such as CTE, Water permission, Electricity permission & Fire safety certificate from concerned departments have been taken.

48.4.5.2. The EAC noted the following:-

- (i) The proposal is for grant of Amendment in Environmental Clearance to the project Multi Level Parking cum Shopping & Office Complex Project at Plot No. P2, District Centre, Wazirpur (Netaji Subhash Place), New Delhi by M/s Best International Projects Pvt. Ltd.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.
- (iii) Earlier, Environment Clearance has been granted by State Level Environment Impact Assessment Authority, Delhi vide letter F. No. 123/DPCC/SEIAA-SEAC/11/2565-2569 dated 16.03.2012 for plot area 3,784.916 sqm and built-up area 25,835.59 sqm.

48.4.5.3. *The EAC during deliberation noted that the environmental Clearance was granted to the project on 16.03.2012 which was valid up to 15.03.2019. Now, the project proponent has proposed changes in the usage of commercial area on ground floor and first floor to banquet hall. After change in usage, project will comprises of Offices, Showroom/Commercial and Banquet Hall. Due to which population, waste water generation and STP capacity is increased. The EAC opined that in the instant case amendment could not be granted as the environmental clearance is not valid. EAC asked the project proponent to apply in modernization category for the proposed changes.*

The committee after deliberation upon the proposal decided to reject the proposal and suggested the project proponent to apply afresh in modernization category.

Agenda item No. 48.4.6.

Expansion of Dr. Baba Saheb Ambedkar Government Hospital at Sector-6, Rohini Delhi by M/s Public Works Department GNCTD - Environmental Clearance

(IA/DL/MIS/108652/2019; F.No. 21-7/2020-IA-III)

48.4.6.1. The project proponent and the accredited Consultant M/s Amaltas Enviro Industrial Consultants LLP gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at Sector-6, Rohini, Delhi. Site co-ordinates of the project is 28°42'50.25"N Latitude and 77°6'49.05"E Longitude.
- (ii) This is an Expansion of Dr. Baba Saheb Ambedkar Government Hospital. Total built-up area of the existing hospital is 97,523.139 sqm. The hospital was inaugurated by former Hon'ble Prime Minister Shri P.V. Narasimha Rao on 19.11.1991 and do not attract the EIA Notification, 2004 as well as 2006.
- (iii) The total plot area is 1,19,260.29 sqm, FSI area is 1,25,487.19 sqm and total construction (Built-up) area after expansion will be 1,31,244.257 sqm (Existing - 97,523.139 sqm and Expansion - 33,721.118 sqm). Maximum height of the hospital building is 41.45 metre.
- (iv) During construction phase, total water requirement is expected to be 1,045 ML which will be met by treated water from DJB during the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- (v) During operational phase, total water demand of the project is expected to be 610 KLD and the same will be met by Delhi Jal Board (374 KLD fresh water) and remaining 236 KLD from recycled water. Wastewater generated from clinical activity (50 KLD) will be treated in ETP of 60 KLD; Domestic wastewater generation will be 245 KLD and will be treated in STP of 300 KLD. 236 KLD of treated wastewater will be recycled and used for flushing (75 KLD), gardening (29 KLD), HVAC (100 KLD) and DG cooling (32 KLD) etc.
- (vi) About 1.426 TPD solid wastes will be generated in the project. The biodegradable waste (0.439 TPD) will be processed in OWC and the non-biodegradable waste generated (0.219 TPD) will be handed over to authorized local vendor.
- (vii) Maximum Electrical load requirement after overall diversity factor works out to 3620 KW. Considering power factor of 85%, Peak Load will be 4260 KVA and will be met from BSES. Existing DG sets will be scrapped and new DG sets 4 Nos. 1500 KVA will be added for standby capacity.
- (viii) Roof top rainwater of buildings will be collected in 24 Rainwater harvesting storage pits after filtration (Existing 19 and proposed 5).
- (ix) Parking facility for 1,438 ECS is proposed to be provided against the requirement of 1,435 ECS respectively (according to local norms).
- (x) Proposed energy saving measures would save about 8-10% of power.
- (xi) It is not located within 10 km of Eco Sensitive areas. Hence NBWL Clearance is not required.
- (xii) Forest Clearance is not required.
- (xiii) No court case is pending against the project.
- (xiv) Investment/Cost of the project is Rs. 194.91 Crores.
- (xv) Employment potential: During Construction phase approx. 100-150 persons shall get employment.
- (xvi) Benefits of the project: Wastewater treatment, green belt, energy conservation, parking management, rainwater harvesting, medical facility etc.

48.4.6.2. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project Expansion of Dr. Baba Saheb Ambedkar Government Hospital at Sector-6, Rohini Delhi by M/s Public Works Department GNCTD for plot area 1,19,260.29 sqm and total built-up area of 1,31,244.257 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.

48.4.6.3. *The project proponent informed the EAC that Dr. Baba Sahab Ambedkar Government Hospital at sector- 6 Rohini, New Delhi was inaugurated by former Hon'ble Prime Minister Shri P.V. Narasimha Rao on 19.11.1991 and it do not attract the EIA notification 2004 as well as 2006. Consent to operate for the existing building has been obtained from DPCC vide Consent Order no. DPCC/BMW/2019/27 dated 09.12.2019 and is valid up to 04.03.2024.*

It was informed that total number of existing trees at expansion site is 95, out of which 22 trees will be retained, 14 trees will be cut and 59 trees will be transplanted.

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-8** of the minutes), while considering for accord of environmental clearance:*

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The project proponent shall provide for adequate fire safety measures and equipment as per National Building Code/required by Fire Service Act of the State and instructions issued by the local Authority/Directorate of fire, from time to time. Further, the project proponent shall take necessary permission/NOC regarding fire safety from Competent Authority as required.
- (iii) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- (iv) As proposed, fresh water requirement from DJB shall not exceed 374 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority.
- (v) Sewage shall be treated in the STP based on MBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, gardening, HVAC and DG cooling etc). As proposed, excess treated water shall be used in nearby construction sites.
- (vi) The project proponents would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coliforms and other pathogenic bacteria.
- (vii) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.

- (viii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 24 no. of rain water harvesting recharge pits (19 existing and 5 proposed) shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (ix) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 60 sqm area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to dumping site.
- (x) Laboratory wastes shall be managed in accordance to the BMW Rules, 2016 and the atomic Energy Commission regulations as applicable.
- (xi) Traffic Management Plan as submitted shall be implemented in letter and spirit. Further, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (xii) No tree shall be cut/transplanted unless exigencies demand. Where absolutely necessary, tree cut/transplantation shall be with prior permission from the Tree Authority constituted as per the Delhi Preservation of Trees Act, 1994 (Delhi Act No. 11 of 1994). Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted). In case of cut/non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree) shall be done and maintained.
- (xiii) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 55,250.19 sqm (46.32% of total area) area shall be provided for green area development.
- (xiv) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, the project proponent has proposed that an amount of Rs. 1.46 Crore (@ 0.75% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as tree plantation drive, drinking water facilities, installation of solar lights in village common areas, solid waste management facilities and construction of public toilets under total sanitation campaign. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.4.7.

Expansion of "V3S East Centre" (Commercial Complex) at Plot No.- 12, Laxmi Nagar District Centre, Vikas Marg, New Delhi by M/s V3S Infratech Limited - Environmental Clearance**(IA/DL/MIS/120350/2006; F.No. 21-8/2020-IA-III)**

48.4.7.1. The project proponent and the accredited Consultant M/s Perfect Enviro Solutions Pvt. Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at Plot No. 12, Laxmi Nagar, District Centre, New Delhi. Latitude 28°38'14.31"N and Longitude 77°17'11.66"E
- (ii) The project is Expansion of "V3S East Centre (Commercial Complex)". Earlier Environmental Clearance was granted by MoEF vide letter F.No. 21-708/2006-IA.III dated 08.08.2007 for plot area 12,540 sqm and built-up area 39,093.14 sqm.
- (iii) After expansion total plot area will remain the same i.e. 12,540 sqm. The total FAR Area of the project will be increased from 19,588.02 sqm (including FAR area 1,042.29 sqm in Basement area) to 20,059.26 sqm. The other Non-FAR Area (as per bye-laws) of the project will be increased from 1,773.0 sqm to 5,892.619 sqm. The total basement area of the project including FAR in Basement level-1 will be 18,676.15 sqm and excluding FAR in basement level-1 will be 17,633.93 sqm. The built-up area of the project will be increased to 43,585.809 sqm and total no. of floors will be increased from 2B + G + 3 to 2B + G + 4 nos. Total no. of basement will be 2 nos. The maximum height of the building will be increased from 17.8 m to 23.8 m. The details of the building are as follows-

| Particulars | Area as per Environment Clearance | Existing Area details | Proposed Area | Total after Expansion |
|----------------------|-----------------------------------|---|----------------|-----------------------|
| FAR Area | - | 19,588.02 sqm | 471.24 sqm | 20,059.26 sqm |
| Non FAR Area | - | 1,773.0 sqm | 4,119.619 sqm | 5,892.619 sqm |
| Built-up Area | 39,093.14 sqm | 38,994.95 sqm | 4,590.859 sqm | 43,585.809 sqm |
| No. of Floors | 2B+G+3 | 2B+G+3 | 1 No. of Floor | 2B+G+4 |
| Activities | | Shops, Restaurant, Food Court, Coffee Shops & Multiplex | | |

- (iv) During the construction phase, total water requirement is expected to be 5 KLD for construction purpose which will be sourced through tankers. During the construction phase, septic tanks will be provided for the disposal of wastewater. Temporary sanitary toilets will be provided during peak labour force.
- (v) During the operational phase after expansion, the total water requirement of the project is expected to be 206 KLD and out of which 61 KLD of fresh water will be met from Delhi Jal Board and 145 KLD of water recycled water. Wastewater generated (162 KLD) will be treated in existing STP of capacity 165 KLD which will be augmented to 200 KLD. 145 KLD of treated water obtained from STP will be recycled and reused for flushing, gardening and cooling.
- (vi) About 0.465 TPD solid wastes will be generated in the project. The biodegradable waste (0.25 TPD) will be processed in OWC and the non-biodegradable waste generated (0.13 TPD), plastic waste (0.08 TPD) and inert waste (0.005 TPD) will be handed over to authorised local vendor.
- (vii) The total Power Requirement during the construction phase will be met by an existing power supply from BSES Yamuna Power Limited and total power requirement during operation phase will be 3000 KVA which will be met from BSES Yamuna Power Limited. Also, during power failure DG Set of capacity 3 x 1500 kVA and 1 x 500kVA are provided.
- (viii) Rooftop rainwater of the building is being collected in 3 RWH pits of total capacity 105 m³ capacity for harvesting after filtration and recharging the groundwater.
- (ix) Parking facility of 445 ECS for four-wheelers and two-wheelers is proposed to be provided against the requirement of 417 ECS.

- (x) Proposed energy-saving measures would save about 11% due to the use of LED and addition solar provision will be provided.
- (xi) Okhla Bird Sanctuary is located at 8.01 km, SSE direction of the project location. The site is outside the notified boundaries of the Okhla Bird Sanctuary. Hence, NBWL Clearance is not required.
- (xii) Forest Clearance is not required.
- (xiii) No court case is pending against the project.
- (xiv) Investment /Cost of the Project after Expansion is Rs. 177.5 Crores (Rs. 12.5 Crores for the expansion).
- (xv) Employment potential: In construction phase 100 persons and 300 persons at the time of Operation Phase.
- (xvi) Benefits of the project: Employment opportunities provided due to the project will lead to better quality of life and will also set a standard for future developments in the area. The project will lead to an increase in the infrastructure of the area and encourage others for further development of the area. It will provide healthy, green & safe premises for living. People have more open and green spaces, bringing them closer to nature. People live, stay and recreate; and have immediate access to entertainment facilities in a single, spacious and secured area. Corporate Environment Responsibility will also be considered for the social benefits of the society.

