## MINUTES OF THE 51<sup>st</sup> MEETING OF THE EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 21-22 May, 2020

### Venue: Through Video Conferencing during 21-22 May, 2020 21.05.2020 – 14:30 hrs to 17:30 hrs. 22.05.2020 – 10:00 hrs to 13:30 hrs and 14:30 hrs to 17:00 hrs.

## Day 1- Thursday, 21<sup>st</sup> May, 2020

#### Time: 14:30 hrs

**51.1 Opening Remarks of the Chairman:** The Chairman extended welcome to members and other participants and requested to start the proceeding as provided in the agenda adopted for this meeting.

## 51.2 Confirmation of the Minutes of the 50<sup>th</sup> Meeting of the EAC (Infra-2) held on 22-24 April, 2020 at New Delhi.

The EAC was informed about the request received from the project proponent for the Agenda item No. 50.4.3/ 50<sup>th</sup> EAC received vide their Letter No. GVCGHA/220 dated 14.05.2020 for minor correction in records of discussions pertaining to their agenda item. The EAC considered the request and the minutes of the 50<sup>th</sup> Meeting of the EAC (Infra-2) held during 22-24 April, 2020, were confirmed with following amendment:

Agenda item No.	Minuting	Correction/To be read as
Agenda item No.	Para 50.4.3.3, Specific condition no. (v)	Para 50.4.3.3, Specific condition
50.4.3 of 50 <sup>th</sup>		no. (v)
Meeting held	Sewage shall be treated in the STP based on	
during 22-24 April,	MBBR Technology with tertiary treatment i.e.	Sewage shall be treated in the STP
2020	Ultra-Filtration. The treated effluent from STP	based on MBBR Technology with
	shall be recycled/re-used for <b>flushing</b> ,	tertiary treatment i.e. Ultra-Filtration.
(IA/DL/MIS/14004	for further utilization of excess treated water	he recycled/re used for berticulture
7/2020; F.No. 21-	that has been proposed to discharge to	and road washing. The possibility
25/2020-IA-III)	sewer line should also be explored	for further utilization of excess
		treated water that has been
		proposed to discharge to sewer line
		should also be explored.
	Para 50.4.3.3, Specific condition no. (vi)	
		Condition deleted.
	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	
	celiferms and other natherenic bacteria	
	Para 50.4.3.3 Specific condition no. (vii)	
		Condition deleted
	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 tollet seats using recycled	
	and quality of water being supplied through	
	sprav faucets attached to toilet seats	

**51.3 Consideration of Proposals:** The EAC considered proposals as listed in the agenda adopted for the meeting. The agenda wise details of discussions held during the meeting are given as under.

#### Agenda item No. 51.3.1.

Development of LPG and Liquid Storage Terminal within Port area at Village Chhara-Sarkhadi, Taluka Kodinar District Gir Somnath, Gujarat by M/s West Coast Liquid Terminal Private Limited - Environmental and CRZ Clearance

#### (IA/GJ/MIS/115006/2016; F.No. 10-69/2016-IA-III)

**51.3.1.1.** The Project Proponent (PP) along with his accredited consultant M/s Kadam Environment Consultant made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) M/s Simar Port Private Limited (SPPL) a Shapoorji Pallonji Group's company, is developing a deep draft, all weather, multipurpose, direct berthing Simar Port at Village Chhara-Sarkhadi, District Gir-Somnath, Gujarat under the concession granted by Gujarat Maritime Board to M/s. SPPL for a period of 30 years. The have been granted Environmental and CRZ Clearance by Ministry of Environment, Forest and Climate Change (MoEFCC) vide letter F.No. 11-73/2009-IA.III dated 6<sup>th</sup> January, 2014. This port, with the right marine conditions and sufficient back-up area, is strategically positioned for markets of North India, parts of West and Central India. The Simar Port, Chhara is an upcoming Greenfield Port, situated in South Saurashtra region of Gujarat.
- (ii) At Simar Port, M/s. West Coast Liquid Terminal Private Limited (WCLTPL) is developing a liquid product import terminal including the facility to import, store and distribute refrigerated LPG. M/s WCLTPL is a joint venture between M/s. Vopak India BV and M/s. SPPL.
- (iii) The project involves setting up of LPG/POL/Veg oil (edible & non-edible) import, storage and Distribution terminal (along with jetty within the proposed Port) at Chhara.
- (iv) Liquid Propane, Butane and LPG will be imported via Very Large Gas Carrier (VLGC), and thereafter will be heated, blended and dosed with odorant to make LPG for distribution via trucks and pipelines. The POL will be imported via ocean moving petroleum oil tankers and distributed via trucks. Veg oil will also be imported via ocean moving veg oil tankers and distributed via trucks.
- (v) The maximum throughput capacity of the proposed storage terminal will be 10 Million Metric Tons per annum (MMTPA). The proposed terminal will consist of storage tanks and a dedicated liquid jetty for storage and handling of LPG, POL and Vegetable oils products which includes Propane, Butane, Mixed LPG, Class-A POL products of categories confirming to Class A/B/C and non-classified, vegetable oils. These products will be stored at terminal through pipelines from jetty to terminal and terminal having internal pipelines.

S. No	Cargo	Chemicals	Total No. of tanks	Storage capacity (m <sup>3</sup> )	Maximum storage capacity (m <sup>3</sup> )	Maximum throughput (MMTPA)
1 LP(		Propane	2	50,000	2 00 000	5.0
		Butane	2	each	2,00,000	
	LFG	Propane	2	900	5400	
		Butane	2	each	(2700 T)	

S. No	Cargo	Chemicals	Total No. of tanks	Storage capacity (m <sup>3</sup> )	Maximum storage capacity (m <sup>3</sup> )	Maximum throughput (MMTPA)
		Mixed LPG	2	(450 MT each)		
2	POL	POL products of categories conforming to Class A / B / C and non- classified	8	30,000 each	2,40,000	3.5
3	Veg oil	Vegetable oils	20	5,000 each	100,000	1.5
	Total	•	38		5,45,400	10

- (vi) Dedicated Jetty will be developed (maximum length 45m and width 35m) for unloading of Propane, Butane, LPG and liquid products from vessel. Trestle length will be 1900 mt. Total Plot area for proposed project is 3,94,852 sqm.
- (vii) Total water requirement for the proposed project would be 140.5 KLD out of which 27.5 KLD would be fresh water and 113 KLD would be recycled water.
- (viii) Domestic Wastewater (114 KLD) will be treated in Sewage Treatment Plant (STP) and treated wastewater will be used for Gardening. Oily wastewater will primarily be generated from washing and cleaning activities from tank farm and floor washing areas. Generation of wastewater from cleaning and washing activities will not be a regular activity. For oily wastewater, separate treatment facility will be proposed.
- (ix) Total power requirement is 4.12 MW and 66 kV power supply shall be made available at plot boundary of LPG terminal by the Port Developer- M/s SPPL. Emergency power for critical loads and emergency lighting shall be provided from Un-interrupted Power Supply (UPS) using 2 DG Sets (1000 kVA) (Power backup).
- (x) Terms of reference (ToR) was granted by MoEFCC vide letter No. 10-69/2016-IA-III dated 25.11.2016 followed by amendment and extension of Validity to TOR vide letter dated 17.12.2019.
- (xi) Public Hearing/ Consultation meeting was conducted by the concerned State Pollution Control Board on 26.10.2018 at Project Site, Survey No. 418/1, Chhara-Sarkhadi Road, Village Chhara, Taluka Kodinar, District Gir-Somnath, Gujarat.
- (xii) Gujarat Coastal Zone Management Authority (GCZMA) vide letter No. ENV-10-2018-199-E (T cell) dated 08.11.2019 has recommended to grant CRZ clearance to the project.
- (xiii) There is no litigation on the proposed project either at NGT or any other court of Law. However, it may be noted that following litigations are pending at NGT (Pune Bench) with regards to EC issued to breakwater extension by M/s SPPL:
  - a. Appeal No. 30 of 2019
  - b. Appeal No. 50 of 2019
- (xiv) **Investment/Cost** of the Project would be of Rs. 1426 Crores.
- (xv) **Benefits of the Project:** The development of tank farm in Chhara will provide access to all the Importers of LPG, Class A/B/C Petroleum products, POL Products

and other Liquid Products. The required infrastructure being nearer to markets, will help to reduce gap between demand and supply of these products. At the same time, the development of terminal close to market location will reduce the logistic cost. The proposed facility is mainly to cater to the requirement of domestic market.

(xvi) **Employment Potential:** Construction phase: 2,000 workers, Operation Phase: direct employment to 70 persons and indirect employment to 1,000 persons.

51.3.1.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental and CRZ Clearance to the project 'Development of LPG and Liquid Storage Terminal within Port area' at Village Chhara-Sarkhadi, Taluka Kodinar District Gir Somnath, Gujarat by M/s West Coast Liquid Terminal Private 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. Hence, it requires appraisal in MoEFCC by sectoral EAC.
- (iii) Terms of reference (ToR) was granted by MoEFCC vide letter No. 10-69/2016-IA-III dated 25.11.2016 followed by amendment and extension of Validity to TOR vide letter dated 17.12.2019.
- (iv) Public Hearing/ Consultation meeting was conducted by the concerned State Pollution Control Board on 26.10.2018 at Project Site, Survey No. 418/1, Chhara-Sarkhadi Road, Village Chhara, Taluka Kodinar, District Gir-Somnath, Gujarat.
- (v) Gujarat Coastal Zone Management Authority (GCZMA) vide letter No. ENV-10-2018-199-E (T cell) dated 08.11.2019 has recommended to grant CRZ clearance to the project.

**51.3.1.3.** The Committee deliberated, inter-alia, upon the issues raised during the Public Hearing/Public Consultation meeting. It was noted that the concerns were expressed primarily on Corporate Environmental Responsibility (CER); Job Opportunities; Compensation or Salary; Benefits of Project to Land Losers; Water Resource; Greenbelt Development; Risk to Human Health & Safety of Workers; Forest related issues; Previous Port projects & its commitment;, protection of Turtle Nesting Ground, Whale Shark, Lion corridor; and interests of fishermen. The Committee noted that the response of PP to the issues raised during Public hearing is satisfactory and has been incorporated in the final EIA-EMP report.

The EAC also took note of the submission made by the PP in respect of Marine Ecology i.e. Mangroves were not observed in the vicinity of the proposed site location. But it is observed within the study area i.e. at village Velan and Madhvad. Only Green Turtles and Olive Ridley Turtles are reported to be nesting along the Gujarat coastline while Leatherback and Hawksbill Turtles are only occasionally seen by fishermen. One whale shark is reported to have been rescued close to Chhara village during the period of 2004-2010. There being a natural shoal bank approx. 2.5 km away from the proposed port shore line where the water depth is only 4 to 5 meters, the possibility of shark whale entering in the area appears to be bleak. Corals were not found in proposed site during site visit and marine sampling.

The EAC during deliberation expressed that the court case on the breakwater is not independent of the proposed LNG terminal. If there is a problem with tranquillity, there will be a serious issue with the operation of LNG. Hence, it not advisable to move forward without addressing the breakwater issue and shoreline changes study. The EAC also took note of submissions of PP that study on shoreline changes is not complete and the PP should do long-term analysis of shoreline changes and sediment data. The disaster and risk management plan for LNG is very critical right from unloading from ships (manifold), transfer through the pipeline, storage tank. It should be as per safely standards with certification. PP has provided no information on third party monitoring for LNG safety after the project is built. As proposed, No capital and maintenance dredging will be carried out. However, dredging will be required at entrance channel as LNG carriers are big and it may need deepening of the channel and also at berth locations.

Since it is all weather port, legal clearance on issues related to breakwater from NGT is prerequisite for grant of environmental and CRZ Clearance. During monsoon season, waves high up to 3 to 5 m are reported in this region. Stability of any ship without breakwater during this period is low and vulnerable for accidents. Even in the presence of breakwaters also there are chances of accidents in the vessels, viz, collision or grounding. According to the past data, most of the accidents occurred during monsoon period. Therefore, this season is crucial for the spill study. In the EIA study, spill movement during monsoon (June - September) is not presented. Vegetable oil is one of the cargos in the proposed project. The fate of this oil on marine environment is to be included in the EIA. The EAC after detailed deliberation asked the project proponent to submit following:

- (i) Key environmental issues related to breakwater, which have been raised in Appeal No. 30 of 2019 and Appeal No. 50 of 2019 pending before Hon'ble NGT (Pune Bench) along with recent orders of the Hon'ble Tribunal relevant to the project under consideration.
- (ii) Relationship between breakwater extension and proposed activity? If the breakwater proposal is rejected by NGT, what would be the fate of the proposed expansion activity? Will the proposed project/ activity be able to function or not?
- (iii) Submit information on third party monitoring for LNG safety after the project is built.
- (iv) Submit detail of spill movement during monsoon (June September). Spill (HSD) track and the quantity reached the coast and length of the coastline affected should be reported in the EIA. Also fate of the vegetable oil spill should be presented in the study.
- (v) Submit Oil spill contingency plan along with responsibilities of M/s. WCLTPL, Ms. SPPL and coastguard along with the budgetary allocation for the plan.
- (vi) Details of Pipeline routes from terminal to tank-forms.
- (vii) Total truck movements per day is reported to be huge in number. Therefore, provide details of Noise pollution and air quality monitoring stations proposed be established.
- (viii) Clarify the mode of disposal of oily waste in the light of submissions made in the EIA Report and report of Central Salt and Marine Chemical Research Institute.
- (ix) Is any dredging proposed at the terminal? If yes, modeling of sediment transport should be carried out and a dump location should be identified. What is the draught of the vessel?
- (x) Details of power requirement for the proposed project.
- (xi) Submit water balance; waste water volume at intel and capacity of proposed STP.

In view of the foregoing observations, the EAC decided to defer the proposal. The proposal may be reconsidered after additional information sought in above subparas above is available for appraisal by the Committee and relevant parameters arising from the above recommended studies/ analysis are included in the EIA report.

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Agenda item No. 51.3.2.