48.4.7.2. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project Expansion of "V3S East Centre" (Commercial Complex) at Plot No. 12, Laxmi Nagar District Centre, Vikas Marg, New Delhi by M/s V3S Infratech Limited for plot area 12,540 sqm and total built-up area of 43,585.809 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.
- (iii) Earlier, Environmental Clearance was granted by MoEF vide letter F.No. 21-708/2006-IA.III dated 08.08.2007 for plot area 12,540 sqm and built-up area 39,093.14 sqm.

48.4.7.3. *The project proponent informed the EAC that the proposed project is an Expansion of "V3S East Centre (Commercial Complex)" located at Plot No. 12, Laxmi Nagar, District Centre, New Delhi. The proposed project is being developed by M/s V3S Infratech Limited. Earlier, Environmental Clearance was granted by MoEF vide F.No. 21-708/2006-IA.III dated 08.08.2007 for plot area 12,540 sqm and built-up area 39,093.14 sqm. Now due to amendment in UBBL Bye Laws, FAR is being shifted to Non-FAR and vertical expansion has been proposed. The built-up area after expansion will be 43,585.809 sqm.*

The EAC also deliberated on the certified compliance report letter No. 4-375/2007-RO(NZ)/639 dated 06.01.2020 issued by the MoEF&CC's Regional Office (Central Region), Lucknow. As per Compliance report, "it has been noticed that Pas have complied or are in the process of complying the environmental conditions stipulated for this project, however some non-compliance were also observed". The EAC noted that the project proponent vide its letter dated 27.01.2020 has submitted action taken report to MoEF&CC's Regional Office (Central Region), Lucknow on the non-complied conditions.

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-8** of the minutes), while considering for accord of environmental clearance:*

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The project proponent shall provide for adequate fire safety measures and equipment as per National Building Code/required by Fire Service Act of the State and instructions issued by the local Authority/Directorate of fire, from time to time. Further, the project proponent shall take necessary permission/NOC regarding fire safety from Competent Authority as required.
- (iii) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- (iv) As proposed, fresh water requirement from DJB shall not exceed 61 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority.
- (v) Sewage shall be treated in the STP based on SAFF Technology with tertiary treatment i.e. Ultra Filtration. The treated water from STP shall be recycled/re-used for Flushing, gardening and cooling. As proposed, no treated water shall be discharged to municipal drain.
- (vi) The project proponents would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coliforms and other pathogenic bacteria.
- (vii) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- (viii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 3 no. of rain water harvesting recharge pit (existing) shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (ix) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 50 sqm area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to dumping site.
- (x) Traffic Management Plan as submitted shall be implemented in letter and spirit. Further, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (xi) No tree cutting/transplantation has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive

species should not be used for landscaping. As proposed 1254 sqm (10% of total area) area shall be provided for green area development.

- (xii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xiii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, the project proponent has proposed that an amount of Rs. 0.125 Crore (@ 1% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Adoption of pond of Mondoli village which is situated at distance of 0.93 Km in SE direction of the project site for its cleanliness and beautification by development of embankment and maintenance and Providing stand alone solar light in Shankar Vihar Park which is at a distance of 0.12 Km, NEE from the project site. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.4.8.

Proposed Construction of Super Specialty Hospital at Siraspur, New Delhi by M/s Health Project Division (North), PWD - Reconsideration for Environmental Clearance

(IA/DL/MIS/123025/2019; F.No. 21-77/2019-IA-III)

48.4.8.1. The project proponent and the accredited Consultant M/s Grass Roots Research and Creation (GRC) India (P) Ltd gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at Siraspur, New Delhi. Latitude 28°45'28.68"N and Longitude 77°08'45.38"E.
- (ii) The project is new. The total plot area is 80,838 sqm. FSI area is 60,561 sqm and total built-up area of 94,778 sqm. The project comprises of Hospital Block (1168 Beds), Nurse Station, Diagnostic Center and Food Court. Maximum height of the building is 41.2 m.
- (iii) The total water requirement for the construction Project is estimated to be approx. 190 ML. The water supply during Construction phase will be met through STP Treated water/Private water tanker. During the construction phase, soak pits and septic tanks are provided for disposal of waste water. Temporary toilets will be provided for labourers.
- (iv) During operation phase, total water requirement will be 1278 KLD and will be met from Delhi Jal Board (487 KLD fresh water) and recycled water (411 KLD) and 379 KLD treated water from other sources. The treated water (411 KLD) from STP shall be recycled/re-used for flushing (172 KLD), gardening (42 KLD) and HVAC (197 KLD) etc). As proposed, excess treated water from ETP (98 KLD) shall be discharge to external sewer.
- (v) About 3564 kg/day solid waste will be generated from the project. The biodegradable waste (1425.6 kg/day) will be processed in OWC, Inert waste (356.4 kg/day) will be used for land filling and the non-biodegradable waste generated (1782 kg/day) will be handed over to vendors.
- (vi) The power will be supplied by State Electricity Board. The maximum demand load for the project will be approx. 8,000 kVA for the project.
- (vii) Rooftop rainwater of buildings will be collected in 06 RWH Pits.
- (viii) Parking facility for 1212 ECS is proposed to be provided against the requirement of 1211 ECS.
- (ix) Proposed energy saving measures: Energy will be saved using energy efficient lighting fixtures, Electronic Ballast, Timer based lighting and APFC Panel.
- (x) There is no Eco-Sensitive zone within 10 km radius. Hence, NBWL Clearance is not required.

- (xi) Forest Clearance is not required.
- (xii) There is no court case pending against the project.
- (xiii) Estimated Cost of the project is 487.41 Crores.
- (xiv) Employment potential: It will generate direct and indirect employment opportunities for both skilled and unskilled labor during construction & operation phase.
- (xv) Benefits of the project: Direct & Indirect employment opportunities and Infrastructural Development of the Area.

48.4.8.2. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project Proposed Construction of Super Specialty Hospital at Siraspur, New Delhi by M/s Health Project Division (North), PWD for plot area 80,338 sqm and total built-up area of 92,266 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.
- (iii) The proposal was considered by the EAC (Infra-2) in its 45th Meeting of the EAC (Infra-2) held during 17-18 October, 2019, wherein, the EAC during deliberation noted that the project proponent has not mentioned the built-up area in the Form-1. Also there were many discrepancies in the Form-1, Form- 1A and Conceptual Plan. The EAC asked the project proponent to rectify all the discrepancies and submit revised Form-1, Form- 1A and Conceptual Plan.
- (iv) The project proponent submitted/uploaded the additional information on 11.12.2019 on Ministry's website.

48.4.8.2. *The EAC was informed that Public Work Department (Health), Govt. of NCT Delhi proposes a Super Specialty Hospital Project at Siraspur, New Delhi in the total plot area measuring 80,838 sqm with estimated built-up area of 94,778 sqm. The project comprises of Hospital Block (1168 Beds), Nurse Station, Diagnostic Center and Food Court.*

*The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-8** of the minutes), while considering for accord of environmental clearance:*

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The project proponent shall provide for adequate fire safety measures and equipment as per National Building Code/required by Fire Service Act of the State and instructions issued by the local Authority/Directorate of fire, from time to time. Further, the project proponent shall take necessary permission/NOC regarding fire safety from Competent Authority as required.
- (iii) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- (iv) As proposed, fresh water requirement from DJB shall not exceed 487 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority.

- (v) Sewage shall be treated in the STP based on MBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, gardening and HVAC etc). As proposed, excess treated water from ETP shall be discharge to external sewer.
- (vi) The project proponents would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coliforms and other pathogenic bacteria.
- (vii) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- (viii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 6 no. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (ix) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 200 sqm area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to dumping site.
- (x) Laboratory wastes shall be managed in accordance to the BMW Rules, 2016 and the atomic Energy Commission regulations as applicable.
- (xi) Traffic Management Plan as submitted shall be implemented in letter and spirit. Further, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (xii) No tree cutting/transplantation has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 41,841 sqm (51.75% of total area) area shall be provided for green area development.
- (xiii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, the project proponent has proposed that an amount of Rs. 7.31 Crore (@ 1.5% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as maintenance/construction of roads and drains in consultation with local authorities in nearby villages, providing computer labs, benches, fans etc. in local schools, setting up of a vocational training centre in the nearby villages, up gradation of sanitation facilities in nearby villages, plantation in nearby villages, providing medical equipments to government hospitals and dispensaries, solar power including electrification in nearby villages. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed

under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 48.4.9.

Proposed Commercial Cum Multiplex With MLCP Block PD Plot, Jasola Apollo Metro Station, Sarita Vihar, Mathura Road, New Delhi by M/s DMRC Ltd through lessee M/s Pacific Development Corporation Ltd - Reconsideration for Environmental Clearance

(IA/DL/MIS/119584/2019; F.No.21-75/2019-IA-III)

48.4.9.1. The EAC noted the following:-

- (i) The proposal is for grant of Environmental Clearance to the project Proposed Commercial Cum Multiplex With MLCP Block PD Plot, Jasola Apollo Metro Station, Sarita Vihar, Mathura Road, New Delhi by M/s DMRC Ltd through lessee M/s Pacific Development Corporation Ltd for plot area 16,888.65 sqm and total built-up area of 50,938.232 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central level by sectoral EAC.
- (iii) The proposal was considered by the EAC (Infra-2) in its 45th Meeting of the EAC (Infra-2) held during 17-18 October, 2019 and 47th Meeting held during 26-27 December, 2019, wherein the EAC sought some additional information. The EAC deliberated upon the information provided by the project proponent and noted that the information in respect to query no (iv) was not addressed properly, also 30 sqm area as earmarked for solid waste management is not adequate. Accordingly, Committee asked the project proponent to submit the proper justification that the area/space provided is adequate as per the technology proposed. The information is to be provided on the same day of the meeting. However, the project proponent fails to submit the requisite information.
- (iv) The project proponent submitted/uploaded the additional information on 18.11.2019 and 09.01.2020 on Ministry's website.

48.4.9.2. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at Annexure-8 of the minutes), while considering for accord of environmental clearance:

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The project proponent shall provide for adequate fire safety measures and equipment as per National Building Code/required by Fire Service Act of the State and instructions issued by the local Authority/Directorate of fire, from time to time. Further, the project proponent shall take necessary permission/NOC regarding fire safety from Competent Authority as required.
- (iii) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

- (iv) As proposed, fresh water requirement from Municipal supply shall not exceed 26 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority.
- (v) Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment i.e. Ultra Filtration. The treated water from STP shall be recycled/re-used for Flushing, horticulture and HVAC. As proposed, no treated water shall be discharged to municipal drain.
- (vi) The project proponents would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to continuously monitor the treated waste water being used for flushing in terms of faecal coliforms and other pathogenic bacteria.
- (vii) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- (viii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 5 no. of rain water harvesting recharge pit shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (ix) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 30 sqm area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to dumping site.
- (x) Traffic Management Plan as submitted shall be implemented in letter and spirit. Further, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (xi) No tree cutting/transplantation has been proposed in the instant project. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 2,545.119 sqm (15% of total area) area shall be provided for green area development.
- (xii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xiii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, the project proponent has proposed that an amount of Rs. 1.53 Crore (@ 1.5% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Promoting Education by Constructing school roads, boundary, setting up computer lab. Providing chairs and fans at schools, Women entrepreneurship & forming self-help group and providing skill based training, Setting up Vocational Training Institutes for the Skill development (Electrician, Beautician, retail, digital awareness, evening class for local labour children) for livelihood

generation, Providing safe drinking water in schools and Construction/Renovation of toilets and building infrastructure in the schools. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

48.5 Any other item with the permission of Chair.

48.5.1. 'Modernization of Sir Ganga Ram Hospital' at Sir Ganga Ram Hospital Marg, Rajinder Nagar, New Delhi by M/s Sir Ganga Ram Hospital (F. No. 21-103/2018-IA-III)

48.5.1.1. Matter relates to Environmental Clearance to the project 'Modernization of Sir Ganga Ram Hospital' at Sir Ganga Ram Hospital Marg, Rajinder Nagar, New Delhi by M/s Sir Ganga Ram Hospital granted by MoEFCC vide file F.No. 21-103/2018-IA-III dated 27.12.2018. As per the EC Letter Part A-Specific condition no. (xxxv) "the project proponent will use gas based power generating standby systems". Now, the project proponent has made a request to install DG set in place of gas based power generator. The matter has been examined in the Ministry. It has been decided to place the matter before the EAC (infra-2) in its meeting scheduled to be held during 28-29 January, 2020.

The project proponent informed the EAC that at present the DG sets of capacity 2 x 1875 kVA, 2 x 2000 kVA, 3 x 625 kVA & 3 x 750 kVA has already been installed at the site. M/s Cummins India Ltd. have informed that the diesel based DG should be used where grid is available and gas gensets are installed where continuous run is required to act as a main source of power. Due to space constraints in the hospital, it is not possible to install gas based gensets which required 4 to 5 times space of DG sets. The hospital requires running of genset rarely because power supply is available from two sources on 11 kV line. This is evident from the record of running of existing DG sets for an average of 15 minutes per day during last two years. It may be seen that 4 nos. DG sets had run for total of 731 hours in two years to meet the requirement due to both load beyond the maximum sanctioned load of 4 MVA on 11 KV line and due to power shut down.

Now, after commissioning of 33 kV sub-stations, which is under construction in the complex, there will hardly be any running of DG set required as full load will be available through grid because of no restriction. This will also be available through two sources being hospital. The sanctioned load is 10 MVA to meet entire demand of 9 MVA as mentioned in proposal. Also there will be hardly any power cut/tripping on 33 KV line, therefore no standby power unit is required but considering the hospital, where emergency /critical services involving life threatening situation, standby power back is a must. The startup time of Gas based Gensets are more viz-a-viz start up time required for Diesel based Gensets.

48.5.1.2. *The EAC deliberated upon the proposal and opined that due to very less use and for a short span, it will not be feasible for the project proponent to install Gas based DG sets. The EAC recommended amending the Specific condition no. (xxxv) of the EC letter F.No. 21-103/2018-IA-III dated 27.12.2018 as follows:*

"The project proponent shall use diesel power generating sets for standby power systems. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets and low sulphur diesel shall be used. The location of the DG sets may be decided in consultation with Delhi Pollution Control Committee".

**LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 48th MEETING OF EAC
(INFRASTRUCTURE-2) HELD ON 28-29 JANUARY, 2020**

| S. No. | Name | Designation | Attendance | | Signature |
|--------|-----------------------------|--------------------------------------|------------|------------|-----------|
| | | | 28.01.2020 | 29.01.2020 | |
| 1. | Prof. T. Haque | Chairman | P | P | |
| 2. | Dr. N. P. Shukla | Member | P | P | |
| 3. | Dr. H. C. Sharatchandra | Member | P | P | |
| 4. | Shri V. Suresh | Member | P | P | |
| 5. | Dr. V. S. Naidu | Member | P | P | |
| 6. | Shri B. C. Nigam | Member | P | P | |
| 7. | Dr. Manoranjan Hota | Member | A | A | |
| 8. | Dr. Dipankar Saha | Member | P | P | |
| 9. | Dr. Jayesh Ruparelia | Member | P | P | |
| 10. | Dr. (Mrs.) Mayuri H. Pandya | Member | P | P | |
| 11. | Dr. M. V. Ramana Murthy | Member | P | A | |
| 12. | Prof. Dr. P.S.N. Rao | Member | A | A | |
| 13. | Dr. Subrata Bose | Scientist F & Member Secretary | P | P | |

Standard EC Conditions for Project/Activity 7(a): Airport

- I. Statutory compliance:**
- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - (iii) The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
 - (iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
 - (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
 - (vi) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
 - (vii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - (viii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
- II. Air quality monitoring and preservation:**
- (i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
 - (ii) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
 - (iii) A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
 - (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
 - (v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
 - (vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
 - (vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.
- III. Water quality monitoring and preservation:**
- (i) Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
 - (ii) Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.
 - (iii) The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.
 - (iv) Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area. Domestic and industrial waste water shall not be allowed to be discharged into storm water drains.
 - (v) Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
 - (vi) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - (vii) Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression
 - (viii) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
 - (ix) A detailed drainage plan for rain water shall be drawn up and implemented.
- IV. Noise monitoring and prevention:**
- (i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
 - (ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
 - (iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
 - (iv) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
 - (v) Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

- V. Energy Conservation measures:**
- (i) Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.
- VI. Waste management:**
- (i) Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- (ii) The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- (iii) Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.
- (iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- (v) The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:
- Trash collected in flight and disposed at the airport including segregation, collection and disposed.
 - Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - Wastes arising out of maintenance and workshops
 - Wastes arising out of eateries and shops situated inside the airport complex.
 - Hazardous and other wastes
- (vi) The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.
- (vii) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (viii) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- VII. Green Belt:**
- (i) Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the Air Port.
- (ii) Top soil shall be separately stored and used in the development of green belt.
- VIII. Public hearing and Human health issues:**
- (i) Construction site should be adequately barricaded before the construction begins.
- (ii) Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- (iii) Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- (iv) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- (v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (vi) Occupational health surveillance of the workers shall be done on a regular basis.
- IX. Corporate Environment Responsibility:**
- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- X. Miscellaneous:**
- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The criteria pollutant levels namely; PM₁₀, PM_{2.5}, SO₂, NO_x (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-2**Standard EC Conditions for Project/Activity 7(d): Common hazardous waste treatment, storage and disposal facilities (TSDFs)**

- I. Statutory compliance:**
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area)
 - iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
 - v. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
 - vi. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.
 - vii. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
 - viii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
 - ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities
- II. Air quality monitoring and preservation:**
- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
 - iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
 - iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
 - v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
 - vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
 - vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory
 - viii. Gas generated in the Land fill should be properly collected, monitored and flared
 - ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- III. Water quality monitoring and preservation:**
- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
 - iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
 - iv. No discharge in nearby river(s)/pond(s).
 - v. The depth of the land fill site shall be decided based on the ground water table at the site.
 - vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
 - vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
 - viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.

- ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
 - x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
 - xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
 - xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.
- IV. Noise monitoring and prevention:**
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
 - ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
 - iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- V. Energy Conservation measures:**
- i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.
- VI. Waste management:**
- i. The TSDF should only handle the waste generated from the member units.
 - ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
 - iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
 - iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
 - v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
 - vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
 - vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- VII. Green Belt:**
- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
 - ii. Top soil shall be separately stored and used in the development of green belt.
- VIII. Public hearing and Human health issues:**
- i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
 - ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
 - iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
 - iv. Occupational health surveillance of the workers shall be done on a regular basis.
- IX. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
 - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
 - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- X. Miscellaneous:**
- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
 - ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(da): Bio-Medical Waste Treatment Facilities

- I. Statutory compliance:**
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
 - iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
 - v. Transportation and handling of Bio-medical Wastes shall be as per the Bio-Medical Waste Management Rules, 2016 including the section 129 to 137 of Central Motor Vehicle Rules 1989.
 - vi. Project shall fulfill all the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration - 2005, issued by CPCB Guidelines of CPCB/MPPCB for Bio-medical Waste Common Hazardous Wastes incinerators shall be followed.
 - vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
 - viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities
- II. Air quality monitoring and preservation:**
- i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
 - iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
 - iv. Venturi scrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/Nm³.
 - v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devices (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
 - vi. Masking agents should be used for odour control.
- III. Water quality monitoring and preservation:**
- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
 - iii. Process effluent/any waste water should not be allowed to mix with storm water.
 - iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
 - vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
 - vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
 - viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
 - ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.
- IV. Noise monitoring and prevention:**
- i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- V. Energy Conservation measures:**
- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
 - ii. Provide LED lights in their offices and residential areas
- VI. Waste management:**
- i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
 - ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
 - iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
 - iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016
 - v. No landfill site is allowed within the CBWTF site
 - vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

VII. Green Belt:

- i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues:

- i. Feeding of materials/Bio-medical waste should be mechanized and automatic no manual feeding is permitted.
- ii. Proper parking facility should be provided for employees & transport used for collection & disposal of waste materials.
- iii. Necessary provision shall be made for fire-fighting facilities within the complex.
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- v. Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or gradual release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- vi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(e): Port, Harbor, Break water, Dredging

- I. Statutory compliance:**
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. No dredging is allowed in protected habitat areas without prior permission from NBWL.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
 - iv. Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011 and the State Coastal Zone Management Plan as drawn up by the State Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
 - v. All the recommendations and conditions specified by State Coastal Zone Management Authority for the project shall be complied with.
 - vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
 - vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
 - viii. All excavation related dewatering shall be as duly authorized by the CGWA. A NOC from the CGWA shall be obtained for all dewatering and ground water abstraction
 - ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
- II. Air quality monitoring and preservation:**
- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the project area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
 - ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
 - iii. Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
 - iv. Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
 - v. The Vessels shall comply the emission norms prescribed from time to time.
 - vi. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
 - vii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- III. Water quality monitoring and preservation:**
- i. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
 - ii. Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
 - iii. No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
 - iv. Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
 - v. The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
 - vi. Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
 - vii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - viii. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.
 - ix. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
 - x. No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
 - xi. All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.
- IV. Noise monitoring and prevention:**
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- iv. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management:

- i. Dredged material shall be disposed safely in the designated areas.
- ii. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- iii. Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- iv. The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- viii. Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered

VII. Green Belt:

- i. Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

- i. Dredging shall not be carried out during the fish breeding and spawning seasons.
- ii. Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
- iii. The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- iv. While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- v. A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.
- vi. Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.
- vii. The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

IX. Public hearing and Human health issues:

- i. The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.
- ii. Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
- iii. In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDf.
- iv. Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.
- v. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- vi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

X. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.

- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(g): Aerial ropeways**I. Statutory compliance:**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
 - iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
 - v. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- II. Air quality monitoring and preservation:**
- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission) covering upwind and downwind directions.
 - ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
 - iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
 - iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.
- III. Water quality monitoring and preservation:**
- i. Storm water from the project area shall be passed through settling chamber.
 - ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
 - iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
 - iv. Prior permission from competent authority shall be obtained for use of fresh water.
 - v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.
 - vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- IV. Noise monitoring and prevention:**
- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
 - ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time..
- V. Energy Conservation measures:**
- i. Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project design and should be in place before project commissioning.
 - ii. Solar energy shall be used in the project i.e. at upper terminal and lower terminal to reduce the carbon footprint.
- VII. Waste management**
- i. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
 - ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
 - iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- VIII. Public hearing and Human health/safety issues:**
- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
 - ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
 - iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
 - iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
 - v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
 - vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
 - vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
 - viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- IX. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
 - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(h): Common Effluent Treatment plants (CETPs)**I. Statutory compliance:**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- i. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Diesel generating sets shall be installed, in the downwind directions.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards.