Up gradation of existing 4 MLD Common Effluent Treatment Plant unit to 10 MLD at Industrial Estate, Kundli, Sonipat by M/s HSIIDC Kundli– Environmental Clearance

(IA/HR/MIS/136228/2019; F.No. 10-23/2019-IA-III)

The project proponent did not attend the meeting and as such, the proposal was deferred.

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Agenda item No. 51.3.3.

Proposed expansion of secured landfill (Phase IV) of Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at plot number 9701-9716, GIDC Ankleshwar, proposed by M/s Bharuch Enviro Infrastructure Limited - Environmental Clearance

#### (IA/GJ/MIS/22321/2014; F.No. 10-25/2019-IA-III)

**51.3.3.1.** The Project Proponent (PP) along with his accredited consultant M/s Shivalik Solid waste Management Limited made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) M/s Bharuch Enviro Infrastructure Limited (BEIL) pioneer in Treatment, Storage and Disposal of Hazardous waste is operating an Integrated TSDF at Ankleshwar with two Common Incineration Systems having thermal capacity of 6.5 million kcal/hour.
- (ii) The existing capacity of Landfill at Integrated TSDF site and their status are:

Phase I: 6,000,00 MT –Completed & Capped
Phase II: 17,00,000 MT completed.
Phase III was developed between Phases I and II, having capacity 11.58 Lacs MT

- (iii) The Environmental Clearance for enhancement in capacity from 11.58 Lacs MT to 14.58 Lacs MT was issued vide letter F.No. 10-10/2014- IA-III, dated 16.04.2018.
- (iv) The proposed Phase IV landfill development comprises of optimization of the landfill capacity of the entire site to add 8,90,000 M<sup>3</sup> space to accommodate 13,40,000 MT of hazardous waste (waste density 1.5 Mg/m<sup>3</sup>) The objective of proposed expansion is to have continued operation of TSDF. The Phase-I and Phase-II sites has been completed and Phase-III is nearing completion. The total remaining capacity is approximately 8,30,000 tonnes, equivalent to about 3 years landfill operations. Till September, 2019, an amount of 31,049,29.65 MT waste has been disposed at the site.
- (v) The feasibility report has identified a proposed scheme to extend the life of the hazardous waste landfill at Ankleshwar for an additional approximately 5.5 years. The additional landfill capacity would comprise an extension to the existing landfill, at four locations around the perimeter. Engineering solutions have been identified to deliver the proposed Phase IV landfill extension. Area and classification of land is as under:

Phase II	Phase III	Phase IV	
Total Site Area = 69 acre.	Total Site Area = 69 acre.	Available space:	
(2,79,233.09 sqm) = 27.92 ha	(2,79,233.09 sqm)	8,90,000 m <sup>3</sup>	
	Phase III Pit Area = 2.98 Acre		
	(12,084 sqm)		
	Phase III Closure Area = 14.755		
	Acre (59,731 sqm).		

- (vi) Permission for total water consumption of 657 KLD for existing facility including for domestic purpose (27 KLD) is already available from Gujarat Industrial Development Corporation (GIDC) supply. No additional water will be required, since, proposed capacity expansion will be the continued operation of secured land filling for disposal of hazardous waste.
- (vii) No additional power is required. The existing source of electricity is Dakshin Gujarat Vij Company Limited (DGVCL). In case of power failure, existing two D.G. Sets of 975 KVA each and 1 DG set of 600 KVA capacity shall be used.
- (viii) Project requires appraisal as Category "A" as the project lies in the Critically Polluted Area, as per the MoEF Office Memorandum J-11013/5/2010/IA-II (I) dated 25<sup>th</sup> November 2016. The moratorium has been lifted in Ankleshwar. Integrated TSDF is listed under Projects of activity at Sr No 7 (d) as per EIA Notification dated 14<sup>th</sup> September 2006 and its subsequent amendments.
- (ix) Leachate / Effluent from landfill will be treated in the existing Multiple Effect Evaporator (MEE) plant. Whenever MEE is not in operation, leachate will be sent to CETP of Enviro Technology Limited at Ankleshwar.
- (x) Green belt is developed in area measuring total 41,000.82 sqm all along the plant area. Additionally, after the closure and capping of Secured Landfill landscaped area is developed as green area. This practice will also be undertaken for the SLF to be capped.
- (xi) Terms of Reference (ToR) for the proposed project was granted by MoEF&CC vide Letter F.No. 10-25/2019-IA-III dated 17.05.2019.
- (xii) Public Hearing was exempted as the project site is located in the GIDC Notified industrial area, Gujarat.
- (xiii) Investment/Cost of the project is Rs. 50.58 Crores.
- (xiv) Benefits of the Project: Continuing the operation of TSDF for scientific disposal of hazardous waste in secured landfill will be a positive environmental impact and sustainable development.
- (xv) Employment Potential: Long term employment opportunity for the local people as well as migrants from nearby areas.

#### 51.3.3.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project titled 'Proposed expansion of secured landfill (Phase IV) of Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF)' at Plot No. 9701-9716, GIDC Ankleshwar, proposed by M/s Bharuch Enviro Infrastructure Limited.
- (ii) The project/activity is covered under category 'B' 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 SEAC level. However, due to applicability of General Condition i.e. Project location in Ankleshwar Critically Polluted Area the proposal is apprised at Central Level by Secrtoral EAC. The moratorium has been lifted in Ankleshwar.
- (iii) Terms of Reference (ToR) for the proposed project was approved by MoEF&CC vide Letter F.No. 10-25/2019-IA-III dated 17.05.2019.
- (iv) Public Hearing was exempted as the project site is located in the GIDC Notified Industrial Area, Gujarat.

**51.3.3.3.** The EAC also noted that the proposal is for capacity enhancement of Secured Landfill to utilize available space of  $8,90,000 \text{ m}^3$  to accommodate 13,40,000 MT of hazardous waste over a period of 5.5 years @ disposal rate of approximately 2,40,000 tonnes/year for Treatment, Storage and Disposal of Hazardous waste as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. The Baseline Study was carried out during 16.10.19 – 15.01.2020.

The EAC also deliberated on the certified compliance report provided by the MoEF&CC's Regional Office (WZ), Bhopal vide letter No. 5-28/2008(ENV)/185 dated 02.03.2020 issued by the. As per Compliance report, two conditions were found partially complied as the project proponent has not submitted Toxicity characteristic leaching procedure (TCLP) data and night noise monitoring data. The EAC asked the project proponent to submit the following:

- (i) Action taken report on the partially complied conditions to be submitted to Regional Office of MoEFCC at Bhopal and get their recommendations on the compliances.
- (ii) Total wastewater generated as per EIA report is 396.5 KL. However, there is no clarity in mode of waste water treatment. Therefore, provide details of quantities to be treated in MEE and the quantity to be sent to CETP. Also, the details of sources of waste water to be routed to MEE and CETP.
- (iii) Give average daily energy consumption for operation of MEE for the previous phases (Randomly for a few days in a month for previous 5 years) in a manner that facilitate verification at a later stage by Competent Authority.
- (iv) Is this the final proposal for expansion? If not, what will be the ultimate capacity?
- (v) The date since when the TSDF is in operation.
- (vi) Proposed expansion of the existing facility does not meet the siting parameter in respect of ground water. Submit the ground water table that prevailed during the first baseline study (prior to establishment) and current ground water table in and around project site obtained from the Concerned Ground Water Authority. Also submit details of measures taken to prevent ground water contamination?
- (vii) In EIA, there are several factors in which ground water quality exceeds the stipulated parameters. e.g. TDS in ground water Sample 1 & 9, total hardness in ground water sample 1, 2 & 9, Nitrate in ground water 2 & 9, Phenol compounds in all samples (except ground water 1) exceed the limits, Lead in ground water sample 6,7 & 8. Please explain with a table the (1) increase compared to First baseline data prior to establishment of the facility, (2) reasons for increase and action taken to prevent the same, (3) how does PP rules out contamination from the TSDF facility?
- (viii) Method for preservation and transportation of samples for analysis of Dioxins and Furans.
- (ix) Details of Existing and proposed Employment.

In view of the foregoing observations, the EAC decided to defer the proposal. The proposal shall be reconsidered after the above details are made available for appraisal by the EAC.

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Agenda item No. 51.3.4.

Environment and CRZ clearance for the development of Multi Cargo Port with supporting utilities and Infrastructure facilities at Hazira, Surat, Gujarat by Adani Hazira Port Private Limited – Extension of validity of Environmental and CRZ Clearance

### (IA/GJ/MIS/148606/2020; F.No. 11-150/2010-IA.III)

**51.3.4.1.** The Project Proponent (PP) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) M/s Adani Hazira Port Private Limited (AHPPL) has set up multipurpose port at Hazira. The Port and related infrastructure facilities have been developed as per Environmental and CRZ clearances obtained in 2003, 2007 and 2013.
- (ii) M/s AHPPL obtained Environmental and CRZ clearances for the development of Multi Cargo Port with supporting utilities and infrastructure facilities at Hazira, Surat, Gujarat vide letter F.No. 11-150/2010-IA-III dated 03.05.2013. The Master plan approved for development of Multi Cargo Port with supporting utilities included development of total 12 berths (7 berths were proposed to developed during initial 5 years of development) for handling container, bulk, break bulk, and liquid cargo, Dredging up to -15.0 m, supporting infrastructure facilities such as RO- RO terminal, Internal Roads, Rail Corridor etc. The permission was also obtained for reclamation to the tune of 225.30 Ha. at north side of port limit and 84 Ha at the south side of port.
- (iii) As part of master plan, M/s AHPPL proposed to develop infrastructure facilities over an area of 873.27 Ha., which included forest land of 376.64 Ha. As the diversion of forest land was under process at the time of Environmental and CRZ Clearance, the same was excluded from the Clearance granted to M/s AHPPL. Hence, the total area available for port development was 496.63 Ha.
- (iv) During the initial 7 years of development M/s AHPPL has already developed 6 berths (2 Container, 1 Liquid, and 3 Multi-purpose). These are out of the 12 berths permitted under the aforesaid Environmental and CRZ Clearance dated 03.05.2013.
- (v) Development and construction of berths and associated facilities was done keeping in mind the limited back-up area available for development with AHPPL. Out of 376.64 Ha, the Stage-1 forest clearance has been granted over an area of 301.0199 Ha. M/s. AHPPL has initiated process for obtaining Stage –II clearance for the area covered under Stage-I clearance. The same was already proposed as per the master plan to be used as back-up. Therefore, M/s. AHPPL would like to proceed with remaining development as per the existing environmental and CRZ Clearance.
- (vi) Hence, it is necessary to maintain the validity of current Environmental & CRZ clearance.
- (vii) It is requested to grant the extension for validity of existing Environmental & CRZ clearance for a period of three years to carry out the balance development activities proposed as part of Environmental & CRZ Clearance granted vide F.No. 11-150/2010-IA-III dated 03.05.2013.

### 51.3.4.2. The EAC noted the following: -

- (i) The proposal is for grant of Extension of validity of Environmental and CRZ clearance accorded vide letter F.No. 11-150/2010-IA-III dated 03.05.2013 for the development of Multi Cargo Port with supporting utilities and Infrastructure facilities at Hazira, Surat, Gujarat by Adani Hazira Port Private 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.

**51.3.4.3**. The EAC also took note of the submissions made by PP that for development of master plan with supporting utilities and infrastructure facilities at Hazira, Environmental and CRZ clearance was granted by MoEF&CC vide letter No. 11-150/2010-IA-III dated 3<sup>rd</sup> May

2013. In 2013, M/s. AHPPL proposed to develop infrastructure facilities over an area of 873.27 Ha., which included forest land of 376.64 Ha, As the diversion of forest land was under process at the time of the clearance, the same was excluded from the environmental clearance granted to M/s. AHPPL. Hence, the total area available for port development was 496.63 Ha. The Port development was carried out for available area. Now out of 376.64 Ha applied forest land, the Stage-I forest clearance has been granted over an area of 301.0199 Ha vide order dated 17<sup>th</sup> October, 2016 (210.1594 Ha.) and 19<sup>th</sup> October, 2016 (90.8605 Ha.). The PP has applied for Stage – II forest clearance and it is under process. Therefore, M/s. AHPPL would like to proceed with remaining development proposed under the existing environmental clearance. To maintain the validity of current Environmental & CRZ clearance granted vide F.No. 11-150/2010-IA-III dated 3<sup>rd</sup> May 2013, PP has approached the Ministry. The EAC also noted that the following work has been carried out at the site:

Key Components under the Clearance <i>dated 3<sup>rd</sup> May 2013</i>		Status of Development at the project Site w.r.t. Key Components the Clearance <i>dated 3<sup>rd</sup> May 2013</i>			
1.	12 berths	1.	6 berths		
2.	Dredging up to -15.0	2.	Dredging up to -15.0 m		
3.	Total cargo handling of 84.1 MMTPA	3.	Total cargo handling capacity of 35 MMTPA out of approved capacity of 84.1 MMTPA and Back up		
4.	Reclamation to the tune of 225.30 Ha at North Side of Port and 84 Ha at South side of port		area with supporting infrastructure facilities along with internal roads etc. for handling multipurpose cargo including liquid.		
		4.	Not Reported.		

The EAC deliberated upon the information provided by the project proponent. The Committee being satisfied with the submission made by the project proponent, recommended for extension of validity of the Environmental and CRZ Clearance issued vide F.No. 11-150/2010-IA-III dated 03.05.2013 for a further period of three years i.e. up to 02.05.2023.

All other conditions stipulated in the Environmental and CRZ Clearance issued vide F.No. 11-150/2010-IA-III dated 03.05.2013 shall remain unchanged.

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### Agenda item No. 51.3.5.

Environment and CRZ clearance for the development of Port at Ponnani, Mallapauram District, Kerala by M/s Malabar Port Private Limited – Extension of validity of Environmental and CRZ Clearance

#### (IA/KL/MIS/152182/2020; F.No. 11-81/2011-IA.III)

**51.3.5.1.** The Project Proponent (PP) along with his accredited consultant M/s L&T Infrastructure Engineering Limited made a presentation and presented following parameters and salient features of the project to the Committee: -

- (i) M/s. Malabar Port Private Limited (MPPL), under Swiss Challenge Method, has been awarded the project by Government of Kerala (GoK) for developing an All-Weather Deep-Water Port at Ponnani, Malappuram District, Kerala. A concession agreement in this regard was signed between GoK and M/s. MPPL on September 29, 2011.
- (ii) The development of Ponnani Port is proposed in two phases i.e., Phase-1 and Phase-1A with cargo handling capacity of 6.1 MTPA and 14.45 MTPA (cumulative), respectively with development plan of six (6) berths, breakwaters, navigation and backup facilities. The major commodities to be handled at Ponnani Port are container

cargo, thermal coal and general cargo which includes Fertilizer, Cement, Building Material, Granite, Timber, Tea, Industrial Cargo, Agri & Consumption Goods and Miscellaneous. The Port will be developed in an area of about 510 Acres. Land area of about 30 Acres south of Bharathapuzha River has been allotted by GoK to M/s. MPPL. Remaining 480 Acres of land for port development will be reclaimed. The dredging quantity during Phase-I is - 7.7 million cu.m (MCM) and 17.8 MCM (cumulative) during Phase-IA; dredge material of 6.49 MCM will be used for reclamation during Phase-I and 10.21 MCM during Phase-IA. Excess dredged material will be disposed at water depth > 20 m contour.

- (iii) MoEF&CC has accorded the Environmental and CRZ Clearance for the project vide Letter F.No. 11-81/2011-IA.III dated 10.05.2013. The Kerala State Pollution Control Board (KSPCB) has granted the Consent to Establish (CTE) for the Project vide file no. PCB/HO/MLPM/IC/1593/2013 and with Consent No. PCB/HO/MLPM/ICE/03/ 2013 on 19.09.2013.
- (iv) The GOK is yet to hand over the entire government land of around 30 acres for ensuring clear access to the port area. Of this, around 20 acres was handed over in 2016. The balance land is expected to be handed over by GoK to M/s. MPPL.
- (v) M/s. MPPL has initiated all necessary activities for port construction. The construction of the Access bund has already commenced as per the approved environmental and CRZ clearance layout and about 35,000 tons of boulder materials have been placed in the sea. The main reason for delay in project is non-availability of the access land (to be handed over by the GoK). Considering the present status, it is expected that the completion of construction of port facilities such as breakwaters, berths, dredging, reclamation and erection of mechanical handling equipment etc., and obtaining necessary financial approvals are likely to take about 30 to 33 months. As the validity of Environmental/CRZ clearance accorded to the project in question is up to May 09, 2020. M/s. MPPL submitted the application with a request to extend validity of Environmental and CRZ Clearances dated 10.05.2013 further by three years so as to complete the construction and commence the Port operations.
- (vi) There is no change in Project configuration, activity, capacity and facilities and these remain same as per Environmental/CRZ clearances dated 10.05.2013.

#### 51.3.5.2. The EAC noted the following: -

- (i) The proposal is for grant of extension of validity of Environment and CRZ clearance accorded vide letter F.No. 11-81/2011-IA.III dated 10.05.2013for the development of Port at Ponnani, Mallapauram District, Kerala by M/s Malabar Port Private 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.

**51.3.5.3.** The EAC noted that MoEF&CC has accorded the Environmental and CRZ Clearance vide F.No. 11-81/2011-IA.III dated 10.05.2013. As per the clearance granted, the development of Ponnani is proposed in two phases Phase-1 and Phase-1A with cargo handling capacity of 6.1 MTPA and 14.45 MTPA respectively. The development plan consists of Two (2) berths in Phase-1 and six (6) berths in Phase-1A (cumulative). The Port KSPCB has granted the Consent to Establish (CTE) on 19.09.2013. Access bund construction has commenced -35,000 tons of boulder materials placed in sea. The extent of Land handed over to MPPL by GoK is 20 acres. The remaining 10 acres, to be used for site access, is yet to be handed over by GOK. M/s. MPPL expects the handing over of the balance land shortly.

The project proponent has confirmed that the Port Handling Capacity and components remain same as contained in Environmental and CRZ Clearance dated 10.05.2013. Considering the present status, it is expected that the completion of construction of Port facilities and obtaining financial approvals will take between 30-33 months.

The EAC deliberated upon the information provided by the project proponent. The Committee being satisfied with the submission made by the project proponent, recommended to extend validity of the Environmental and CRZ Clearance issued vide F.No. 11-81/2011-IA.III dated 10.05.2013 further by three years i.e. up to 09.05.2023.

All other conditions stipulated in the Environmental and CRZ Clearance issued vide F.No. 11-81/2011-IA.III dated 10.05.2013 shall remain unchanged.

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## Day 2- Friday, 22<sup>nd</sup> May, 2020

Time: 10:00 hrs

Agenda item No. 51.4.1.

Group Housing Project Located at Plot No-3, Sector-D, Pocket-4, Vasant Kunj, New Delhi by M/s The Jag Jiwan Cooperative Group Housing Society Limited – Environmental Clearance

#### (IA/DL/MIS/151213/2020; F.No. 21-34/2020-IA-III)

**51.4.1.1.** The project proponent along with his accredited consultant-M/s Grass Roots Research & Creation India (P) Limited made presentation on following parameters and salient features of the project:

- (i) The project is located at Plot No-3, Sector-D, Pocket-4, Vasant Kunj, New Delhi. The coordinates of the project site are 28°31'17.93"N & 77°09'07.31"E.
- (ii) The project is new. The total plot area is 12,380.475 sqm. The Floor Space Index (FSI) area is 28,772.59 sqm and total built-up area of 57,517.63 sqm. The project consists of Main Residential Units (208 Nos), EWS Units (120 Nos) and Basement (02 Nos). Maximum height of the building is 31.20 m.
- (iii) The total water requirement for the construction Project is estimated to be approx. 114ML. The water supply during construction phase will be met through Sewage Treatment Plant (STP) Treated water and 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 the operational phase, the total water requirement of the project is expected to be 117 KLD and out of which 76 KLD of freshwater will be met from Delhi Jal Board (DJB) and 41 KLD of recycled water. Wastewater generated (93 KLD) will be treated in STP of capacity 120 KLD. 85 KLD of treated water obtained from STP will be reused for flushing (32 KLD) and gardening (9 KLD). Excess treated water (44KLD) shall be provided to nearby construction site and for road side green areas.
- (v) About 629 kg/day of solid waste will be generated from the project. The biodegradable waste (377 kg/day) will be processed in Organic Waste Convertor (OWC), inert waste (63 kg/day) will be used for land filling and the non-biodegradable waste generated (189 kg/day) will be handed over to vendors.
- (vi) The power supply will be supplied by BSES Rajdhani Power Limited The total connected load for Group Housing Project will be approx. 1,650 KW.

- (vii) Rooftop rainwater of buildings will be collected in three Rain Water harvesting (RWH) Pits of total 28.26 KLD capacity for harvesting after filtration.
- (viii) Parking facility for 519ECS is proposed to be provided against the requirement of 512 ECS as per state bye laws.
- (ix) Proposed energy saving measures: Energy will be saved using energy efficient lighting fixtures, Electronic Ballast, Timer based lighting and Automatic Power Factor Control (APFC) Panel.
- (x) Asola Bhatti Wildlife Sanctuary- 5.0 KM towards SE. NBWL Clearance is not required because notified boundaries of Eco-Sensitive Area of Asola Bhatti Wildlife extends up to one kilometer.
- (xi) Forest Clearance is not required as no forest land is involved.
- (xii) There is no court case pending against the project.
- (xiii) Estimated Cost of the project is 85 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.

51.4.1.2. The EAC noted the following: -

- (i) The proposal is to grant Environmental Clearance to project i.e. Group Housing Project Located at Plot No-3, Sector-D, Pocket-4, Vasant Kunj, New Delhi by The Jag Jiwan Cooperative Group Housing Society Limited for plot area 12,380.475 sqm and total built-up area of 57,517.63 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.

**51.4.1.3.** The EAC also noted that The Jag Jiwan Cooperative Group Housing Society Limited proposes Group Housing Project located at Plot No-3, Sector-D, Pocket-4, Vasant Kunj, New Delhi. The project facilities include Main Residential Units (208 Nos), EWS Units (120 Nos) and Basement (02 Nos) in a plot area measuring 12,380.475 sqm (3.05 Acres) with estimated built-up area of 57,517.63 sqm.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard Conditions as specified by the Ministry vide OM dated 4<sup>th</sup> January, 2019 for the said project/activity (specified at **Annexure-8** of the minutes):

- (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 or as required under relevant Fire State law 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 construction activities shall be undertaken in accordance with the local building byelaws.
- (iv) As proposed, fresh water requirement from DJB shall not exceed 76 KLD.
- (v) Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment i.e. Ultra-Filtration. The treated effluent from STP shall be recycled/re-used for flushing and gardening. As proposed, excess treated water shall be provided to nearby construction site and for road side green areas.
- (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 byelaw 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, 03 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, 100 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) No tree cutting/transplantation has been proposed in the instant project. A minimum of one 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, total area of 2,891.49 sqm (23.35% of plot area) shall be developed as green area.
- (xi) The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
- (xii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1<sup>st</sup>May, 2018, and proposed by the project proponent, an amount of Rs. 1.70 Crores (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as solar power facility in nearby area, Rain Water Harvesting, plantation in community area, Sanitation, Health, Education and skill development in nearby areas around 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 of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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#### Agenda item No. 51.4.2.

Construction of 500 bedded Government Hospital, located at Khasra no.- 1726 (bg, bh, bk, bl), 1727, Village Dimna, Circle Mango, Town Jamshedpur, District East Singhbum, Jharkhand by M/s Jharkhand State Building Construction Corporation Limited - Environmental Clearance

#### (IA/JH/MIS/151071/2020; F.No. 21-35/2020-IA-III)

**51.4.2.1.** The project proponent and his accredited Consultant-M/s OCEAO-ENVIRO Management Solutions (India) Pvt Limited made a presentation and informed about following salient features of the project:

- The project is located at 1726 (bg, bh, bk, bl), 1727 Village Dimna, Circle Mango, Town Jamshedpur, District East Singhbum, Jharkhand Latitude 22°50'34.17"N and Longitude 86°13'56.45"E
- (ii) The project is new. The total plot area is 1,21,406 sqm and total construction (Builtup) area of 67,418 sqm. The project will comprise of one building. The number of Floors will be SB+G+7. The maximum height of the building is 33.40m.
- (iii) 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 labour force.
- (iv) During operational phase, total water requirement of the project is expected to be 524 KLD and the same will be met through 301 KLD fresh water from Municipal Corporation and 223 KLD recycled water. Wastewater generated 248 KLD will be treated in a STP of 350 KLD capacity and ETP of 50 KLD capacity. The 223 KLD of treated wastewater will be recycled and re-used (87.5 KLD for flushing, for gardening, 36.9 KLD for 99 KLD HVAC etc.). No treated water will be disposed in to municipal drain.
- (v) About 1016.86 Kg/day solid wastes will be generated in the project. The estimated generation will be as under:
  - a. Biomedical waste 254.2 Kg/day (25%)
  - b. MSW 762.6 Kg/day (75%): Biodegradable waste 381.3 Kg/day (50%) + Nonbiodegradable 305.04 Kg/day (40%) + Other inert waste 68.63 Kg/day (9%), and E-waste 7.62 Kg/day (1%)].
- (vi) The total power requirement during operation phase is 4,630 KVA and will be met from Jharkhand Bijli Vitran Nigam Limited.
- (vii) Rooftop rainwater of buildings will be collected in 24 RWH Pits.
- (viii) Parking facility for 124 four wheelers is proposed to be provided against the requirement of 55 (according to local norms i.e. Jharkhand Building Bye Laws).
- (ix) Energy conservation measures like installation of LED for the lighting the areas outside the building will be integral part of the project design and will be in place before project commissioning.
- (x) It is located within 10 km of Eco Sensitive areas. However, boundary of Dalma Wild life Eco sensitive area is 310 m away from the hospital /project boundary. Hence NBWL Clearance is required.
- (xi) Forest Clearance is not required.
- (xii) No Court case is pending against the project.

- (xiii) Investment/Cost of the project is Rs 240 Crores
- (xiv) Employment potential: 500
- (xv) Benefits of the project: The project will generate employment for local people. Affordable medical facilities will be provided through the proposed hospital project.

51.4.2.2. The EAC noted the following: -

- (i) The proposal is to grant Environmental Clearance to project i.e. Construction of '500 bedded Government Hospital' at Village Dimna, Circle Mango, District East Singhbhum Town, Jamshedpur State Jharkhand by M/s Jharkhand State Building Construction Corporation Limited for plot area 1,21,406 sqm and total built-up area of 67,418 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 Jharkhand, the proposal has been appraised at Central level by sectoral EAC.

**51.4.2.3.** During deliberation the project proponent informed the EAC that taking into consideration the growing medical needs of the People of District, the Government of Jharkhand has planned to construct "500 bedded Government Hospital" at Khasra no.- 1726 (bg, bh, bk, bl), 1727, Village Dimna, Circle Mango, Town Jamshedpur, District East Singhbum, Jharkhand in MGM Medical College Campus. The project proponent further informed that the proposed hospital will be a component of the existing MGM Medical College. At present Medical College is having only the institutional part in the very old existing building. No part of or component of the hospitals exists on the date in the campus of MGM college. The construction of hospital is independent activity and is a new / fresh greenfield project. No construction of the proposed hospital has taken place at the project site.

The EAC also noted that the project area is within the eco-sensitive zone of Dalma Wildlife Sanctuary and is situated at distance of 310meter from the Sanctuary. The proposed project comes under regulated category of eco-sensitive zone. Total no. of trees present at project site are 240 and out of which 224 trees will be felled/cut for hospital project. Permission for felling of 224 trees has been obtained from the Forest Division Officer, Jamshedpur vide letter no. 3737/Jamshedpur dated 14.11.2019. The project proponent has also made an application for seeking recommendation of Standing Committee of NBWL/SBWL vide Proposal No. FP/JH/Others/4341/2019.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to following specific conditions and 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:

- 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 construction activities under the project shall start only after obtaining clearance under Wildlife (Protection) Act, 1972.
- (iii) The project proponent shall provide for adequate fire safety measures and equipment as per National Building Code or 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.