III. Water quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- iii. There shall be flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.
- iv. The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the Industrial park/units, quantity of the treated effluent discharged. All the above information shall be provided on-line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
- v. The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.
- vi. No changes in installed capacity, quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, addition of any new member units shall be carried without prior approval of the ministry
- vii. The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advice in the matter.
- viii. The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.
- ix. The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
- x. The unit shall maintain a robust system of conveyance for primary treated effluents from the member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.
- xi. The effluent from member units shall be transported through pipeline. In case the effluent is transported thorough road, it shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
- xii. Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.
- xiii. Treated water shall be disposed on land for irrigation. An irrigation management plan shall be drawn up in consultation with and to the satisfaction of the State Pollution Control Board.
- xiv. The Project proponents will build operate and maintain the collection and conveyance system to transport effluents from the industrial units in consultation with and to the satisfaction of the State Pollution Control Board and ensure that the industrial units meet the primary effluent standards prescribed by the State Pollution Control Board.
- xv. The State Pollution Control Board will also evaluate the treatment efficiency of the Effluent Treatment Plant (ETP) and its capability of meeting the prescribed standards. The final scheme of treatment would be such as is approved by the Pollution Control Board in the Consent to Establish.
- xvi. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CETP.

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- V. Waste management:**
 - i. ETP sludge generated from CETP facility shall be handled and disposed to nearby authorized TSDF site as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
 - ii. Non Hazardous solid wastes and sludge arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non Hazardous solid wastes and sludge shall not be mixed with Hazardous wastes.
 - iii. The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
 - iv. The site for aerobic composting shall be selected and developed in consultation with and to the satisfaction of the State Pollution Control Board. Odour and insect nuisance shall be adequately controlled.
 - v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
 - vi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- VI. Energy Conservation measures:**
 - i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
 - ii. Provide LED lights in their offices and residential areas
- VII. Green Belt:**
 - i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- VIII. Public hearing and Human health issues:**
 - i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
 - ii. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
 - iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
 - iv. Occupational health surveillance of the workers shall be done on a regular basis.
- IX. Corporate Environment Responsibility:**
 - i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
 - ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
 - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
 - v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- X. Miscellaneous:**
 - i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
 - ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - vi. The criteria pollutant levels or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 - vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of operation by the project.
 - viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 - xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(i): Common Municipal Solid Waste Management Facility (CMSWMF)

- I. Statutory compliance:**
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
 - ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
 - iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
 - iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
 - v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
 - vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
 - vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
- II. Air quality monitoring and preservation:**
- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
 - ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
 - iii. Analysis of Dioxins and Furans shall be done through CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
 - iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
 - v. Gas generated in the Land fill should be properly collected, monitored and flared.
 - vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- III. Water quality monitoring and preservation:**
- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
 - iii. The depth of the land fill site shall be decided based on the ground water table at the site.
 - iv. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.
 - v. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
 - vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
 - vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
 - viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
 - ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
 - x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- IV. Waste management:**
- i. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
 - ii. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
 - iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
 - iv. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- V. Transportation:**
- i. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.
 - ii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
 - iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be

based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

VI. Green belt:

- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
- ii. Top soil shall be separately stored and used in the development of green belt.

VII. Public hearing and Human health/safety issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iii. Occupational health surveillance of the workers shall be done on a regular basis.

VIII. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain (in case of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 8(a/b): Building and Construction projects / Townships and Area Development projects**I. Statutory compliance:**

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightning etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

II. Air quality monitoring and preservation:

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5}) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
 - xiii. All recharge should be limited to shallow aquifer.
 - xiv. No ground water shall be used during construction phase of the project.
 - xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
 - xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
 - xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
 - xviii. No sewage or untreated effluent water would be discharged through storm water drains.
 - xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
 - xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
 - xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
- IV. Noise monitoring and prevention:**
- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
 - ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
 - iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- V. Energy Conservation measures:**
- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
 - ii. Outdoor and common area lighting shall be LED.
 - iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
 - iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
 - v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
 - vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- VI. Waste Management:**
- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
 - ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
 - iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
 - iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
 - v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
 - vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
 - vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
 - viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
 - ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
 - x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- VII. Green Cover:**
- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).

- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
 - iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
 - iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
- VIII. Transport**
- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
 - ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
 - iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- IX. Human health issues:**
- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
 - ii. For indoor air quality the ventilation provisions as per National Building Code of India.
 - iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
 - iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
 - v. Occupational health surveillance of the workers shall be done on a regular basis.
 - vi. A First Aid Room shall be provided in the project both during construction and operations of the project.
- X. Corporate Environment Responsibility:**
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
 - ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
 - iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
 - iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- XI. Miscellaneous:**
- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
 - ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
 - x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Item No.01:

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

Original Application No.196 of 2021 (SZ)&

I.A. No. 134 of 2021

(Through Video Conference)

IN THE MATTER OF:

T.M. Umashankar,

Union of India and Ors.



Versus

सत्यमेव जयते

...Applicant(s)

...Respondent(s)

Date of hearing: 06.09.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE DR. K. SATYAGOPAL, EXPERT MEMBER

For Applicant(s): Mr. Anitha Shenoy, Sr. Adv along with Mr. Ritwick Dutta and Mr. Stanley Hezbon Singh.

For Respondent(s): Mr. G.M. Syed Nurullah Sheriff for RI.

ORDER

1. The above application has been filed by the applicant stating that the 5th respondent is running integrated common hazardous waste treatment storage and disposal facility of Karnataka Waste Management Project illegally in plot no. 7 to 9 and 75 to 85 of Dobaspeth Industrial Area,

Pemmanahalli and Thimmanayakanahalli village, Taluka Nelamangala, Bangalore, Rural District as a secured landfill facility of capacity 40,000 TPA with hazardous waste incineration facility of capacity 5.5 million kcal/hr against the environmental norms.

2. It is alleged in the application that they are running the unit without obtaining environment clearance as required under EIA Notification, 2006. It is also in violation of siting criteria issued by the Central Pollution Control Board and office memorandum dated 29.08.2016 issued by MoEF&CC in respect of establishment of such treatment facility. It is also in violation of the Thimmanayakanahalli Reservoir Notification (TGR Notification) dated 18.11.2003 and also in violation of orders passed by the National Green Tribunal, New Delhi dated 26.09.2019. So, the applicant filed the following application seeking following reliefs:

- i. *Declare that the establishment of TSDF of the respondent No. 5 is illegal;*
- ii. *Direct Respondent Nos. 1 to 4 to facilitate the closure of TSDF of the respondent no. 5;*
- iii. *Direct respondent nos. 1 to 4 to initiate proceedings against the respondent no. 5 and its directors and officers incharge under the provisions of Environment (Protection) Act, 1986 and Hazardous and other waste (Management and Transboundary Movement) Rules, 2016;*
- iv. *Direct a proper environment impact assessment be carried out by a Committee to be formed by this Hon'ble Tribunal to assess the impact of ICHWTSDF unit of respondent no. 5 on Thippagondanahalli reservoir which provides drinking water to the Bengaluru city and take all the preventive or remedial measures to prevent all forms of contamination and pollution to*

water bodies;

v. Restrain the respondents from permitting further industrial development in the notified TGR catchment area in view of the provisions of the Notification dated 18.11.2003 issued by the State of Karnataka;

vi. Pass an order thereby imposing Environmental Compensation on respondent no. 5 under section 15 of the National Green Tribunal, Act, 2010 for causing grave and irreversible damage to the environment and ecology in that vicinity.

Pass any other order deemed fit by this Hon'ble Tribunal in the interest of justice, equity and good conscience.

3. When the matter came up for admission today, Ms. Anitha Shenoy, Senior Advocate along with Mr. Ritwick Dutta and Mr. Stanley Hezbon Singh represented the applicant and Mr. G.M. Syed Nurullah Sheriff represented 1st respondent.

4. As regards certain prayers made in the application, we feel that without getting further details in the matter as to some extent it has been concluded as the litigation originally started by filing writ petition no. 51509/2016 and 52176-52179 of 2016 before the Hon'ble High Court of Karnataka against the establishment of this facility and running of this facility without obtaining environment clearance and those cases were transferred to National Green Tribunal by order dated 10.01.2019 where it was re-numbered as O.A. No. 654 of 2019 and after considering the report submitted by the Committee constituted by the Tribunal by order dated 26.09.2019 disposed of the matter without interfering with the functioning of the unit but directed the unit to comply with the law and requisite environment clearance must be obtained. They have been

directed to apply for the environment clearance within two months and directed the Appellate Authority to dispose of the same appeal pending in accordance with law without delay. which was challenged by the applicants in those cases before the Hon'ble Supreme Court of India by filing Civil Appeal (Diary) No. 522 of 2020 and the Hon'ble Supreme Court of India by order dated 17.12.2020 dismissed the appeal holding that even though the Learned Senior Counsel has made out a good point in law, it is difficult for us to interfere given the public interest involved. However, in so far as compensation is concerned, the appellants are free to knock at the doors of whichever forum in order to seek the aforesaid in public interest if so payable in law. So, as regards the interim injunction prayer is concerned, we are not inclined to grant at this stage and we are disposing I.A. No. 134 of 2021 filed by the applicant for such a prayer. With the above observation and direction I.A. No. 134 of 2021 is disposed of

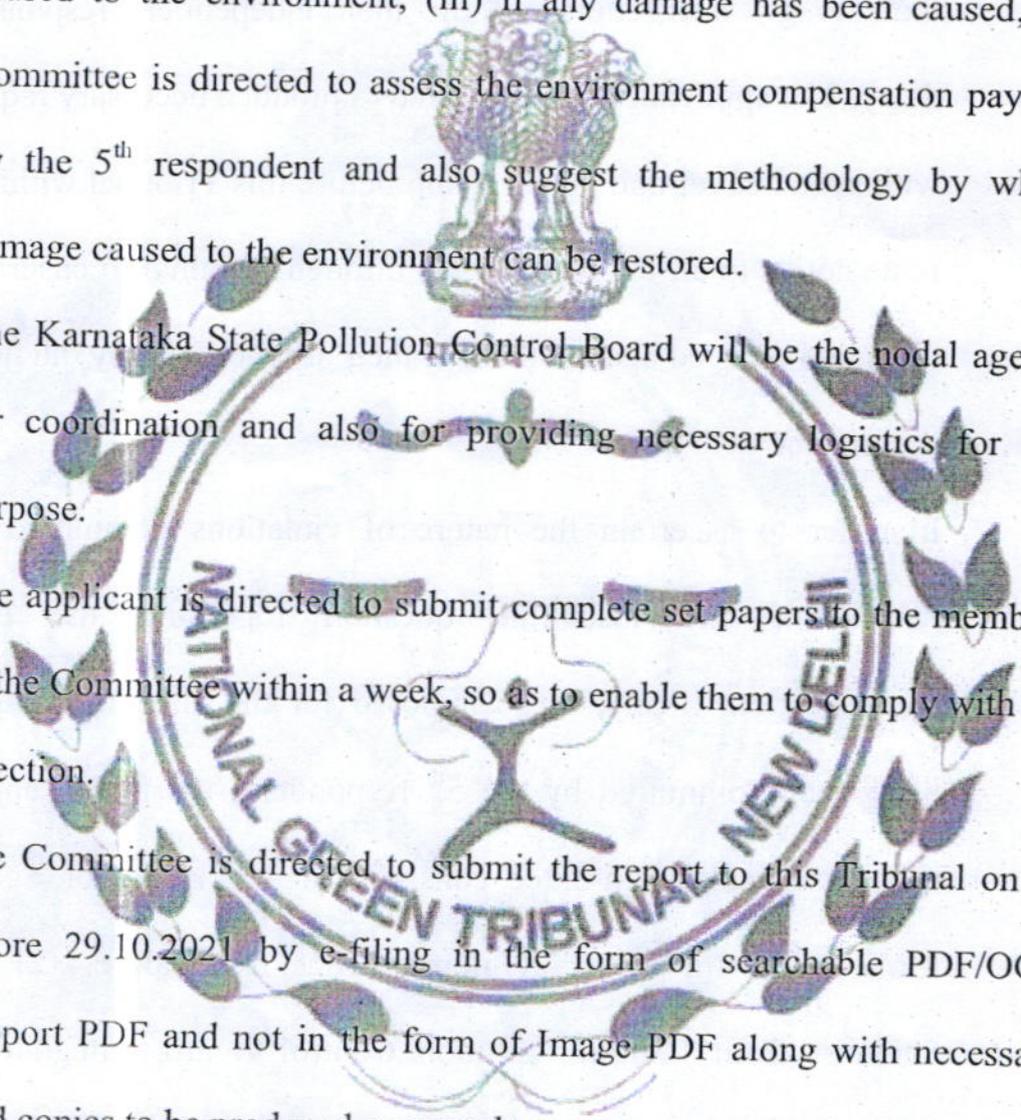
5. However, Considering the issues involved and nature of violations alleged, we feel it appropriate to admit the matter subject to the orders already issued in this regard by the Principal Bench confirmed by the Hon'ble Apex Court unless further change of circumstances are made out by the applicant for varying from those findings. With the above observation the application is admitted.
6. Issue notice to the respondents by Registered post with acknowledgment