- (iv) 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 bye-laws and the building design may take in to account guidelines of concerned State Health Department, if any issued, particularly in context of highly contagious diseases like novel Covid-19.
- (v) As proposed, fresh water requirement from Maango Nagar Nigam shall not exceed 301 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from Nagar Nigam /concerned authority.
- (vi) Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment i.e. Ultra-Filtration. The treated effluent from STP shall be recycled/re-used for flushing, horticulture and HVAC. As proposed, no treated water shall be discharged to municipal drain.
- (vii) 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.
- (viii) 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.
- (ix) The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (x) Separate bins for dry and wet waste 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. Adequate 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.
- (xi) Biomedical wastes shall be managed in accordance to the Bio-Medical Waste Management Rules 2016 and radio-active waste shall be disposed off as per the atomic Energy Commission regulations, as applicable.
- (xii) 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 5 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) A total of 224 trees will be felled/cut for hospital project. Permission for felling of 224 trees has been obtained from the Forest Division Officer, Jamshedpur vide letter no. 3737/Jamshedpur dated 14.11.2019. 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 one tree) shall be done and maintained.
- (xiv) A minimum of one 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 36,907 sqm (30.4% of total area) area shall be provided for green area development.
- (xv) As per the Ministry's Office Memorandum (OM) F.No. 22-65/2017-IA.III dated 01.05.2018, the project proponent has proposed that an amount of Rs. 3.60 Crore (@ 1.5% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Adoption of Primary and secondary schools in 10 km area, Provisions of solar street lights on road within 2 km radius of the project site, Awareness campaigns and training programs related to Environment & Wildlife & skill development programs. The activities proposed under CER shall be as per the aforesaid OM and 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 of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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### Agenda item No. 51.4.3.

Group Housing at Khasra No. 8/26/2, Village Kapashera, Tehsil Vasant Vihar, New Delhi by M/s Anant Raj Limited – Environmental Clearance

#### (IA/DL/MIS/152620/2020; F.No. 21-36/2020-IA-III)

**51.4.3.1.** The project proponent and his accredited Consultant M/s Perfact Enviro Solutions Private Limited made a presentation on key parameters and salient features of the project and informed as under:

- (i) The project is located at Khasra No. 8/26/2, Village Kapashera, Tehsil Vasant Vihar, New Delhi Latitude- 28° 31' 42.65"N and longitude- 77° 4' 42.30"E
- (ii) The project is "Group Housing" with a plot area 11,930 sqm and built-up area 50,220.705 sqm. The total FAR Area of the project will be 27,772.604 sqm, Non-FAR Area of the project will be 9,080.041 sqm and the Basement area will be 13,368.06 sqm. The built-up area of the project will be 50,220.705 sqm and the total no. of floors will be 2B+ G/S+12. No. of tower will be 7 main towers + 2 EWS. Total No. of DU (3 BHK and 4 BHK) will be 178 and EWS units will be 72. The maximum height of the building will be 38.35 m.
- (iii) During the construction phase, total water requirement from domestic purpose is expected to be 9 KLD during construction phase which will be sourced through tankers. Septic tanks will be provided for the disposal of wastewater. Mobile toilets will be provided during peak labour force.

- (iv) During the operational phase, the total water requirement of the project is expected to be 168 KLD and out of which 92 KLD of freshwater will be met from Delhi Jal Board and 76 KLD of recycled water will be reused within the complex. Wastewater generated (123 KLD) will be treated in STP of 160 KLD and 111 KLD of treated water will be obtained from STP out of which 76 KLD will be reused for flushing, gardening, cooling and miscellaneous purposes and excess treated water of 35 KLD will be given for nearby construction or irrigation purposes.
- (v) About 0.468 TPD solid wastes will be generated in the project. The biodegradable waste (0.281 TPD) will be processed in OWC and the non-biodegradable waste generated (0.094 TPD) & plastic waste 0.093 TPD) will be handed over to the authorized local vendor.
- (vi) The total Power Requirement during the construction phase will be met by DG Set of 1x125 kVA, 1x62.5 kVA and total power requirement during operation phase will be 5600 KW which will be met from BSES. Also, during power failure, the DG Set of capacity 2x1500 kVA, 1x1000 kVA, 1x750 kVA will be provided.
- (vii) Rooftop rainwater of the building will be collected in 2 RWH pits of total capacity 165 m<sup>3</sup> capacity for harvesting after filtration and recharging the groundwater.
- (viii) The total parking requirement for the proposed complex is 506 ECS and the Total parking provision is 628 ECS.
- (ix) Proposed energy-saving measures would save about 20% due to the use of LED and solar provision.
- (x) Asola Wildlife Sanctuary is located at 13.15 km, ESE direction of the project location. Hence NBWL clearance is not required.
- (xi) Forest Clearance is not required.
- (xii) No Court case is pending against the project.
- (xiii) Investment /Cost of the Project is Rs. 68.42 Crores.
- (xiv) Employment potential- In construction phase 200 persons and 50 persons at the time of Operation Phase.
- (xv) Benefits of the project: Well connected with the network of public transport, local railways and cabs. Pollution-free environment with proper drainage and sewage system. Easy access to the airport and local Railway Station. The provision of renewable sources of energy like solar lights will be helpful in power savings. The basic requirement of the community like strengthening of Solar lighting and Infrastructure Development through the proposed CER activities in the area will help in uplifting the living standards of local communities.
- (xvi) Employment Opportunities: About 200 people will be deployed temporarily during the construction of the project and about 50 people will be employed during the operational stage of the project (direct or indirect).
- 51.4.3.2. The EAC noted the following: -
- (i) The proposal is to grant Environmental Clearance to project i.e. Group Housing at Khasra No. 8/26/2, Village Kapashera, Tehsil Vasant Vihar, New Delhi by M/s Anant Raj Limited for plot area 11,930 sqm and total built-up area of 50,220.705 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.

**51.4.3.3.** The EAC also noted that the proposed "Group Housing Project" will be located at Khasra No. 8/26/2, Village Kapashera, Tehsil Vasant Vihar, New Delhi to be developed by M/s Anant Raj Limited. The land is in the name of M/s Sarvodaya Builders (P) Limited which was later merged with M/s Anant Raj Limited vide amalgamation order by Hon'ble High Court of Delhi vide CP Nos. 117-121/2006 order dated 3<sup>rd</sup> October, 2006. The land is under Extended Abadi Area (Lal Dora Area) and the Lal Dora Certificate has been obtained for the same dated 11.08.1998. The total plot area of the project will be 11,930 sqm (Net Plot Area will be 9,164.108 sqm) and the built-up area of the project will be 50,220.705 sqm.

The EAC noted that there are inconsistencies in the data submitted for key project parameters in the application/Form-2 and data presented in brief/presentation for the Committee. Some of the parameters, which are found to be inconsistent are highlighted below for reference:

- (i) Copy of documents in support of the competence/authority is not correct. It should be in the name of the person applying for the Environmental Clearance not in the name of Environmental Consultant.
- (ii) Latitude and longitude of the project.
- (iii) Power Requirement.
- (iv) Air quality data is given for only two days monitoring. It should be as per CPCB Norms.
- (v) Copy of application submitted for water permission is not submitted.
- (vi) Raw material details are not provided.

In view of the foregoing observations, the EAC return the proposal in original form. The PP may apply afresh.

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### Agenda item No. 51.4.4.

"150 Bedded Hospital" Besides Archana Cinema, Public Building Site no. 1, Greater Kailash-1, New Delhi by M/s Lal Chand Public Charitable Trust – Reconsideration for Environmental Clearance

#### (IA/DL/MIS/114924/2019; F.No.21-74/2019-IA-III))

51.4.4.1. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project "150 Bedded Hospital" Besides Archana Cinema, Public Building Site no. 1, Greater Kailash-1, New Delhi by M/s Lal Chand Public Charitable Trust for plot area 4,046.86 sqm and total built-up area of 26,427.553 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 earlier considered by the EAC (Infra-2) in its 45<sup>th</sup> Meeting of the EAC (Infra-2) held during 17-18 October, 2019, wherein the EAC sought some additional information.
- (iv) The project proponent submitted/uploaded the additional information on 31.10.2019, 04.12.2019 and 19.03.2020 on Ministry's website (Parivesh Portal).

**51.4.4.2**. EAC also noted that there are two different parcels of land with plot area of one acre each. The details of both the projects are "150 Bedded Hospital", besides Archana Cinema Public Building Site no. 2, Block- B, Greater Kailash- 1, New Delhi. (Plot Area-4046.86 sqm) and "150 Bedded Hospital" besides Archana Cinema, Public Building Site No. 1, Block- B, Greater Kailash- 1, New Delhi. (Plot Area-4046.86 sqm). The plots have been leased in Perpetuity to the same lessee i.e. Lal Chand Public Charitable Trust while the lessors of the respective projects are different i.e. DLF Housing and Construction private Limited, New Delhi and Municipal Corporation of Delhi (MCD). Hence, the concerned authority in the State has advised to take separate clearances for the same. Land papers of the project has already been submitted in hard copy.

Regarding the approved building Plan for the instant project, it was mentioned by the project proponent that since sanction of approved building plan is a single window protocol, the approved building plan will be provided only after grant of Environmental Clearance of the same. However, Delhi Urban Art Commission's (DUAC) approval has been sanctioned to the project.

The EAC also noted that in the reply to additional information sought by the Committee, the PP has also submitted the revised water balance. As per the revised water balance; during operational phase, the total water requirement of the project will be 311 KLD out of which fresh water requirement will be 146 KLD which will be met through Delhi Jal Board. The total waste water generation will be 188 KLD (Sewage-170 KLD; Laboratory and Laundry Waste water-18 KLD) from Domestic, Kitchen, RO & filter backwash, flushing, gardening, hot water generator, cooling & mopping. The waste water will be treated in Sewage Treatment Plant (STP) of capacity 220 KLD & 19 KLD waste water from Laboratory & Laundry will be treated in ETP of capacity 25 KLD. Treated water from STP will be reused in flushing, gardening, hot water generator, cooling & mopping. 19 KLD of treated wastewater from ETP will be sent to STP. No treated water will be discharged to Municipal Drain.

The EAC deliberated upon the information provided by the project proponent. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and 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 or 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 bye-laws and the building design may take in to account guidelines of concerned State Health Department, if any issued, particularly in context of highly contagious diseases like novel Covid-19.
- (iv) As proposed, fresh water requirement from DJB shall not exceed 146 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, hot water generator, cooling & mopping. 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 byelaw 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, 2 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (ix) Separate bins for dry and wet waste 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 100 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) Biomedical wastes shall be managed in accordance to the BMW Rules, 2016 and radio-active waste shall be disposed off as per 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 5 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 one tree) shall be done and maintained.
- (xiii) A minimum of one 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 503.70 sqm (12.45% 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. 3.22 Crore (@ 1.5% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Drinking Water Supply, Plantation & Horticulture, Adaptation of two DDA parks at W-block, Greater Kailash-I from South Delhi Municipal Corporation, Contribution in Clean Yamuna Drive and Contribution in Clean Najafgarh Drain. 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 of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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#### Agenda item No. 51.4.5.

Integrated Municipal Waste Management Project for Deoghar Nagar Nigam at Plot No: 723, 723/752, 701, 702, 720, Rakba 23.56 Acre, Thana number 242, Khata No 58, Pachiyari Kothiya Village, District Deoghar, Jharkhand by M/s Deoghar Nagar Nigam – Reconsideration for Environmental Clearance

#### (IA/JH/MIS/78087/2018; F.No. 10-70/2018-IA-III)

51.4.5.1. The EAC noted the following: -

- (i) The proposal is for grant of environmental clearance to the project 'Integrated Municipal Waste Management Project for Deoghar Nagar Nigam at Plot No: 723, 723/752, 701, 702, 720, Rakba 23.56 Acre, Thana number 242, Khata No 58, Pachiyari Kothiya Village, District Deoghar, Jharkhand by M/s Deoghar Nagar Nigam.
- (ii) The project/activity is covered under category 'B' of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF)' of the schedule to the EIA Notification, 2006 and its subsequent amendments, However due to applicability of General condition i.e. project site falls under interstate boundary; the border with Bihar State is at a distance about 2.65 km in NNW direction from project site; it requires appraisal at Central level in the MoEFCC.
- (iii) Terms of Reference (ToR) was granted by MoEF&CC vide letter F.No. 10-70/2018-IA-III dated 15.10.2018.
- (iv) Public Hearing was conducted on 05.04.2019 at Project Site, Village Pachiyari Kothiya, District Deoghar (Jharkhand) by Jharkhand State Pollution Control Board Deoghar.
- (v) The proposal was earlier considered by the EAC (Infra-2) in its 44<sup>th</sup> Meeting of the EAC (Infra-2) held during 23 to 25 September, 2019, wherein the EAC sought some additional information.
- (vi) The project proponent submitted/uploaded the additional information on 13.12.2019 and 16.03.2020 on Ministry's website (Parivesh Portal).

The project proponent informed the EAC that proposed leachate management system at Deoghar includes Leachate Collection and Removal System (LCRS) and

Leachate treatment system. The LTP- Design was modified & updated through vetting from "Regional Centre for Urban & Environmental Studies" established by Ministry of Housing & Urban Affairs, Government of India. From water balance method, the estimated capacity of Leachate Treatment plant is 25 KLD.