due and also by e-mail and Dasti, if possible and produce proof of service by filing proof affidavit as per Rules. The applicant is also directed to serve copy of the application to the standing counsel appearing for the official respondents within a week, so as to enable them to get instruction and file their independent response to avoid delay. The applicant is also directed to produce necessary requisite along with postal cover and postal stamp before this Tribunal within a week to issue notice to all the respondents through Tribunal to ensure service on them and proceed against them in their absence, if they did not appear in accordance with law.

7. In order to ascertain the nature of violations committed by the 5th respondent and also the question regarding the environment compensation, if any, to be imposed for the alleged violation said to have been committed by the 5th respondent, we feel if appropriate to appoint a Joint Committee consists of (1) a Senior Scientist from MoEF&CC, Integrated Regional office, Bangalore, (2) a Senior Scientist from Central Pollution Control Board, Integrated Regional office, Bangalore, (3) a Senior Scientist from Karnataka State Pollution Control Board and (4) a Senior Scientist from Indian Institute of Science, Bangalore to inspect the unit in question and submit a factual as well as action taken report, if there is any violation found.

8. The Committee is directed to ascertain (i) whether the 5th respondent

unit had committed any violation of environmental laws in establishing and running the unit without obtaining necessary permission and in violation of the direction issued by the Principal Bench in O.A. No. 654 of 2019, (ii) On account of the violation committed, is there any damage caused to the environment, (iii) if any damage has been caused, the Committee is directed to assess the environment compensation payable by the 5th respondent and also suggest the methodology by which damage caused to the environment can be restored.

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9. The Karnataka State Pollution Control Board will be the nodal agency for coordination and also for providing necessary logistics for this purpose.
 10. The applicant is directed to submit complete set papers to the members of the Committee within a week, so as to enable them to comply with the direction.
 11. The Committee is directed to submit the report to this Tribunal on or before 29.10.2021 by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF along with necessary hard copies to be produced as per rules.
 12. The Registry is directed to communicate this order to the members of the Committee as well as official respondents by e-mail immediately, so as to enable them to file their report and also make their appearance and file independent response without delay.

13.For appearance of parties, filing independent response and also for consideration of report, post on 29.10.2021.

.....J.M.
(Justice K. Ramakrishnan)

.....E.M.
(Shri. Dr. K. Satyagopal)

O.A. No. 196/2021(SZ)
6th September, 2021. (AM)



ಫ್ಯಾಕ್ಸ್/Fax : 080-25586321

ಈಮೇಲ್/E-mail : ho@kspcb.gov.in

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ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ

Karnataka State Pollution Control Board

"ಪರಿಸರ ಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
 "Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

No. PCB/WMC/65/HWM (2020)/2021-22/ 3987

Dated:

12 NOV 2021

MEMORANDUM

Sub: Constitution of Joint Committee as per the directions of Hon'ble National Green Tribunal in OA NO. 196 of 2021 (SZ) in order to ascertain nature of violations committed and environmental if any in respect of Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility established by M/s Ramky Enviro Engineers and M/s Ramky Infrastructure Ltd., Sy No 75 to 85 of Pemmenahalli and Sy No. 7 & 9 of Thimmanhalli, KIADB Industrial Area, Dobespet, Nelmangala Taluk, Bengaluru Rural District -reg.

- Ref:** 1) Orders of the Hon' ble NGT, South Zone Dated: 06/09/2021 in O.A NO. 196 of 2021(SZ) in the matter of Sri T M Umashankar v/s Union of India & Ors.
 2) Board Office letter dt: 30.09.2021 to Indian Institute of Science, Bangalore, Ministry of Environment, Forest and Climate Change (MoEF & CC) & Central Pollution Control Board (CPCB) for Nomination for constitution Joint Committee as per NGT, South Zone in O.A NO. 196 of 2021(SZ).
 3) Ministry of Environment, Forest and Climate Change (MoEF & CC) letter dt: 14.09.2021
 4) Central Pollution Control Board (CPCB) letter dt: 07.10.2021
 5) Indian Institute of Science, Bangalore letter dt: 26.10.2021

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The Hon'ble National Green Tribunal (NGT), South Zone, C Chennai, while hearing the OA No. 196 of 2021 has passed an order on 06/09/2021 (Sri T M Umashankar & Ors v/s Union of India & Ors) in respect of Integrated Common Hazardous Waste, Treatment, Storage & Disposal Facility (CHW-TSDF) of M/s Ramky Enviro Engineers and M/s Ramky Infrastructure Ltd., to constitute Joint Committee comprising of Senior Scientists from Ministry of Environment, Forest and Climate Change (MoEF & CC), Central Pollution Control Board (CPCB) and Karnataka State Pollution Control Board (KSPCB) and Senior Scientist of Indian Institute of Science, Bangalore to inspect and submit factual as well as action taken report and also to ascertain the nature of violations committed by the operator of TSDF facility and the Environmental Compensation, if any to be imposed. KSPCB has been nominated as the Nodal agency.

The Board vide letter cited at ref. (2) has communicated the Order of the Hon'ble NGT and requested Indian Institute of Science, Bangalore, Ministry of Environment, Forest and Climate Change (MoEF & CC) & Central Pollution Control Board (CPCB) and requested to nominate Offices/Scientest as per the said directions. Accordingly, nominations have been received from the MoEF & CC, CPCB and IISc vide ref. (3) to (5).

Therefore, a joint committee comprising of the following officers has been constituted as per the Orders of the Hon'ble NGT.

| SI No. | Name & Address | Designation |
|--------|---|-------------|
| 1 | Dr. Murali Krishna Chimata, Scientist 'E', Ministry of Environment, Forest and Climate Change (Southern Zone), 4 th Floor, E&F Wing, Kendriya Sadhan, 17 th Mian Road, II Block, Koramangala, Bengaluru. Ph: 080-25635902, ext-37, Mob. No. 9654684977, Email:cm.krishna@gov.in | Member |
| 2 | Smt. Selvi PK, Sc D (E-mail: pkselvi.rdb@gmail.com)/pkselvi.cpcb@nic.in; 9868166753 (M), Central Pollution Control Board, Regional Directorate-South Zone, Nisarga Bhavana, Thimmaiah Road, 7 th D Cross, Shivanagar- Bengaluru - 560010 | Member |
| 3 | Sri Siddaramaiah. C, Senior Environmental Officer , Karnataka State Pollution Control Board Zonal Office, Bangalore North, Urban Eco Park, Regional Office - Peenya , Bengaluru | Member |
| 4. | Prof. G.L. Sivakumar Babu, Department of Civil Engineering, Indian Institute of Science, Bangalore – 560012, Tel: 080-22933124/9448480671, email: gls@iisc.ac.in | Member |



The Joint committee shall inspect the Integrated Common Hazardous Waste, Treatment, Storage and Disposal Facility and submit factual report as per the directions of the NGT within 30 days.


Member Secretary
Karnataka State Pollution Control Board

To,

1. Dr. Murali Krishna Chimata, Scientist 'E', Ministry of Environment, Forest and Climate Change (Southern Zone), 4th Floor, E&F Wing, Kendriya Sadhan, 17th Mian Road, II Block, Koramangala, Bengaluru. Ph: 080-25635902, ext-37, Mob. No. 9654684977, Email:cm.krishna@gov.in.
2. Smt. Selvi PK, Sc D, Central Pollution Control Board, Regional Directorate-South Zone, Nisarga Bhavana, Thimmaiah Road, 7th D Cross, Shivanagar- Bengaluru – 560010
3. Sri Siddaramaiah. C ,Senior Environmental Officer Bengaluru North, Karnataka State Pollution Control Board Zonal Office, Bangalore North Regional Office - Peenya , Bengaluru
4. Prof. G.L. Sivakumar Babu, Department of Civil Engineering, Indian Institute of Science, Bangalore – 560012

Item No. 03 Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 654/2019
(Writ Petition Nos. 51509/2016 & 52176-52179/2016)

(With report dated 07.08.2019)

Sri T. M. Umashankar & Ors.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 26.09.2019

CORAM:

**HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s):

Mr. Darpan K.M., Advocate

For Respondent(s):

Mr. Devraj Ashok, Advocate for State of
Karnataka
Mr. Ravi Varma, Mr. Abhinav Sharma, Advocate
for R-5
Mr. Chirag Jain, Advocate for R-6

ORDER

- The matter has been transferred to this Tribunal by the High Court of Karnataka vide order dated 10.01.2019 to deal with the subject matter of W.P. (C) Nos. 51509/2016 and 52176-52179/2016 on the file of the High Court.
- The Writ Petition before the High Court giving rise to the present proceedings was for a direction for closure of Treatment, Storage and Disposal Facility (TSDF) established by M/s Ramky Enviro Engineers Ltd. and M/s Ramky Infrastructure Ltd. on the direction of State of

Karnataka, Karnataka State Pollution Control Board and Karnataka Industrial Area Development Board on the ground that super fund, Residual Liability Fund and Environment Relief Fund had not been established, as required under the Hazardous and other Waste (Management and Transboundary Movement) Rules, 2016 and there are violations of norms in operating the TSDF facility.

3. The order of the High Court further shows that a sum of Rs. 3.2 crore was transferred to an ESCROW account under the order of the High Court dated 28.11.2018. Further sum of Rs. 11,61,011/- was deposited in pursuance to order of the High Court dated 12.12.2018.

4. According to the Writ petitioners, working of TSDF needs to be audited to ensure compliance of environmental laws, apart from ensuring deposit of funds by the service provider in the manner statutorily required. It is alleged that the environmental clearance, as required, has not been taken nor post establishment preventive and remedial steps taken to comply with the requirement of Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986. The service provider is liable to pay environmental cost for the failure.

In view of above, vide order dated 22.04.2019, this Tribunal directed constitution of a joint Committee comprising the representatives of the Ministry of Environment, Forest & Climate Change, (MoEF&CC), Central Pollution Control Board (CPCB) and Karnataka State Pollution Control Board (KSPCB). The Committee was to furnish a report to this Tribunal.

6. Accordingly, report has been furnished by the joint Committee on 07.08.2019 finding the TSDF to be compliant except that consent to operate for a period from 01.07.2016 was refused by the SPCB against which an appeal was pending and the Appellate Authority directed maintenance of *status quo*. It is further stated that while Environmental Clearance (EC) was taken for incinerator, the same EC was being treated as EC for TSDF which does not meet the mandate of the rules. However, it is suggested that at this stage, separate EC may not be directed to be required. The concluding part of the report is as follows:

"Considering above facts and observations, the Joint Committee is of the opinion that the Rule 2 of the Environmental Impact Assessment Notification -2006, clearly mandates the Projects / Activities require Prior Environmental Clearance, before establishing / even before starting any construction work of the Projects / Activities and secondly, the facility has followed / obtained (i) compliances of Location Criteria as specified in the "Criteria for Hazardous Waste Landfills" (ii) the provisions of Rule 8 of Hazardous Waste (Management & Handling) amendment Rules, 2003 to build and operate environmentally sound hazardous waste management facility (TSDF) (iii) no significant non-compliances / environmental impact noticed based on the Environmental monitoring data (iv) even the facility was established by obtaining Consent for Establishment (CFE) and successfully operated for many years with Consent For Operation (CFO) from KSPCB and also there was no any major non-compliances reported (v) obtained NOC from Govt. of Karnataka for setting up TSDF and H.W. Incinerator from time to time (vi) also MoEF & CC has issued EC for setting up Incinerator for disposal of incinerable waste within the existing TSDF, as an integrated facility considering existing TSDF, and (vii) the facility completed the establishment of above, the Joint Committee is of the view that it would not be appropriate to Hazardous Waste Incinerator and it is ready for commissioning, So in view of direct the facility to conduct EIA & obtain separate EC only for TSDF at this stage. The Environmental Clearance (EC) issued by MoEF & CC as integrated facility (incinerator & landfill) may be considered."

7. In view of above, while we do not interfere with the functioning of the TSDF, we direct that the TSDF must comply with the law and the requisite EC may be obtained. The project proponent may apply for EC within two months. The Appellate Authority may deal with the

appeal said to be pending for about three years expeditiously in accordance with law.

The application is disposed of.

Adarsh Kumar Goel, CP

S.P Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

September 26, 2019
Original Application No. 654/2019
DV



GOVERNMENT OF KARNATAKA

No. FEE 215 ENV 2000

Karnataka Govt. Secretariat
M.S.Building
Bangalore, Dated 18-11-2003NOTIFICATION

Whereas Tippagondanahalli Reservoir (TGR), built at the confluence of Arkavathi and Kumudvathi rivers is one of the source of drinking water to the city of Bangalore and surrounding areas since 1930. Tippagondanahalli Reservoir in normal year, supplies up to 125MLD of water to Bangalore City and in recent years, the inflow to Tippagondanahalli Reservoir has been decreasing. The quality of water supplied by this reservoir has also deteriorated due to the effluent discharge into the reservoir. In view of these facts, BMRDA initiated a study by Indian Space Research Organisation (ISRO) in association with Indian Resources Information and Management Technologies Pvt Ltd. (IN-RIMIT) to ascertain the reasons for reduced inflow of water to Tippagondanahalli Reservoir.

And whereas the study carried out by Indian Space Research Organization in association with Indian Resources Information and Management Technologies Pvt. Ltd., (IN-RIMIT) reveals that unplanned development in the catchment area is one of the main reasons for the deteriorating quality and reduced inflow into the reservoir. Increasing urbanization and industrialization in the catchment area is one of the main reasons for the deteriorating quality and reduced inflow into the reservoir. Increasing urbanization and industrialization in the catchment area has altered the drainage pattern in the catchment areas. This in turn has affected the inflow into the Tippagondanahalli Reservoir. There are number of industries in the catchment area, whose effluents also flow into Tippagondanahalli Reservoir affecting the quality of water. Underground leachate from untreated effluent and sewage is also affecting the quality of ground water in this area.

And whereas the total extent of Tippagondanahalli Reservoir catchment is 1453 sq km and covers parts of Doddaballapur, Nelamangala, Devanahalli, Magadi and Bangalore taluks. Tippagondanahalli Reservoir receives inflows from two streams namely Kumudvathi and Arkavathi. This study done by ISRO and IN-RIMIT, has made several recommendations, to protect and preserve the Tippagondanahalli Reservoir catchment. The recommendations include as follows:

- Formation of a Conservation Zone covering the entire Tippagondanahalli Reservoir catchment and adopting suitable land utilization strategy therein, especially from the point of view of regulating the urbanization/industrialization.
- Declaring a zone of about 10km radius around Tippagondanahalli Reservoir as area of protection.

- Regulating a buffer of around 2 km on either side of the Arkavathi and Kumudvathi courses (within the catchment), for protecting the Tippagondanahalli Reservoir from further deterioration.
- Implementing necessary measures to prevent alteration of drainage course or impediments to the flow of water along the Arkavathi and Kumudvathi rivers.
- Checking of the uncontrolled disposal of effluent/sewage into the streams/ surface water bodies within the catchment. Implementing suitable measures for controlling over-exploitation of groundwater in the catchment, implementing proper waste management system and implementing programmes for revival of the tanks in the catchment.

And whereas in order to ensure improvement in the quantity and quality of inflow of water into Tippagondanahalli Reservoir, Karnataka State Pollution Control Board has recommended to regulate the development in the catchment areas in its 140th meeting held on 24-7-2002. The Karnataka State Pollution Control Board has taken the decision not to accord consent for any industry, as this is bound to change the surface contours and affect the catchment's drainage pattern. The Karnataka State Pollution Control Board has recommended to the Government that the area identified by ISRO be declared as a sensitive zone under Environment (Protection) Act, 1986 and also suggested to constitute a separate Authority for the conservation of 'Tippagondanahalli catchment area'.

And whereas in a meeting held on 08-07-2003 chaired by the Principal Secretary, Urban Development, it was resolved to protect this ecologically sensitive area. Since the quality and quantity of water supplied from Tippagondanahalli Reservoir will have direct impact on large population of Bangalore and whereas the Government considers it necessary to protect the catchment area of Tippagondanahalli Reservoir to prevent any activity that would lead to contamination of the reservoir.

And whereas the Central Government in exercise of the powers conferred under section 23 in the Environment (Protection) Act, 1986 has delegated the powers vested in it under section 5 of the said Act to the State of Karnataka vide Notification No.S.O.152 (E), dated 10-2-1988.

Now therefore in exercise of the powers conferred by section 5 of the Environment (Protection) Act, 1986, (Central Act 29(86) read with Notification No.S.O.152 (E), dated 10-02-88, the Government of Karnataka having considered it necessary in the public interest hereby issued the following directions in respect of Tippagondanahalli Reservoir catchment areas which are categorized into four zones comprising of areas specified in column (2) of the schedule falling under the corresponding zones specified in column (1) thereof and also specify the nature of restricted for regularization of the activities in column (4).

SCHEDULE

| Zone | Area Covered | Nature of restricted/regulated activities | Authorities responsible |
|---------|---|---|--|
| (1) | (2) | (3) | (4) |
| Zone-1 | Entire Tippagondanahalli Reservoir (TGR) catchment area specified in Annexure to this Notification. | <p>a) Regulation and checking over exploitation of ground water.</p> <p>b) No fresh leases or licence for mining, quarrying and stone crushers shall be granted.</p> <p>c) No person shall dispose solid as well as liquid waste in this area without scientific Processing.</p> <p>d) To ensure adoption of rain water harvesting systems in all the new and existing buildings, within six months from the date of issue of this order.</p> <p>e) To promote organic farming including bio-fertilizers and bio-pesticide.</p> | <p>Director Mines and Geology Department.</p> <p>1. Department of Urban Development. 2. Bangalore Water Supply & sewage Board. 3. Nelamangala Planning Authority.</p> <p>Secretary, Department of Agriculture/ Horticulture.</p> |
| Zone -2 | Area covered within 2 kms from the Tippagondana halli Reservoir (TGR) boundary | <p>No person shall carry on activities other than Agricultural or Agriculture related activities without prior permission</p> | <p>1. Department of Urban Development 2. BMRDA. 3. Nelamangala Planning Authority. 4. Bangalore Development Authority. 5. Directorate of Municipal Administration.</p> |

| | | | |
|---|---|---|--|
| | | | 6. Bangalore Water Supply and Sewage Board. |
| 3 | Area covered within 1 km distance from the river banks of Arkavathy (only upto Hesarghatta tank from TGR) and Kumudvathi | No person shall carry on activities other than Agriculture or Agriculture related activities without prior permission | <ol style="list-style-type: none"> 1. Department of Urban Development. 2. BMRDA 3. Nelamangala planning Authority. 4. Bangalore Development Authority. 5. Directorate of Municipal Administration. 6. Bangalore Water Supply and Sewage Board. |
| 4 | Area covered within 1 km distance from the river banks of Arkavathy (only upto Hesaraghatta Tank from TGR) and Kumudvathi (Excluding the areas falling within zone 2) | a) Permit only those industrial activities which are listed as Green category, by the Karnataka State Pollution Control Board with mandatory adoption of rainwater harvesting systems and waste water treatment facilities. The other regulatory/civic agencies to issue permit only after Consent form Establishment (CFE) is obtained | <ol style="list-style-type: none"> 1. Department of Urban Development. 2. BMRDA. 3. Nelamangala Planning Authority. 4. Bangalore Development Authority 5. Directorate of Municipal Administration. 6. Bangalore Water Supply and Sewage Board. |

| | | | |
|--|--|---|--|
| | | <p>from the KSPCB.</p> <p>b) Permit new buildings with only ground and first floor with mandatory adoption of rainwater harvesting systems.</p> | |
|--|--|---|--|

The above directions shall come into effect immediately and non-compliance of the same shall attract penal action under sections 15 and 17 of the Environment (Protection) Act, 1986.

The concerned authorities entrusted with implementation of the above directions shall cause wide publicity of the provisions and submit monthly compliance report and of the action taken to the Secretary (Ecology and Environment), Department of Forest, Ecology and Environment, 709, 7th Floor, M.S Building, Bnagalore-560001.

By Order and in the name of the
Governor of Karnataka

Sd/-
(V.R.GAIKWAD)
Under Secretary to Government,
Forest, Ecology and Environment Dept.,

To the compiler, Karnataka Gazette for publication in the next Gazettee and to supply 200 copies to the Department.

ANNEXURE

THE TIPPAGONDANAHALLI RESERVOIR CATCHMENT LOCATION AND EXTENT

The Tippagondanahalli Reservoir is situated about 34 Km west of Bangalore City and is drained by the river Arkavathi and the river Kumudvati. The catchment of the reservoir extends up to Dobbarpet towards northwest of Bangalore City on the Bangalore- Tumkur National Highway (NH-4) and upto Nandi hills, about 60 km.north

of Bangalore City. The Tippagondanahalli Reservoir catchment covers an area of 1453 sq.km. and is covered in the Survey of India toposheet Nos. 57 G/3, G/4, G/7, G/8, G/11, G/12, H/5 and H/9. The area lies between $12^{\circ} 56'$ and $13^{\circ} 23' 15''$ North Latitudes and $77^{\circ} 13' 30''$ and $77^{\circ} 41' 15''$ East Longitudes. The catchment occupies an area of 461.80 sq.km. (31.78% of the total catchment) of Daddaballapur Taluk; 396.91 sq.km. (4.00% of the catchment) of Devanahalli Taluk; 40.26 sq.km (2.77% of the catchment) of Bangalore South and 8.00 sq.km. (0.55% of the catchment) of Chikballapur Taluk.

APPENDIX I

(See Paragraph-6)

FORM 1

Note : If space provided against any parameter is inadequate, Kindly upload supporting document under 'Additional Attachments if any' at the last part of the Form1. Please note that all such Annexures must be part of single pdf document.