The EAC deliberated upon the information provided by the project proponent. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to the following specific conditions and other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity (specified at **Annexure-7** 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) 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); bag filter/ESP for removal of particulate matter; ventury 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, SO<sub>2</sub>, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- (iii) Green Belt along the periphery in 3 tiers. 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.
- (iv) Analysis of Dioxins and Furans shall be done through CSIR National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- (v) No fresh water to be used except for potable use.
- (vi) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the Delhi Pollution Control Committee / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the DPCC and the Regional Office of MoEF&CC.
- (vii) Ground water monitoring for Physico-Chemical parameters to be carried out and record maintained by providing piezometric wells along the flow channel (up and down).
- (viii) Leachates to be collected and utilized within project after proper treatment.
- (ix) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.
- (x) The depth of the land fill site shall be decided based on the ground water table at the site.
- (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) 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.
- (xiv) 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.
- (xv) On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.
- (xvi) Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- (xvii) Gas generated in the Land fill should be properly collected, monitored and flared.
- (xviii) Project Proponent shall develop green belt, as committed. At least 30 m thick greenbelt shall be developed in the periphery of sanitary landfill facility.
- (xix) Pre medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.
- (xx) Emergency plan shall be drawn in consultation with DPCC/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.
- (xxi) Rain water runoff from the landfill area shall be collected and treated in the effluent treatment plant.
- As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May (xxii) 2018, and as proposed a fund of Rs. 74.4 lakh @2.0% of project cost shall be earmarked for activities such as Infrastructure Development, drinking water (OHT, Pipe laying etc.), sanitation facilities in village Pachiyari Kothiya & Gidhni, Infrastructure for Electricity (solar panels etc.) in village Pachiyari Kothiya & Gidhni, Upliftment of poor/farmers to acquire traditional/ basic skill to increase yield of crops & fodders in village Pachiyari Kothiya Gidhni, Conducting camps & programmes for avenue plantation and its awareness in village Pachiyari Kothiya & Gidhni, To acquire skills through ITI & skill development organizations in getting employments in industries in village Pachiyari Kothiya & Gidhni, Development of PHC, Conducting Health camps and Providing medicines in village Pachiyari Kothiya & Gidhni, Fogging arrangement to avoid mosquito problem in village Pachiyari Kothiya & Gidhni, Quarter amount of compost will be share amongst the localized people in village Pachiyari Kothiya & Gidhni Conducting awareness camp in nearby villages for explains solid waste management processes in village Pachiyari Kothiya & Gidhni. 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.

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#### Agenda item No. 51.4.6.

Expansion of Residential Complex "M2k Victoria Gardens" at Ring Road, Azadpur, New Delhi by M/s Negolice India Limited – Reconsideration for Terms of Reference

(IA/DL/MIS/124665/2019; F.No. 21-79/2019-IA-III)

51.4.6.1. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project Expansion of Residential Complex "M2k Victoria Gardens" at Ring Road, Azadpur, New Delhi by M/s Negolice India Limited in a total plot area of 18,372.744 sqm and total construction (built-up) area of 1,72,855.613 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(b) 'Township and Area Development 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 is appraised at Central Level.
- (iii) The proposal was earlier considered by the EAC (Infra-2) in its 46<sup>th</sup> Meeting of the EAC (Infra-2) held during 25-26 November, 2019, wherein the EAC sought some additional information.
- (iv) The project proponent submitted/uploaded the additional information vide letter dated 07.04.2020 on Ministry's website (Parivesh Portal).

**51.4.6.2.** The Committee also took note of the Certified Compliance report issued by Regional Office (Central Region), MoEFCC, Lucknow issued vide letter 4-294/07/651 dated 20.01.2020. The report inter-alia mentioned that "It was noticed that 7 blocks with 3B+G+19 floors was constructed and found operational. However, PAs have not obtained any prior permission from the Ministry before the construction of three numbers of basements instead of 02 basements".

The EAC also took note of submissions made by PP that the original proposal was applied to the Ministry on 24.11.2006 wherein it was submitted that there would be three basements. The copy of documents submitted in 2006 obtained under RTI has already been provided with current application wherein it is mentioned that three basements were proposed. The project details submitted during the initial EAC appraisal in 2006 had also mentioned about three basements. At present, the Built-up area of the project is 1,00,352.02 sqm which is less than the Built-up area permitted in Environment Clearance vide letter no. 21-641/2007-IA.III dated 16<sup>th</sup> May, 2007 i.e. 1,00,676.12 sqm. The PP has obtained the approval of existing building plan, building competition certificate, and occupancy certificate from concerned authorities in the State.

The Member Secretary informed to the Committee that the PP has obtained the copy of project file for their original proposal under the RTI Act, 2005. As per the records available in MoEFCC, the original proposal was submitted by PP in 2006, wherein the PP had indicated construction of three basements. However, the notes and letter granting clearance mention about the two basements. The reasons for the aforesaid inconsistencies are not evident in the records. The concerned RO of MOEFCC has taken a note of the change in the project parameters and requested the PP to take necessary approval from the Ministry in this regard.

The EAC deliberated upon the issue and opined that original Environment Clearance was granted by MoEFCC vide letter no. 21-641/2007-IA.III dated  $16^{th}$  May, 2007 for built-up area 1,00,676.12 sqm and for the development of eight (8) blocks with 2B+G+19 Floor+stilt+2 podium. However, the project proponent has constructed seven (7) blocks (out of 8 permitted originally) with 3B+G+19 floors for which neither amendment was taken from the MoEFCC nor it was informed to the Ministry. The project proponent has made changes in building plan without informing to the Ministry. However, the construction has been done within the permitted built-up area i.e. 1,00,676.12 sqm as conveyed by the PP.

In view of the above, the EAC was of the opined that the Ministry may take a view on observations contained in the compliance report of their concerned regional office. The PP has undertaken construction activities for built-up area less than that of permitted in existing

EC and number of towers and units constructed are also less than that of those were permitted. The overall environmental impact might not be more than that had been envisaged at the time of original EC granted to this project. After detailed deliberation, EAC recommended granting 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 5 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 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) Approval AAI w.r.t proposed height of the building.
- (v) Details of tree cutting/transplantation, if any.
- (vi) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (vii) 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.
- (viii) 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.
- (ix) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 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.

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#### Agenda item No. 51.4.7.

'Proposed Building Construction for 1<sup>st</sup> BN NDRF' by M/s 1<sup>st</sup> BN NDRF at Sonapur, Guwahati, Assam - Reconsideration for Environmental Clearance

#### (IA/AS/MIS/147769/2020; F.No. 21-29/2020-IA-III)

**51.4.7.1.** 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 located at Sonapur, Guwahati, Assam.Site co-ordinates of the project site is 26°08'47.5"N 91°53'30.9"E.
- (ii) The project is new. The total plot area is 3,35,862 sqm, total FSI area is 21,159.306 sqm and total construction (Built-up) area is 21,238 sqm. Maximum height of the building is 15 metre. The component of the building will be Residential Quarters and Other Facilities. Total Dwelling Units (DU) for Phase-I will be twenty-six (26) (Type-II Quarters; Type-III Quarters; Type-IV Quarters; Type-V Quarters)
- (iii) During construction phase, total water requirement is expected to be 586.27 ML, which will be met by treated water from Municipal supply. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (iv) During operational phase, total water demand of the project is expected to be approx. 415 KLD; out of which daily fresh water requirement of 377 KLD will be met by Municipal Supply and remaining 68 KLD from recycled water. Domestic wastewater generation will be 98 KLD, which will be treated in STP of 120 KLD. 68 KLD of treated wastewater will be recycled and reused; 30 KLD for flushing, 23 KLD for gardening, 12 KLD for HVAC cooling and 3 KLD for DG Cooling etc.
- (v) About 0.580 TPD solid wastes will be generated in the project. The biodegradable waste (0.348 TPD) will be processed in OWC and the non-biodegradable waste generated (0.174 TPD) will be handed over to authorized local vendor.
- (vi) Maximum Demand load estimated for Phase-1 is approx. 897 kW. The power requirement will be met from Assam Power Distribution Company Limited. Maximum demand load for DG Set of 347Kw, which shall be placed outdoor with Acoustic Enclosure. DG Set Capacity 1x500 kVA 11/0.43kV oil type transformer with on load tap changer on HV side will also be provided.
- (vii) As groundwater level in area is high so rainwater harvesting is not advisable. Roof top rainwater of buildings will be collected after filtration in five (5) Retention ponds with total capacity of 27,296.4 KL.
- (viii) Parking facility for 270 ECS is proposed to be provided against the requirement of 265 ECS respectively (according to local norms).
- (ix) Proposed energy saving measures would save about 8-10 % of power.
- (x) It is not located within 10 km of Eco Sensitive Zone. Hence, NBWL Clearance is not required.
- (xi) Forest Clearance is not required.
- (xii) No Court case is pending against the project.
- (xiii) Investment/Cost of the project is Rs.86.55 Crores.
- (xiv) Employment Potential: During Construction phase approx. 30-80 persons shall get employment.
- (xv) Benefits of the project Wastewater treatment, green belt, energy conservation, parking management, rainwater harvesting.

51.4.7.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project 'Proposed Building Construction for 1<sup>st</sup> BN NDRF' by M/s 1<sup>st</sup> BN NDRF at Sonapur, Guwahati, Assam for plot area 3,35,862 sqm and total built-up area of 21,238 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 Assam, the proposal has been appraised at Central level by sectoral EAC.

**51.4.7.3.** It was informed by the project proponent that the proposed Building Construction is for 1<sup>st</sup> BN NDRF at Sonapur, Guwahati, Assam. The aim of the National Disaster Management Authority is to build a safer and disaster resilient India by developing a holistic, proactive, multi-disaster and technology driven strategy for disaster management. At present, National Disaster Response Force consist of 12 battalions, three each from the BSF and CRPF and two each from CISF, ITBP and SSB. Each battalion have 18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics. It will have convention service apartments, residential zones, surface parking. The site is having plot area 3,35,862 sqm (83 acres) with built up area is 21,238 sqm.

Total green area proposed for project is 1,01,094.46 sqm (30.10% plot area). A combination of evergreen and ornamental, palms, shrubs and ground covers will be planted along the sides of the road and in open space and set back area within the complex layout. Total number of existing trees is 490, out of which 200 trees will be cut.

The EAC, based on the information/additional information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance subject to the following specific conditions and 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:

- 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 377 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from Municipal supply /concerned authority.
- (v) Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, green area, HVAC cooling and DG 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 byelaw 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 tanks shall be provided 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, 26 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 of trees proposed to be cut shall not exceed 200. Where absolutely necessary, tree cut/transplantation shall be with prior permission from the Tree Authority constituted as per the Assam (Control of felling and removal of Tress from Non-Forest Lands) Rules, 2002. 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.
- (xii) A minimum of one (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 1,01,094.46 sqm (30.10% of total area) area shall be provided for green area development.
- (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. 1.73 Crore (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as tree plantation, drinking water facilities, installation of solar lights in village common areas, solid waste management facilities and construction of public toilet 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.

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#### Agenda item No. 51.4.8.

# Aerial Passenger Ropeway System between Purkul Gaon (Dehradun) and Library (Mussoorie) by M/s Mussoorie Sky Car Company Private Limited – Terms of reference

### (IA/UK/MIS/149939/2020; F.No. 10-33/2020-IA-III)

**51.4.8.1.** The project proponent and the accredited Consultant M/s Perfact Enviro Solutions Private Limited gave a presentation on the salient features of the project and informed that:

- (i) The proposed project titled "Aerial Passenger Ropeway System between Purkul Gaon (Dehradun) and Library (Mussoorie) in Dehradun District, Uttrakhand will be developed by M/s Mussoorie Sky Car Private Limited. Proposed Monocable Detachable Grip Ropeway System will be developed at Lower Terminal Point (LTP) at Purkul Gaon, Taluk-Dehradun, District Dehradun, Uttrakhand; and Upper Terminal Point (UTP) at Mussoorie Nagar Palika, Taluk-Dehradun, District Dehradun, Uttrakhand.
- (ii) The land at LTP & UTP are partly owned by Forest/Revenue Departments and Private Owners. According to Memorandum of Understanding between Uttarakhand Tourism Development Board (the "Authority"/"UTDB") on behalf of Government of Uttarakhand (GoU) engaged in the development of tourism in the state of Uttarakhand and as part of this endeavour, the Authority has decided to undertake development of aerial passenger ropeway between Dehradun (Purkul Gaon) and Mussoorie, District Dehradun, Uttarakhand (the "Project") through Public Private Partnership mode.
- (iii) Since the elevation of Upper Terminal Point is at 1996 m which is more than 1000 m above mean sea level. Also, part of the proposed project falls in the Notified Eco sensitive area (ESA) of DOON Valley (1989). Hence, general conditions are also applicable. Therefore, the proposed project falls under Activity 7(g), Category A as per schedule of EIA Notification, 2006 and its subsequent amendments.
- (iv) The project is located at Dehradun District, Uttrakhand. Latitude 30°24'46.97"N; Longitude 78°04'01.80"E & Altitude:958.2 m above MSL at LTP, and Latitude 30°27'36.76" N; Longitude 78°03'58.19" E & Altitude: 1996 m above MSL at UTP.
- (v) The proposed ropeway system will aid as a better transportation alternative in the area that will eventually accentuate tourism & socio-economic status in the area. The ropeway will cover a total land area of 75000 sqm (7.5 ha.). Out of which, 5000 sqm will be forest land. The total inclined length will be 5402.61 m. There will be a continuous ropeway line from LTP to UTP.
- (vi) To meet the terrain, length and capacity requirement a Monocable Detachable Grip Ropeway System is appropriate in this Alignment. Ropeway will be used for carrying passengers (Ropeway Capacity: 2000 persons per hour).
- (vii) Maximum 100 numbers construction workers will be deployed during the peak construction phase and proper arrangement of water supply and sewage disposal will be made at the site. 4 KLD of Wastewater from 100 labourers will be discharged to a septic tank followed by a soak pit.
- (viii) During the operation phase, Approx. 24000 visitors are expected in a day and there will be a provision of 18 skilled and 15 unskilled staff for the operation of the ropeway. Total cost of the project will be Rs. 285.2 crores.
- (ix) Total water requirement will be 111 KLD mainly used for domestic, flushing, gardening & misc. purposes. Water will be sourced from Tanker supply of Jal Nigam. Freshwater requirements will be 25 KLD. The total quantity of wastewater generation will be 96 KLD which will be treated in STP at LTP & UTP

- (x) Power Load Requirement will be 1250 KW. DG set of capacities 3x 500 kVA will be used as a backup power source. The total power requirement will be sourced by Uttarakhand Power Corporation Limited.
- (xi) Total solid waste will be 1220 kg/day generated from the project. Total biodegradable waste will be 854 Kg/day and recyclable waste will be 366 kg/day generated from the project. The organic waste will be sent to the Organic Waste Converter. The Recyclable Waste will be collected and given to the approved recycler.
- (xii) The proposed project will be a Plastic-free zone. So, there will be no generation of plastic waste. Approx. 21 L/month of used oil will be generated from D.G sets which will be sent to authorized hazardous waste disposal authority.
- (xiii) There will be no displacement or immigration of the human population due to the proposed project. Risk assessment shall be done and proper safety and security measures will be undertaken. Proper prevention and timely maintenance of ropes, machines etc will be scheduled to prevent any accident.
- (xiv) The maintenance team will be trained to handle any type of contingency in time of emergency. All safety guidelines will be adhered to and followed during construction and operation phases. First aid facilities will be provided at the site.
- (xv) Forest Clearance will be obtained.
- (xvi) There is no court case pending against the project.
- (xvii) Overall cost of the Project is Rs. 285.2 Crores.
- (xviii) Employment potential: The ropeway will give direct employment to approx. 100 persons during construction phase and 33 persons during operation phase of which locals suitable will be given preference. It will also create more indirect employment.
- (xix) Benefits of the project: The Ropeway will boost the local economy when a larger number of Tourists / Visitors will visit Mussoorie. The Ropeway will provide direct and indirect employment to the local people. The ropeway will give a boost to the tourism potential. The project will lead to improved aesthetics in the area. The basic facilities such as road, water supply system, drainage system, streetlight etc. near the project area are likely to be remarkably improved due to the implementation of the project
- 51.4.8.2. The EAC noted the following: -
- (i) The proposal is for grant of Terms of Reference to the project 'Aerial Passenger Ropeway System between Purkul Gaon (Dehradun) and Library (Mussoorie)' by M/s Mussoorie Sky Car Company Private Limited.
- (ii) The project/activity is covered under category 'B' of item 7(g) 'Ropeways' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at SEIAA/SEAC level. However due to applicability of general condition as the elevation of Upper Terminal Point is at 1996 m which is more than 1000 m above mean sea level and also, part of the proposed project falls in the Notified Eco sensitive area (ESA) of DOON Valley (1989), the project is apprised as Category 'A' at Central Level in MoEFCC by sectoral EAC.

**51.4.8.2.** The EAC during deliberation noted that there are many discrepancies in the Form-1 and Pre-feasibility Report submitted by the project proponent. The EAC decided to return the proposal in original. The PP may apply afresh.

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#### Agenda item No. 51.4.9.

## Development of Water Aerodrome at Umrrangso Reservoir Dam, Dima Hasao District, Assam by M/s Transport Department, Government of Assam – Terms of reference

### (IA/AS/MIS/151916/2020; F.No. 10-34/2020-IA-III)

**51.4.9.1.** The project proponent and his accredited Consultant M/s Enviro Resources made a presentation on the following parameters and salient features of the project and informed as under:

- (i) The proposal is for Development of Water Aerodrome at Umrrangso Reservoir Dam, Dima Hasao District, Assam by Transport Department, Government of Assam, India
- (ii) The proposed project is located on at Umrangso Reservoir Dam, Assam. The land side of the proposed project admeasures 10,501 sqm. The geographical location of the project is at Latitude / Longitude=25°29'34.54"N / 92°41'26.41"E.
- (iii) Water Aerodrome at Umrangso water reservoir, Assam will also have terminal building on the land side and allied facilities. The proposed Terminal will be spread over the plot area of 1.05 Ha. The proposed project is planned in the area provided by the Transport Department, Govt of Assam.
- (iv) This project is independent and is not linked with other projects' which may attract directly or indirectly any provisions of schedule of EIA notification 2006 amended to date. To boost tourism, water aerodrome is being proposed at Umrangso water reservoir, Assam along with terminal building on the land side and allied facilities.

S. No.	Description	Area (sqm)	% Utilization of Plot Area
1	Green Belt	7,729.00	74.00%
2	PTB plinth area (double storey)	600.00	6.00%
3	Road	1,649.00	16.00%
4	Utility/Services	144.00	1.37%
5	Parking (10nos)	96.00	0.63%
6	Hard Paving	283.00	3.00%
	Total Plot Area	10,501.00	100%

(v) The land is provided by Transport Department, Govt of Assam. The break-up of the plot area on the land side is as mentioned below:

- (vi) During construction phase water requirement will be 3 KLD and shall be sourced from water tankers. During operation phase, net fresh water requirement is 6.5 KLD and it shall be sourced from local municipal sources.
- (vii) No litigation is pending.
- (viii) Investment/Cost of the project is Rs. 20 Crores.
- (ix) Employment potential: During the project operation stage, for the purposes of daytoday professional and maintenance works, about 50 staff is envisaged.
- (x) Benefits of the project: The incoming of tourist at proposed project location will leads to increase in tourism & hotel business at local level. The proposed project will serve employment to local people. Establishment of proposed project will contribute in increase in level of current social infrastructural facilities. Considering the above overwhelming positive impacts, there shall be overall development of the area.

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

(i) The proposal is for grant of Terms of Reference for 'Development of Water Aerodrome at Umrrangso Reservoir Dam, Dima Hasao District, Assam by M/s Transport Department, Government of Assam. (ii) The Water Aerodrome is not a listed project/activity in the Schedule to the EIA Notification, 2006 and its amendments. A view has been taken by this EAC that the activities proposed under Water Aerodrome project may have similar type of impacts as that of the Airport. Therefore, the proposed project/activity can be applied under category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006 and its amendments. Considering the Water Aerodrome are emerging in the country as new mode of transport involving sea/river fronts and its likely impacts on water, air and aquatic biodiversity including flora and fauna, the EAC has also taken a view to follow the EC process as per category A of item 7(a) 'Air Ports' of the Schedule to the EIA Notification, 2006.

**51.4.9.3.** The project proponent informed the EAC that with current growth scenario in civil aviation, particularly in India, the Central Government has launched "Ude Desh ka Aam Naagrik" Regional Connectivity Scheme (UDAN-RCS) to reach out to remote areas. As per directives of Ministry of Civil Aviation (MoCA), Airport Authority of India (AAI) requested Govt. of Gujarat, Assam, Andhra Pradesh, Telangana and A&N Administration to propose potential locations for setting up 10 water aerodromes, in these States/ Union Territory for the purpose of boosting the tourism sector. The current proposal is the outcome of the aforesaid exercise. The activities being proposed are Approach Road, Terminal Building and Ancillary Facilities on City Side, Air Side and Fueling.

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) A certificate from Wildlife Warden/forest Officer is to be submitted stating the conformity that the project site is not lying within any eco sensitive zone/area.
- (iii) The EIA 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 regard.
- (iv) 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).
- (v) Layout maps of proposed project indicating runway, Aerodrome building, parking, greenbelt area, utilities etc.
- (vi) Cost of project and time of completion.
- (vii) 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.
- (viii) Detail plan for 'deplane waste' and impact of noise on the sensitive environment especially on wildlife sanctuaries and national parks, if any.
- (ix) EIA report should contain the water quality, flora and fauna in the region.
- (x) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project proponent or other agencies in the core area, shall be made for traffic densities and parking capabilities in 5 kms radius from the project 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.

- (xi) The EIA. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Aerodrome premises.
- (xii) An onsite disaster management plan shall be drawn up to account for risks and accidents including spillage during fueling. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xiii) 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.
- (xiv) Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
- (xv) 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.
- (xvi) The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.
- (xvii) The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.
- (xviii) The management plan will include compliance to the provisions of the Solid Waste Management Rules, 2016.
- (xix) 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 5 Km radians of the Aerodrome.
- (xx) 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.
- (xxi) Noise monitoring shall be carried out in the funnel area of flight path.
- (xxii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xxiii) Details of fuel tank farm and its risk assessment.
- (xxiv) 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 Aerodrome including the segregation mechanism.
  - b. Toilet wastes and sewage collected from aircrafts and disposed at the Aerodrome.
  - c. Maintenance and workshop wastes.
  - d. Wastes arising out of eateries and shops situated within the Aerodrome.
- (xxv) Status of litigation pending against the project and/or any direction/order passed by any Court of Law against the project; If so, the 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.

- (xxvi) Submit an affidavit signed by authorized representative to the effect that there is no violation and no part of the project has been implemented without Environmental Clearance.
- (xxvii) Plan for Corporate Environment Responsibility (CER), as specified in this Ministry's Office Memorandum No. 22-65/2017-IA.III dated 1<sup>st</sup>May, 2018, shall be prepared and submitted along with EIA Report.
- (xxviii) Public hearing is to be conducted. Issues raised during public hearing and commitments made by the project proponent on such issues should be included in final EIA/EMP Report in the form of tabular chart with financial budget for complying with such commitments.
- (xxix) A tabular chart with index for point-wise compliance of above ToRs.

The EAC recommended for the grant of ToR with Public Hearing for preparation of EIA / EMP report in addition to all relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006 and as amended from time to time. The draft EIA/EMP report be submitted to the State Pollution Control Board for Public Hearing.

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#### Agenda item No. 51.4.10.

Common Bio-Medical Waste Treatment Facility at Plot No. B2/92 & B2/93, village Mohan Cooperative Industrial Estate by M/s Biotic Waste Solutions Private Limited – Terms of reference

#### (IA/DL/NCP/149344/2020; F.No. 10-35/2020-IA-III)

**51.4.10.1.** The project proponent along with his accredited Consultant M/s Perfact Enviro Solutions Private Limited made a presentation on the salient features of the project and informed that:

- (i) The project titled "Common Bio-Medical Waste Treatment Facility" is proposed at Plot No. B2/92 & B2/93, Mohan Cooperative Industrial Estate, New Delhi. It would be to be developed by M/s Biotic Waste Solutions Private Limited over the total land area of 3177.284 sqm (0.317 ha.). The total capacity of the proposed project will be 30 TPD (Incineration Capacity- 16 TPD; Autoclave- 14 TPD).
- (ii) The Mohan Cooperative Industrial Estate at Mathura Road is an approved industrial area prior to year 2006 (ref. p.125/Gazette Master Plan Delhi 2001 dated 01.08.1990). Therefore, proposed development may be exempted from the conduct of public hearing.
- (iii) The land has been leased from RKKR Udyog Trust to M/s Biotic Waste Solutions dated 31.01.2020 for operation of Bio Medical Waste Plant which collects common biomedical waste from Delhi Hospitals and processes it without creating any pollution.
- (iv) The project lies under Activity 7 d(a) in Category 'A' as Haryana State Boundary & UP State Boundary are within 5km radius of the project site. Hence, General Conditions are applied as per schedule of EIA Notification, 2006 and its subsequent amendments. Therefore, application has been made at MoEF&CC for the grant of Terms of Reference.
- (v) As per Master plan of Delhi 2021, the land falls under notified industrial area. The site was selected on the basis of environmental consideration and other factors like site falling in the notified industrial area, Good Road Connectivity and Easy availability of
skilled and unskilled laborers for construction of plants and its operation. The proposed project is located at Plot No B2/92 & B2/93, Mohan Cooperative Industrial Estate, New Delhi. (Latitude- 28°29'50.17"N and Longitude-77°17'59.77"E)

- (vi) The project is a Common Bio-Medical Waste Treatment Facility with a total land area of 3177.284 sqm (0.317 ha.). The total no. of floors will be G+1. The total capacity of the facility will be 30 TPD (Incineration-16 TPA; Autoclave-14 TPD). The total capacity of Incinerator of 500 kg/hr with dry air pollution control device & static incinerator of 300 kg/hr based on ALFA-THERM Oil fired Incinerator. The total no. of autoclave will be two (2) each with a capacity 350 kg/batch. The plastic shredder will be of total capacity of 350 kg/batch.
- (vii) During the construction phase, the total water requirement for domestic purposes is expected to be 5 KLD, which will be sourced through tanker supply. Mobile toilets will be provided for labours. 1 KLD wastewater will be discharged to septic tanks with soak pits to be cleaned regularly.
- (viii) During the operational phase, the total water requirement of the project is expected to be 15.8 KLD out of which 7.3 KLD of freshwater will be met from Delhi Jal Board (DJB) and 8.5 KLD will be sufficed from in-house ETP treated water. The 8.9 KLD wastewater will be treated in ETP (10 KLD). The 8.5 KLD treated water will be reused within the facility for purposes like gardening, floor washing and vehicle container washing & chemical disinfection.
- (ix) During the Construction Phase, approx. 6 kg/day municipal waste will be generated and disposed off to MSW Disposal Site.
- During Operational Phase, about 0.018 TPD solid wastes has been estimated to be (x) generated from the complex. The biodegradable waste (0.007 TPD) will be processed in OWC. The non-biodegradable waste will be 0.011 TPD, which will be handed over to the authorised local vendor. It is estimated that 0.03 kL/month of used oil will be generated from machineries/DG Sets and carefully stored in HDPE drums in an isolated covered facility. The used oil will be sold to authorized vendors for the treatment of the same. Suitable care will be taken so that spills / leaks of used oil from storage could be avoided. The 0.8 TPD of incinerator ash will be sent to TSDF site. The 0.13 kg/day ETP Sludge will be stored in leak proof PVC containers in isolated areas on Pakka floor within the premises, as per the Rules and handed over to treatment and disposal facility authorized by Delhi Pollution Control Committee. The 13 TPD of autoclaved plastics & rubber etc. will be sent to shredder and then will be sent to authorized recyclers. One TPD of sharps will be treated in autoclave. After autoclaving, sharps will be encapsulated. Glass bottles shall be sold to recyclers after chemical disinfection.
- (xi) The total Power Requirement during the construction phase will be met by DG Set of 1x125 kVA. Total power requirement during operation phase will be 250 kW, which will be met from Tata Power Delhi Distribution Limited (TPDDL). Also, during power failure, DG Set of capacity 1 x 250 kVA will be provided. To avoid emissions, stack will be constructed with appropriate height of 3.5 m above roof level as per CPCB guidelines.
- (xii) Being a Bio Medical Waste Treatment Unit, rainwater from rooftop will be channelized to the storm water drainage network of the industrial area. Other storm water discharges will be channelized to industrial drain outside the place.
- (xiii) There will be use of approx. twenty-five (25) four wheelers and ten (10) two wheelers per day for transportation purposes. These vehicles will be used exclusively for collection of bio medical waste from various medical establishments. There is enough space available within the premises to park these vehicles. Thus, parking of these vehicles can be done within the facility premises.