(I) Basic Information

| S.No. | Item | Details |
|-------|---|---|
| | Is your project Comes under Notified Industrial Area | NA |
| | Whether proposal involved violation of EIA notification | N/A |
| | Weather Consent to Establishment Obtained | N/A |
| | Upload copy of CTE | N/A |
| 1. | Name of the Project/s Brief summary of project Proposal Number Project Cost | Integrated Common Hazardous Waste Treatment Storage and Disposal Facility of Karnataka Waste Management Project, Dobaspet Industrial Area, Pemmanahalli and Thimmanayakanahalli (V), Nelamangala(T), Bangalore Rural (D), Karnataka by M/s. Ramky Enviro Engineers Limited. <u>Annexure-Brief summary of project</u> IA/KA/MIS/135629/2020 5200 lacs |
| 2. | S. No. in the schedule Project Sector | 7(d) Common hazardous waste treatment, storage and disposal facilities (TSDFs) INFRA-2 |
| 3. | Proposed capacity/area/length/tonnage to be handled/command area/lease area/number or wells to be drilled | Secured Landfill (DLF & LAT) 40,000 TPA; Hazardous Waste Incinerator 5.5 Million kcal/hr (1000 - 1500 kg/hr) ha. |
| 4. | New/Expansion/Modernization Proposal Number MoEFCC file number(Previous EC) Uploaded EC letter | Expansion IA/KA/MIS/270/2012 10-65/2012-IA-III <u>Annexure-Uploaded EC letter</u> |
| 5. | Existing Capacity/Area etc. | 37.7 ha. |
| 6. | Category of project i.e. 'A' or 'B' | A |
| 7. | Does it attract the general condition? If yes, please specify | No |
| 8. | Does it attract the specific condition? If yes, please specify | No |
| 9. | Location of the project Shape of the project land Uploaded GPS file Uploaded copy of survey of India Toposheet Plot/Survey/Khasra No. Town / Village | Latitude 13°13'41" N Longitude 77°15'15" E Block (Polygon) <u>Annexure-GPS file</u>  <u>Annexure-Survey of india toposheet</u> 7,8,9,75,76,77,78,79,80,81,82,83,84 and 85 Pemmanahalli, Thimmanayakanahalli |

State of the project

Karnataka

Details of State of the project

| S.no | State Name | District Name | Tehsil Name |
|------|--|-----------------|---|
| (1.) | Karnataka | Bangalore Rural | Nelamangala |
| 10. | Nearest railway station along with distance in kms Nearest airport along with distance in kms | | Dobaspet Railway Station, 0.5 km Kempegowda International Airport, Bengaluru, 55 km |
| 11. | Nearest Town/City/District Headquarters along with distance in kms | | Dobaspet , 1 km |
| 12. | Village Panchayats, Zila Parishad, Municipal Corporation, Local body (Complete postal address with telephone nos. to be given) | | Pemmanahalli and Thimmanayakanahalli Villages, Nelamangala Taluk, Bangalore Rural District, Karnataka |
| 13. | Name of the Applicant | | Sanjiv |
| 14. | Registered Address | | Ramky Enviro Engineers Limited 13th Floor Ramky Grandiose Ramky Tower Complex Gachibowli Hyderabad |
| 15. | Address for correspondance: Name of the Company Name of the Applicant Designation (Owner/ Partner/ CEO) Pin code E-mail Telephone No. Fax No. Copy of documents in support of the competence/authority of the person making this application to make application on behalf of the User Agency . | | RAMKY ENVIRO ENGINEERS LTD Sanjiv IWMHead 500032 consultancygroup@ramky.com 40-23015000 40-04023015000 <u>Annexure-Uploaded Copy of documents in support of the competence/authority</u> |
| 16. | Details of Alternative Sites examined, if any. Location of these sites should be shown on a toposheet | | No |
| 17. | Whether part of Interlinked projects? | | No |
| 18. | Whether separate application of Interlinked project has been submitted? | | N/A |
| 19. | If Yes, MoEF file number Date of submission | | N/A N/A |
| 20. | If No, Reason | | N/A |
| 21. | Whether the proposal involves Approval/ Clearance under: if yes, details of the same and their status to be given | | |
| | (i) Whether the proposal involves approval/clearance under the Forest (Conservation) Act,1980? | | No |
| | (ii) Whether the proposal involves approval/clearance under the wildlife (Protection) Act,1972? | | No |
| | (iii) Whether the proposal involves approval/clearance under the C.R.Z notification, 2011? | | No |
| 22. | Whether there is any Government Order/Policy relevant/relating to the site? | | No |
| 23. | | | |

| | | |
|-----|--|-----|
| | Whether any Forest Land Involved? | No |
| | Area of Forest land Involved (hectares) | N/A |
| 24. | Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up? | No |
| | (a) Name of the Court | N/A |
| | (b) Name of the Sub court | N/A |
| | (c) Case No. | N/A |
| | (d) Orders/directions of the court, if any and relevance with the proposed project | N/A |

(II) Activity

1 Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

| S.No | Information/Checklist confirmation | Yes/No | Details there of (with approximate quantities/rates, wherever possible) with source of information data |
|------|---|--------|---|
| 1.1 | Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan) | No | There is a TSDF on the existing land. This land is falling under Notified Industrial Area of Karnataka Industrial Area Development Board (KIADB), Govt of Karnataka. There will not be any change in the present land use. |
| 1.2 | Clearance of existing land, vegetation and buildings? | No | Clearance of vegetation and buildings not envisaged. |
| 1.3 | Creation of new land uses? | No | Creation of new land use not anticipated. |
| 1.4 | Pre-construction investigations e.g. bore houses, soil testing? | No | There is no new construction activities proposed and the existing site is having Secured landfill and Incinerator |
| 1.5 | Construction works? | No | There is no new construction activities proposed and the existing site is having Secured landfill and Incinerator. Any construction further will be done only as per Waste Management Rules. |
| 1.6 | Demolition works? | No | No demolition works are envisaged. |
| 1.7 | Temporary sites used for construction works or housing of construction workers? | No | None |
| 1.8 | Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations and fill or excavations | No | Not envisaged |
| 1.9 | Underground works including mining or tunnelling? | No | Not applicable |
| 1.10 | Reclamation works? | No | Not applicable |
| 1.11 | Dredging? | No | Not applicable |
| 1.12 | Offshore structures? | No | Not applicable |
| 1.13 | Production and manufacturing processes? | No | The project is for treatment, storage, and disposal of hazardous waste. In process recycle, reuse, reduce and recovery of some material is envisaged as per Rules. The detailed processes involved in project components are given in Pre-Feasibility Report (PFR). |

| | | | |
|------|--|-----|--|
| 1.14 | Facilities for storage of goods or materials? | Yes | In the onsite earmarked area for Hazardous waste |
| 1.15 | Facilities for treatment or disposal of solid waste or liquid effluents? | Yes | The project being integrated common hazardous waste TSDF focuses on treatment and disposal of various types of hazardous wastes through secured landfill (after treatment, if necessary) and incineration. Liquid wastes if any received at the site is to be treated as per Rules envisaged by MoEFCC and any effluent and leachate generated from the facility would be treated through spray drier and solar evaporation pond |
| 1.16 | Facilities for long term housing of operational workers? | Yes | Staff quarters are available at the site. |
| 1.17 | New road, rail or sea traffic during construction or operation? | No | None envisaged, existing roads shall be used during operation |
| 1.18 | New road, rail, air water borne or other transport infrastructure including new or altered routes and stations, ports, airports etc? | No | None envisaged, existing roads shall be used during operation |
| 1.19 | Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? | No | No closure or diversion of existing transport routes or infrastructure is foreseen in the project location. |
| 1.20 | New or diverted transmission lines or pipelines? | No | Existing power transmission lines would be utilized |
| 1.21 | Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers? | No | No impoundment, damming culverting, realignment or other changes to the hydrology of water courses or aquifers are existing |
| 1.22 | Stream crossings? | No | There are no stream crossings within the project location |
| 1.23 | Abstraction or transfers of water from ground or surface waters? | Yes | Water required for the project is 115 KLD and it is sourced from tankers/ rainwater harvesting/ reuse of leachate in spray drier. |
| 1.24 | Changes in water bodies or the land surface affecting drainage or run-off? | No | As the project is based on the concept of Zero Liquid Discharge (ZLD), no change is envisaged in water bodies or the land surface that will affect drainage or run-off. |
| 1.25 | Transport of personnel or materials for construction, operation or decommissioning? | Yes | The materials during operation shall be transported via the existing infrastructure. Workers from the nearby villages and town will be engaged in the project. |
| 1.26 | Long-term dismantling or decommissioning or restoration works? | No | No long-term dismantling or decommissioning or restoration works is involved. |
| 1.27 | Ongoing activity during decommissioning which could have an impact on the environment? | No | No Impact due to ongoing activity during decommissioning on environment |
| 1.28 | Influx of people to an area in either temporarily or permanently? | No | Influx of people to the area will be observed both during construction and operation phases. |
| 1.29 | Introduction of alien species? | No | None |
| 1.30 | Loss of native species or genetic diversity? | No | There will be no loss of native species or genetic diversity. |
| 1.31 | Any other actions? | No | None |

2 Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|--|--------|--|
| 2.1 | Land especially undeveloped or agricultural land (ha) | No | The existing TSD land area is 93.18 Acres and its falls in Notified Industrial area of Karnataka Industrial area development board (KIADB). Govt of Karnataka has provided land to Ramky Enviro Engineers Ltd for Operating KWMP TSD |
| 2.2 | Water (expected source & competing users) unit: KLD | Yes | Water required for the project is 115 KLD and will be sourced from tankers/ rainwater harvesting/reuse of leachate. |
| 2.3 | Minerals (MT) | No | Not applicable |
| 2.4 | Construction material – stone, aggregates, sand / soil (expected source – MT) | No | No construction activities are envisaged |
| 2.5 | Forests and timber (source – MT) | No | No forest clearing is involved in the project. However the timber is purchased in local timber depots for building doors, windows and other necessary wooden requirements. |
| 2.6 | Energy including electricity and fuels (source, competing users) Unit: fuel (MT),energy (MW) | Yes | The power required for operations is 550 kVA which is drawn from BESCO. DG set are used as backup power during emergency requirement. |
| 2.7 | Any other natural resources (use appropriate standard units) | No | Not envisaged |

3 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|--|--------|---|
| 3.1 | Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies) | Yes | The facility itself is for treatment and scientific disposal of hazardous waste, to reduce impacts on human health and the environment. |
| 3.2 | Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases) | No | No change in occurrence of disease or disease vectors is anticipated. |
| 3.3 | Affect the welfare of people e.g. by changing living conditions? | Yes | Positive impact on the welfare of people. |
| 3.4 | Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc. | No | Nearest hospital is at 1.5 KM distance and nearest village is at 1 KM distance. So there is no possibility of vulnerability by the project. |
| 3.5 | Any other causes | No | None |