- (xiv) Proposed energy-saving measures would save about 10% due to the use of LED and solar energy provision.
- (xv) Asola Wildlife Sanctuary is located at 2.09 km SWW direction of the project site and outside the notified boundary of the Sanctuary. Hence NBWL Clearance not required.
- (xvi) Forest Clearance is not required.
- (xvii) There is no court case pending against the project.
- (xviii) Cost of the Project is estimated to be Rs. 4 Crores.
- (xix) Employment potential: In construction phase 40 persons and 120 persons at the time of Operation Phase will be employed for the proposed project.
- (xx) Benefits of the project: With the proposed Common Biomedical Waste Treatment facility, Delhi will get a cleaner and healthier environment. Installation of individual treatment facilities by small healthcare establishments requires comparatively high capital investment. In addition, it requires separate manpower and infrastructure development for the proper operations and maintenance of treatment systems. The Centralized system of waste management is the best method in terms of cost reduction and minimizes legal and ethical hassles of health care staff & authority. Organized methods for Bio-medical Waste Treatment i.e. Incineration, autoclaving & shredding has been adopted. A complete bio medical waste disposal solution using the best technology methods is proposed to be provided. The waste product obtained from shredder shall be sold to authorized recyclers which shall be reused. It will be an environmentally sustainable project. It will provide direct and indirect employment to local people. Addition of revenue to the state by taxes.
- 51.4.10.2. During deliberations, the EAC noted the following: -
- (i) The proposal is for grant of Terms of Reference for 'Common Bio-Medical Waste Treatment Facility at Plot No. B2/92 & B2/93, village Mohan Cooperative Industrial Estate to be setup by M/s Biotic Waste Solutions Private Limited
- (ii) The project/activity has applied under category 'B' of item 7(da)- 'Bio-Medical Waste Treatment Facilities' of the Schedule to the EIA Notification, 2006 and its amendments. However, due to applicability of General Condition as Haryana State Boundary & UP State Boundary are within 5 km radius, the project is apprised as Category 'A' at Central Level in MoEFCC by sectoral EAC.

**51.4.10.3.** The EAC also took note of submissions by PP that at present there are two CBWTF's in operation in Delhi. Both CBWTF's are authorized by DPCC. The total installed treatment capacity is 63 Tons per day. M/s SMS Watergrace BMW Pvt Limited, Nilothi is providing services to six districts of Delhi i.e. North-East, Shahdara, East, Central, South-West and West. Approximate health care facilities covered by the CBWTF is 6,000 including 27,000 beds. M/s Biotic Waste Solutions Pvt Limited, SSI Industrial Area, Delhi is providing services to Five districts of Delhi i.e. North-West, South, South-East, and New Delhi. Approximate health care facilities covered by the CBWTF is 4,800 including 24,000 beds. In order to prevent movement of waste from south region to north region of Delhi, M/s Biotic Waste Solutions Pvt Limited for grant of Terms of Reference for setting up of CBWTF in South East District. The project proponent shall be catering to nearby districts only. The Mohan Cooperative Industrial Estate at Mathura Road is an approved industrial area prior to year 2006 and the proposed facility may be exempted from conduct of public hearing/consultation.

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

- (i) Importance and benefits of the project.
- (ii) To carry out a sensitivity analysis of alternative sites as per the "Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in 2003."
- (iii) Project proponents would also submit a write up on how their project proposals conform to the stipulations made in the "Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators", published by the CPCB on May 24, 2010.
- (iv) Status of compliance to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- (v) Compliance to the conditions of the consent to operate and authorization. A separate chapter on status of compliance of conditions given in consent to operate to be provided in EIA-EMP report.
- (vi) The project proponents would submit a certificate that no expansion, modernization or capacity enhancement has been undertaken after the introduction of the EIA notification.
- (vii) The project proponents would submit a para wise certified compliance report to the consent to operate and the authorization received from the State Pollution Control Board for the existing facilities.
- (viii) Details of various waste management units with capacities for the proposed project.
- (ix) List of waste to be handled and their source along with mode of transportation.
- (x) Other chemicals and materials required with quantities and storage capacities.
- (xi) Details of temporary storage facility for storage of hazardous waste at project site.
- (xii) Details of pre-treatment facility of hazardous waste at TSDF.
- (xiii) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (xiv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xv) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xvi) Hazard identification and details of proposed safety systems.
- (xvii) Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
- (xviii) Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
- (xix) Ground water quality monitoring in and around the project site.
- (xx) Status of the land purchases in terms of land acquisition Act and study the impact.
- (xxi) Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- (xxii) R&R details in respect of land in line with state Government policy.

- (xxiii) Details of effluent treatment and recycling process.
- (xxiv) Leachate study report and detailed leachate management plan to be incorporated.
- (xxv) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xxvi) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- (xxvii) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- (xxviii) 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.
- (xxix) A tabular chart with index for point-wise compliance of above ToR.

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. The Project/ Activity has been exempted from requirement of conduct of Public Hearing/ Consultation under para 7 (i). III (b) of the EIA Notification, 2006.

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# Agenda item No. 51.4.11.

Common hazardous waste incineration facilities at 342 B, 2nd Phase, Harohalli Industrial Area, Kanakpura Taluk, Ramanagara District, Karnataka by M/s E Nano Incintech– Amendment in Terms of reference

# (IA/KA/MIS/150340/2020; F.No. 10-26/2017-IA-III)

**51.4.11.1.** The project proponent gave a presentation on the project and informed that:

- (i) M/s. E- Nano Incintech had obtained Environmental clearance for Common Hazardous Waste Incineration unit having capacity of 500 Kg/hr for eight (8) hour of operation per da. It is designed to incinerate 1200 MT/A of hazardous incinerable waste.
- (ii) Now, due to increase in incinerable waste generation in Karnataka, many of industries have approached them for waste disposal. Hence, it is proposed to increase operating time of incinerator from 16 hours/ day to 24 hours/day and capacity from 2400 MTA to 3600 MTA.
- (iii) Environmental Clearance was granted by MoEFCC vide letter F. No.10-88/2010-IA.III dated 10<sup>th</sup> May, 2012 followed by amended in Environmental Clearance dated 21<sup>st</sup> March, 2018

**51.4.11.2.** The EAC during deliberation noted that the project proponent has proposed to increase operating time of incinerator from 16 hours/ day to 24 hours/day and capacity from 2400 MTA to 3600 MTA. The EAC noted that this is an expansion project, however, project proponent has applied for Amendment in Terms of Reference. The EAC asked the project proponent to apply for fresh Terms of Reference under Expansion category. The EAC returned the instant proposal in present form.

In view of the foregoing observations, the EAC recommended to return the proposal in present form. The proponent may apply afresh for Terms of Reference under Expansion category.

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# Agenda item No. 51.4.12.

Augmentation of Liquid Cargo Handling Capacity from 8 MMTPA to 10 MMTPA through modernization of Existing Pipeline network at Oil Jetty Area, Deendayal Port Trust, Kandla by M/s Kandla Port Trust – Amendment in Terms of reference

# (IA/GJ/MIS/151823/2020; F.No. 10-26/2018-IA-III)

**51.4.12.1.** The project proponent and the accredited Consultant M/s Mecon Limited gave a presentation on the salient features of the project and informed that:

- (i) Deendayal Port Trust (DPT) has decided to revamp the existing pipeline network leading from Oil Jetties, 1, 2, 3, 4 & 5. Some of the existing pipelines along with allied structures leading from Oil Jetties to the Y-Junction will be replaced by pipelines of higher capacity for improving the efficiency and also considering safety aspects, for handling Liquid Cargo (Chemicals, POL, Edible Oil, Caster Oil etc.). This will enable increased cargo-throughput and cargo mix.
- (ii) Term of Reference was granted by MoEF&CC vide letter F. No. 10-26/2018-IA-III dated 14<sup>th</sup> June, 2018.
- (iii) Subsequently, based on the consultation with various Port users, the revised scheme of Replacement & Revamping has been formulated by their technical consultant - *National Technology Center for Ports, Waterways and Coasts-IIT Madras, Chennai* (NTCPWC, IIT, Chennai). In the said revised scheme, NTCPWC, IIT, Chennai; by citing various scenario of capacity enhancement by re-calculation based on various factors viz. guidelines issued by the Tariff Authority of Major Ports etc., has arrived at capacity enhancement to 23.8 MMTPA after revamping & replacement from existing capacity of 8 MMTPA. The project location remains the same. No additional land shall be required.
- (iv) In view of the above, amendment in Terms of Reference (ToR) is requested for the following changes:

		· · · ·		
	As per approved ToR	As per present	Remarks	
		proposal		
Product type	Liquid cargo	Liquid cargo		
Quantity of	10 MTPA	23.8 MTPA	Increase in liquid	
Product			cargo handling	
Equipment/	167 pipelines with total	126 pipelines with total	capacity without	
configuration	capacity of 8.0 MTPA	capacity of 23.8 MTPA	change in existing	
			project area/notified	
			area.	
Public hearing	Public Hearing to be	This condition may be	-	
	conducted for the	exempted		
	project			

# Details of Amendment Sought in Terms of Reference (ToR)

# 51.4.12.2. The EAC noted the following: -

(i) The proposal is for grant of Amendment in Terms of Reference to the Augmentation of Liquid Cargo Handling Capacity from 8 MMTPA to 10 MMTPA through modernization of Existing Pipeline network at Oil Jetty Area, Deendayal Port Trust, Kandla by M/s Kandla 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 Terms of Reference was granted by MoEFCC vide letter F. No. 10-26/2018-IA-III dated 14<sup>th</sup> June, 2018.

**51.4.12.3.** The EAC also took note of the submissions made by PP that DPT in their original proposal had proposed "Augmentation of Liquid Cargo Handling Capacity from 8 MMTPA to 10 MMTPA through modernization of existing pipeline network of Oil Jetty area". MoEFCC had issued ToR to their original proposal vide letter no. F. No. 10-26/2018-IA-III dated 14<sup>th</sup> June, 2018 on basis of recommendations of EAC (Infra 2) given in the meeting held on 20<sup>th</sup> April, 2018. Assessment NTCPWC- IIT Chennai has indicated shortcomings in present modernization plan and recommend revised plan of capacity enhancement to 23.8 MTPA after revamping & replacement of existing pipeline network through scenario calculations based on various factors viz. guidelines issued by the Tariff Authority of major Ports. Now the project proponent has requested for "Augmentation of Liquid Cargo Handling Capacity through modernization of Existing Pipeline network at Oil Jetty Area of Deendayal Port Trust, Kandla" with no change in project site, no additional land requirement and no increase in resource requirements for enhancing Liquid Cargo Handling Capacity from the currently permitted capacity of 8 MMTPA to 23.8 MMTPA.

The EAC was of the view that since there is a change in the capacity of the project from 8 MMTPA to 23.8 MMTPA, it will have its associated impact. The exemption from the public hearing was also not granted in TOR dated 14.06.2018. Therefore, EAC could not consider the request of PP for exemption in the public hearing. The EAC deliberated upon the information provided by the project proponent and recommended following amendment in Terms of Reference letter F.No. 10-26/2018-IA-III dated 14<sup>th</sup> June, 2018:

Details		As per approved ToR letter dated 14 <sup>th</sup> June, 2018	Amendment recommended
Quantity Product	of	10 MTPA	23.8 MTPA
Equipment/ configuration		167 pipelines with total capacity of 8.0 MTPA	126 pipelines with total capacity of 23.8 MTPA

All the other Terms and conditions stipulated in the Terms of Reference granted by MoEFCC vide letter F.No. 10-26/2018-IA-III dated 14<sup>th</sup> June, 2018 shall remain unchanged.

# Agenda item No. 51.4.13.

Proposed Installation of Single Point Mooring & Associated Infrastructure at Vadinar Taluka Khambhalia District Devbhumi Dwarka by M/s Coviva Energy Terminals Limited (a subsidiary of Nayara Energy Limited) - Reconsideration for Terms of Reference

# (IA/GJ/MIS/140238/2020; F.No. 10-12/2020-IA-III)

**51.4.13.1.** The project proponent gave a presentation on the salient features of the project and informed that:

(i) The proposal is for Proposed Installation of Single Point Mooring (SPM) & associated infrastructure (subsea pipeline) by Coviva Energy Terminals Limited (a subsidiary of Nayara Energy Limited Company) at OOT (Offshore Oil Terminal), Deendayal Port Trust Vadinar. Approximate longitude-latitude of the proposed SPM to be built by Coviva Energy Terminals Limited is Latitude: 22°31'19"N, Longitude: 69°39'38"E

- (ii) No land acquisition is proposed in the Project. The SPM and associated infrastructure will be located off-shore within Deendayal Port Trust (DPT) limit at Vadinar. No inhabitants in 10 km radius.
- (iii) The proposed SPM and associated infrastructure are planned at offshore with no shore land involvement. The water front for installation of the SPM and offshore piping has already been allotted by Deendayal Port Trust. Nayara Energy Limited's existing facilities consist of One SPM and Two Berths located in OOT Vadinar of Deendayal Port Trust. The proposed SPM by M/s Coviva Energy Terminals Limited will also be located in DPT water, in OOT Vadinar, District Devbhumi Dwarka, Gujarat and will be connected with existing SPM of Nayara Energy Limited.
- (iv) SPM will be capable of mooring tankers from 87,000 DWT to 350,000 DWT. The crude from the tankers will be discharged via two flexible hoses (Double carcass type floating hoses) whose diameter will be16" at the ship end & 24" at the inlet of SPM. Submarine hose strings connect the SPM to Pipeline End Manifold (PLEM). The pipeline End Manifold (PLEM) is a steel base structure which supports the subsea pipeline termination. Following component are proposed:
  - CALM (Catenary Anchor Leg Mooring) type SPM.
  - Two flexible hose strings (Double carcass type floating hoses) whose diameter will be 16" at the ship end 24" at the inlet of SPM PLEM.
  - PLEM (Pipeline End Manifold) assembly on the seabed at >30 m average water depth.
  - 48" crude subsea pipeline between existing SPM of Nayara Energy Limited and the proposed SPM for interconnection – Approx. 2 Km.
  - 48" crude subsea pipeline line will come up on a riser platform on Northern most Berth of the existing Oil Terminal - Approx. 8 Km, and will follow through the existing RoW up to the Refinery location.
- (v) No Involvement of any forest land.
- (vi) OOT-DPT is located in natural harbour creek between two islands namely Kalubhar Tapu & Narara Bet. Proposed SPM will be established in the Gulf of Kutch near to Nayara Energy Limited's existing SPM as per proposed lay out plan. The natural draft 30 to 35 m is available in the Vadinar creek, No Dredging is required for proposed SPM as natural draft is exist. No reclamation is required.
- (vii) The capital investment of the project for development of the Proposed SPM with Associated facilities is Rs 500 crores, which includes SPM with associated facilities, subsea pipelines.