4 Production of solid wastes during construction or operation or decommissioning (MT/month)

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|------------------------------------|--------|--|
| 4.1 | Spoil, overburden or mine wastes | No | Not Applicable |

| | | | |
|------|--|-----|---|
| 4.2 | Municipal waste (domestic and or commercial wastes) | Yes | Domestic solid waste generated from the project activities will be converted into Compost and reused as manure for greenbelt. Commercial waste/ non-biodegradable waste shall be sent to the nearest municipal bin for further disposal. |
| 4.3 | Hazardous wastes (as per Hazardous Waste Management Rules) | Yes | The facility itself is for treatment and scientific disposal of various streams of hazardous wastes through scientific landfill and incineration. Hazardous wastes, if any generated during the treatment (such as incineration ash etc.), shall be treated and disposed off in the secured landfill within the facility. |
| 4.4 | Other industrial process wastes | No | Not applicable |
| 4.5 | Surplus product | No | Not applicable |
| 4.6 | Sewage sludge or other sludge from effluent treatment | Yes | Sludge generated shall be disposed of in the secured landfill. |
| 4.7 | Construction or demolition wastes | No | No construction or demolition activities are envisaged. |
| 4.8 | Redundant machinery or equipment | No | Not applicable |
| 4.9 | Contaminated soils or other materials | No | No contamination of soil is envisaged, as the project would be established as per the guidelines and standards prescribed by CPCB & MoEF&CC for Secured Landfill, Hazardous Waste Incinerator etc |
| 4.10 | Agricultural wastes | No | Not Applicable. |
| 4.11 | Other solid wastes | No | No other solid waste is anticipated. |

5 Release of pollutants or any hazardous, toxic or noxious substances to air(Kg/hr)

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|--|--------|---|
| 5.1 | Emissions from combustion of fossil fuels from stationary or mobile sources | Yes | Emissions are envisaged from DG sets, incineration of hazardous wastes etc. DG set will be provided with adequate stack height, meeting MoEF&CC/CPCB standards. Similarly, the gases coming out of the incinerator will be sent through multi cyclone, spray dryer, wet scrubber, bag house, followed by stack height meeting MoEF&CC/CPCB set standards. |
| 5.2 | Emissions from production processes | No | No production activities involved in the project |
| 5.3 | Emissions from materials handling including storage or transport | Yes | Emissions from handling of Hazardous waste storage and transport are controlled by handling them in the closed containers and earmarked covered storage areas. |
| 5.4 | Emissions from construction activities including plant and equipment | No | No construction activities are envisaged |
| 5.5 | Dust or odours from handling of materials including construction materials, sewage and waste | Yes | Dust is likely to be generated during operation phase. To control dust generation, following measures are being taken: (a) Water sprinkling at regular intervals, (b) Tarpaulin cover provided over stored raw material, and (c) Greenbelt developed along boundary and open areas |
| 5.6 | Emissions from incineration of waste | Yes | PM, SO ₂ , NO _x , Dioxin, Furans, etc. are expected to be generated from incinerator which would be mitigated by providing necessary air pollution control devices to meet the applicable emission standards. |

| | | | |
|-----|---|----|--|
| 5.7 | Emissions from burning of waste in open air (e.g. slash materials, construction debris) | No | No material will be openly burnt in air. |
| 5.8 | Emissions from any other sources | No | Emissions from other sources are not envisaged |

6 Generation of Noise and Vibration, and Emissions of Light and Heat:

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|---|--------|---|
| 6.1 | From operation of equipment e.g. engines, ventilation plant, crushers | Yes | Noise is expected near incinerator, pumps and motors. Necessary PPE (ear muffs etc.) will be provided for the personnel working in this area. Most of the equipment structures are static so the vibration effect of these will be only local. The design of support and foundation will nullify the intensity of vibrations. |
| 6.2 | From industrial or similar processes | Yes | Necessary noise mitigation measures will be followed as per regulations due to which the noise from facility will be confined to the site premises. |
| 6.3 | From construction or demolition | No | No construction activities are envisaged |
| 6.4 | From blasting or piling | No | Not Applicable. |
| 6.5 | From construction or operational traffic | Yes | Noise during daytime is expected due to the vehicular movement and construction activities, however, it would be for a temporary period of time. All necessary precautions will be taken to minimize noise. |
| 6.6 | From lighting or cooling systems | No | Not applicable |
| 6.7 | From any other sources | No | Not applicable |

7 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|---|--------|---|
| 7.1 | From handling, storage, use or spillage of hazardous materials | No | The facilities to treat hazardous waste material are developed in compliance with CPCB guidelines (HAZWAMS documents) and the Hazardous & Other Wastes (Management & Transboundary) Rules, 2016 |
| 7.2 | From discharge of sewage or other effluents to water or the land (expected mode and place of discharge) | No | Contamination of land or water is not envisaged as the generated leachate is sent to incinerator for spray drier or will be evaporated (Solar evaporation). |
| 7.3 | By deposition of pollutants emitted to air into the land or into water | No | The major pollutants expected from the ICHWTSDF facility are PM, SO ₂ , NO _x , Dioxins & Furans. Incinerator is provided with multi cyclone, spray dryer, wet scrubber, bag house, followed by stack height meeting MoEF&CC/CPCB standards. DG set will be provided with adequate stack height meeting MoEF&CC/CPCB standards. Hence the chance of contamination of land and water by deposition of pollutants is not envisaged |
| 7.4 | From any other sources | No | Not envisaged |

| | | | |
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| 7.5 | Is there a risk of long term build up of pollutants in the environment from these sources? | No | No long term build-up of pollutants is expected due to the project. All pollution control measures would be adopted and an approved Environmental Management Plan (EMP) will be followed to ensure zero or minimal pollution in the environment. |
|-----|--|----|--|

8 Risk of accidents during construction or operation of the Project, which could affect human health or the environment

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|---|--------|--|
| 8.1 | From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances | Yes | Minimum risk. No explosions and spillages or production of hazardous waste is expected to take place in the project site during construction and/or operation. However, appropriate firefighting system will be installed and safety precautions will be followed as per the safety rules. Spillages and fires if any, during operational phase will be handled by trained emergency handling teams for minimizing damage. |
| 8.2 | From any other causes | No | None envisaged. |
| 8.3 | Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)? | No | The project area falls under Zone - II: Low Damage Risk Zone (MSK VI or less zone as per the NDMA, 2016 and indicates a low vulnerability. |

9 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

| S.No | Information/Checklist confirmation | Yes/No | Details thereof (with approximate quantities/rates, wherever possible) with source of information data |
|------|--|--------|---|
| 9.1 | Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> o Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) o housing development o extractive industries o supply industries o Other | Yes | There will be cumulative positive impact on the environment in terms of better management of Hazardous wastes. More employment opportunities will be generated and aesthetics of the area will be improved due to the ICHWTSDF project. Impact may be felt on local infrastructure. Demand for housing may increase and ancillary industries, shops, small hotels etc. are expected to come up with the establishment of the project. |
| 9.2 | Lead to after-use of the site, which could have an impact on the environment | No | Integrated Hazardous Waste Management Facility will not have impact on environment. Once the existing landfill is fully utilized, post closure care of landfill shall be conducted as per regulatory guidelines. Vegetative cover will be provided over completed cells/site. Monitoring of leachate collection and ground water system will be carried out in accordance with CPCB / SPCB guidelines. |
| 9.3 | Set a precedent for later developments | Yes | The closed land fill site may be used for development of garden etc., after ensuring that gases/leachate are controlled and meet the laid down standards after analysis. |

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| 9.4 | Have cumulative effects due to proximity to other existing or planned projects with similar effects | No | The project is established following all the applicable rules and guidelines and the local laws to keep cumulative effect under control. |
|-----|---|----|--|

(III) Environmental Sensitivity

| S.No | Areas | Name/Identity | Aerial distance (within 15km.) Proposed project location boundary |
|------|--|---------------|---|
| 1 | Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value | No | The area allotted for project is earmarked for development of industrial complex by KIADB |
| 2 | Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests | Yes | Nidvanda Kere (Dry) - 0.8 km N Nijagal RF - 2.5 km NW Kengal RF - 3.5 km W Manne Kere (Dry) - 3.5 km NE Sondivadi Kere - 4.4 km SE Hire Kere (Dry) - 5.0 km E Devara Kere - 5.8 km SW Mavinakommanahalli RF - 7.0 km NE Chikkannavvan Kere - 7.0 km SE Jakkasandra RF - 7.5 km NE Adarangi North RF - 8.0 km SW Krishnarajpura RF - 8.0 km ENE Hirehalli RF - 8.5 km NW Kenchanapura RF - 11.0 km E Madala Kere - 10.5 km NW Adarangi South RF - 12.0 km SW Ramdevara Betta RF - 13.0 km NW |
| 3 | Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration | No | None in within 15 Km radius. |
| 4 | Inland, coastal, marine or underground waters | No | No river is positioned within 15 km radius Nidvanda Kere (Dry) - 0.8 km N Manne Kere (Dry) - 3.5 km NE Sondivadi Kere - 4.4 km SE Hire Kere (Dry) - 5.0 km E Devara Kere - 5.8 km SW Chikkannavvan Kere - 7.0 km SE Madala Kere - 10.5 km NW Ire Kere - 14.0 km SW |
| 5 | State, National boundaries | No | None in within 15 Km radius. |
| 6 | Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas | Yes | National Highway 207 adjacent to site in N direction National Highway 4 - 1 km from site in W direction |
| 7 | Defence installations | No | None in within 15 Km radius. |
| 8 | Densely populated or built-up area | No | Tumkur - 20 km NW |
| 9 | Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities) | Yes | Schools, Worship places, hospitals etc. are exist in the Dobaspet |
| 10 | Areas containing important, high quality or scarce resources.(ground water resources,surface resources,forestry,agriculture,fisheries,tourism,minerals) | Yes | Nidvanda Kere (Dry) - 0.8 km N Nijagal RF - 2.5 km NW Kengal RF - 3.5 km W Manne Kere (Dry) - 3.5 km NE Sondivadi Kere - 4.4 km SE Hire Kere (Dry) - 5.0 km E Devara Kere - 5.8 km SW Mavinakommanahalli RF - 7.0 km NE Chikkannavvan Kere - 7.0 km SE Jakkasandra RF - 7.5 km NE Adarangi North RF - 8.0 km SW Krishnarajpura RF - 8.0 km ENE Hirehalli RF - 8.5 km NW Kenchanapura RF - 11.0 km E Madala Kere - 10.5 km NW Adarangi South RF - 12.0 km SW Ramdevara Betta RF - 13.0 km NW |

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| 11 | Areas already subjected to pollution or environmental damage.(those where existing legal environmental standards are exceeded) | No | None in within 15 Km radius. |
| 12 | Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions) similar effects | No | The project area falls under Zone - II: Low Damage Risk Zone (MSK VI or less zone as per the NDMA, 2016 and indicates a low vulnerability. |

(IV) Proposed Terms of Reference for EIA studies

| | | | | | |
|--|---|---|--------------------------------|---------------|-------------------|
| 1 | Uploaded Proposed TOR File | <u>Annexure-TOR file</u> | | | |
| 2 | Uploaded scanned copy of covering letter | <u>Annexure-scanned copy of covering letter</u> | | | |
| 3 | Uploaded Pre-Feasibility report(PFR) | <u>Annexure-PFR</u> | | | |
| 4 | Uploaded additional attachments(only single pdf file) | NIL | | | |
| <table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">Additional Attachments, if any</td> </tr> <tr> <td style="text-align: center;">Attached File</td> </tr> <tr> <td><u>ADS Letter</u></td> </tr> </table> | | | Additional Attachments, if any | Attached File | <u>ADS Letter</u> |
| Additional Attachments, if any | | | | | |
| Attached File | | | | | |
| <u>ADS Letter</u> | | | | | |

Essential Detail Sought : NIL

Additional Detail Sought : NIL

(V) Undertaking

I hereby give undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

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|-----------|---|--|
| V. (i) | Name of Applicant | Sanjiv |
| | Designation | IWMHead |
| | Name of Company (Applicant Name should not be given here) | RAMKY ENVIRO ENGINEERS LTD |
| | Address | Ramky Enviro Engineers Limited 13th Floor Ramky Grandiose Ramky Tower Complex Gachibowli Hyderabad |