# 51.4.13.2. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project 'Proposed Installation of Single Point Mooring & Associated Infrastructure at Vadinar Taluka Khambhalia District Devbhumi Dwarka by M/s Coviva Energy Terminals Limited (a subsidiary of Nayara Energy 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 proposal was earlier listed in the 49<sup>th</sup> meeting of EAC held during 25-26<sup>th</sup> February, 2020. However, PP did not attend.

**51.4.13.3.** The EAC also took note of submissions made by PP that Environmental and CRZ Clearance for the proposed SPM was granted by MoEF vide F.No.10-52/2007-IA.III dated

17.08.2009 to support the earlier envisaged Refinery Expansion. The validity of the aforesaid Environmental and CRZ Clearance was extended till 16.08.209 vide letter 05.01.2015. However, due to the business requirements, implementation of the SPM could not be taken up within the validity period of the EC & CRZ Clearance i.e. up to 16.08.2019. Accordingly, fresh application for Terms of Reference has been made.

After detailed deliberations on the proposal, the Committee recommended granting Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following specific 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 Gujarat 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) Detailed analysis turnaround time of vessels operated for oil.
- (ix) Hydrodynamic analysis of SPM, Flexible house and its connections to ensure the safety during normal and cyclonic conditions.
- (x) Details of submarine pipeline from SPM to tank farm including depth of burial, based on prevailing hydrodynamic conditions
- (xi) Oil spill contingency plan in case of ship collision or grounding.
- (xii) Flooding and related impact on creek and control area during the cyclonic storm should be studied.
- (xiii) Ship navigational studies for the SPM should be carried out.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.
- (xvii) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.
- (xviii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xix) Permission from CGWA in case of groundwater use being proposed for the project.

- (xx) Wastewater Management Plan.
- (xxi) Details of Environmental Monitoring Plan.
- (xxii) To prepare a detailed biodiversity impact assessment report and management plan through the NIO or any other institute of repute on marine, brackish water ecology and biodiversity. The report shall study the impact of the activity on 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. A coral study should be carried out in the pipeline route. The data collection and impact assessment shall be as per standard survey methods. The concentrations of Petroleum Hydrocarbons in seawater at low tide and high tide conditions should be presented at proposed SPM site.
- (xxiii) 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.
- (xxiv) 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.
- (xxv) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) Disaster Management Plan for the project.
- (xxix) Details and status of court case pending against the project, if any.
- (xxx) 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.
- (xxxi) 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.
- (xxxii) 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.

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Agenda item No. 51.4.14.

Construction of '500 bedded Government Hospital' at Plot no. 117, 118, 119, 120, 121, 122,123,124, 125,126,127 and 128, Near Village Kolghati 1, Anchal Sadar, Thana no. 134, Khata No. 08 and 07, Hazaribagh, Jharkhand by M/s Jharkhand State Building Construction Corporation Limited - Reconsideration for Environmental Clearance

# (IA/JH/MIS/141894/2020; F.No. 21-22/2020-IA-III)

51.4.14.1. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project Construction of '500 bedded Government Hospital' at Plot no. 117, 118, 119, 120, 121, 122,123,124, 125,126,127 and 128, Near Village Kolghati 1, AnchalSadar, Thana no. 134, KhataNo. 08 and 07, Hazaribagh, Jharkhand by M/s Jharkhand State Building Construction Corporation Limited for plot area 1,01,171.45 sqm and total built-up area of 62,775.5 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 Jharkhand, the proposal has been appraised at Central level by sectoral EAC.
- (iii) The proposal was earlier considered by the EAC (Infra-2) in its 50<sup>th</sup> Meeting of the EAC (Infra-2) held during 22-24 April, 2020, wherein the EAC sought some additional information.
- (iv) The project proponent submitted/uploaded the additional information on 15.05.2020 on Ministry's website (Parivesh Portal).

**51.4.14.2.** The EAC also took note of the submissions made by PP that certificate from Wildlife Warden/forest Officer has been obtained which clearly shows that the project site does not fall within any eco sensitive zone/area. Project proponent also submitted map, showing Hazaribagh national park boundary, its Eco sensitive Zone and project site distance from the Eco sensitive zone, which clearly shows the project site does not fall in Eco-sensitive Zone/ Area. The project proponent also presented details of observations made by the SEAC, Jharkhand during its appraisal of the project, along with copies of the relevant minutes of SEAC meetings, and point wise reply of proponent to SEAC on their observations. (xiii) A total of 185 trees will be felled/cut for hospital project for which the permission from regulatory authority in the State has been obtained.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to following specific conditions and 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 or 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 bye-laws and the building design may take in to account guidelines of concerned State Health Department, if any issued, particularly in context of highly contagious diseases like novel Covid-19.
- (iv) As proposed, fresh water requirement from Municipal Corporation supply shall not exceed 195 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from Municipal Corporation/concerned authority.
- (v) Sewage shall be treated in the STP based on SBR Technology with tertiary treatment i.e. Ultra-Filtration. The treated effluent from STP shall be recycled/re-used for flushing, gardening, HVAC cooling and DG 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 byelaw 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, 21 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (ix) Separate bins for dry and wet waste 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. Adequate 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) Biomedical wastes shall be managed in accordance to the Bio-Medical Waste Management Rules 2016 and radio-active waste shall be disposed off as per 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 5 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) A total of 185 trees will be felled/cut for hospital project for which the permission from regulatory Authority constituted in the State as per the rules has been obtained.

However, tree cutting/transplantation should be taken where absolutely necessary. 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 one tree) shall be done and maintained.

- (xiii) A minimum of one 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 19,403.33 sqm (19.17% of total area) area shall be provided for green area development.
- (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. 5.10 Crore (@ 1.0% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Provision of toilet block with water tank, drainage network within 5 km of the project site, Provision of computers, printers, educational material and benches in nearby school, Provisions of solar street lights on road within 2 km radius of the project site and Avenue plantation within 05 km of 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 of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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# Agenda item No. 51.4.15.

Construction of '500 bedded Government Hospital' at Plot no. 1375, Medininagar, Thana no. 205, Village Pokhraha Khurd Palamu, Jharkhand by M/s Jharkhand State Building Construction Corporation Limited - Reconsideration for Environmental Clearance

# (IA/JH/MIS/143864/2020; F.No. 21-24/2020-IA-III)

51.4.15.1. The EAC noted the following: -

- (i) The proposal is to grant Environmental Clearance to the project Construction of '500 bedded Government Hospital' at Plot no. 1375, Medininagar, Thana no. 205, Village Pokhraha Khurd Palamu, Jharkhand by M/s Jharkhand State Building Construction Corporation Limited for plot area 98,621.85 sqm and total built-up area of 63,096.40 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 Jharkhand, the proposal has been appraised at Central level by sectoral EAC.
- (iii) The proposal was earlier considered by the EAC (Infra-2) in its 50<sup>th</sup> Meeting of the EAC (Infra-2) held during 22-24 April, 2020, wherein the EAC sought some additional information.
- (iv) The project proponent submitted/uploaded the additional information on 15.05.2020 on Ministry's website (Parivesh Portal).

**51.4.15.2.** The EAC also took note of submissions of PP that forest clearance was applied with proposal no. FP/JH/DISP/41048/2019 dated 12.07.2019 and accordingly revised form-I and IA has been submitted. The project proponent also submitted point wise reply to the points raised during 82<sup>th</sup> Meeting SEAC, Jharkhand held on 04-07.11.2019

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project subject to 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 obtain Stage I Forest Clearance for diversion of forest land.
- (iii) The project proponent shall provide for adequate fire safety measures and equipment as per National Building Code or 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.
- (iv) 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 bye-laws and the building design may take in to account guidelines of concerned State Health Department, if any issued, particularly in context of highly contagious diseases like novel Covid-19.
- (v) As proposed, fresh water requirement from Municipal Corporation supply shall not exceed 195 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from Municipal Corporation/concerned authority.
- (vi) Sewage shall be treated in the STP based on SBR Technology with tertiary treatment i.e. Ultra-Filtration. The treated effluent from STP shall be recycled/re-used for flushing, gardening, HVAC cooling and DG cooling. As proposed, no treated water shall be discharged to municipal drain.
- (vii) 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.
- (viii) 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.
- (ix) The local bye-law provisions on rain water harvesting should be followed. If local byelaw 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, 21 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.

- (x) Separate bins for dry and wet waste 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. Adequate 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.
- (xi) Biomedical wastes shall be managed in accordance to the Bio-Medical Waste Management Rules 2016 and radio-active waste shall be disposed off as per the atomic Energy Commission regulations, as applicable.
- (xii) 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 5 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) No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree cut/transplantation shall be with prior permission from the Tree Authority constituted as per the Assam (Control of felling and removal of Tress from Non-Forest Lands) Rules, 2002. 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.
- (xiv) A minimum of one 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 15,290 sqm (15.50% of total area) area shall be provided for green area development.
- (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. 7.20 Crore (@ 1.5% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Provision of toilet block with water tank, drainage network within 5 km of the project site, Provision of computers, printers, educational material and benches in nearby school, Provisions of solar street lights on road within 2 km radius of the project site and Avenue plantation within 05 km of 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 of the MoEFCC as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

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Agenda item No. 51.4.16.

Capacity Expansion, Cuddalore Port, Tamil Nadu by M/s Tamilnadu Maritime Board – Reconsideration for Environmental and CRZ Clearance

(IA/TN/MIS/64666/2017; F.No. 10-35/2017-IA-III)

The project proponent did not attend the meeting and as such, the proposal was deferred.

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51.5 Any other item with the permission of Chair- Nil

The meeting ended with vote of thanks to the Chair.

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# LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 51<sup>st</sup> MEETING OF EAC (INFRASTRUCTURE-2) HELD ON 21-22 MAY, 2020 THROUGH VIDEO CONFERENCING

S.	Name	Designation	Attendance		Sign
No.		_	21.05.20	22.05.20	
1.	Prof. T. Haque	Chairman	Р	Р	
2.	Dr. N. P. Shukla	Member	Р	Р	
3.	Dr. H. C. Sharatchandra	Member	Р	Р	
4.	Shri V. Suresh	Member	Р	Р	
5.	Dr. V. S. Naidu	Member	Р	Р	
6.	Shri B. C. Nigam	Member	Р	Р	
7.	Dr. ManoranjanHota	Member	Р	Р	
8.	Dr. Dipankar Saha	Member	Р	Р	
9.	Dr. Jayesh Ruparelia	Member	Р	Р	
10.	Dr. (Mrs.) Mayuri H.	Member	A	A	
	Pandya				
11.	Dr. M. V. Ramana Murthy	Member	P	A	
12.	Prof. Dr. P.S.N. Rao	Member	A	A	
13.	Shri Shard	Scientist E&	Р	Р	
		Member			
		Secretary			
14.	Dr. Vinod Kumar Singh	Scientist E	Р	Р	

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#### 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.
- 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. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx 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.
- 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. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7
- (v) am to 6 pm.

#### v. **Energy Conservation measures:**

Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building (i) should be integral part of the project design and should be in place before project commissioning.

#### VI Waste management:

- Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that (i) soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- The project activity shall conform to the Fly Ash notification issued under the É.P. Act of 1986. (ii)
- Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, (iii) 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.
- Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to (iv) 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. a.
  - Toilet wastes and sewage collected from aircrafts and disposed at the Airport. b.
  - C. Wastes arising out of maintenance and workshops
  - Wastes arising out of eateries and shops situated inside the airport complex. d.
  - e. Hazardous and other wastes
- The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of (vi) 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.
- A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing (vii) civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing (viii) guidelines/ rules of the regulatory authority to avoid mercury contamination.

#### VII. Green Belt:

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

#### VIII Public hearing and Human health issues:

- Construction site should be adequately barricaded before the construction begins. (i)
- (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.
- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster (iv) 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:**

- The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III (i) 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.
- A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be (iii) set up under the control of senior Executive, who will directly report to the head of the organization.
- Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall (iv) 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.

#### Х. Miscellaneous:

The project proponent shall make public the environmental clearance granted for their project along with the (i) 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 languagewithin 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<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx (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.

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# 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. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx 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:

IX.

- 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.

# 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
- 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 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 languagewithin 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<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (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.

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#### 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 (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. 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/Nm<sup>3</sup>.
- 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 devises (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:

- 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.
  The company shall have a well laid down environmental policy duly approve by the Board of Directors. The
- 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 languagewithin 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<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical
- vi. The criteria pollutant levels namely; PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (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.

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#### 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 (incase 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. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx 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.
  - Top soil shall be separately stored and used in the development of green belt.

#### ii. Top soil shal 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 languagewithin 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<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (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)
- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of iv. Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- ٧. 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:

- The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters i. relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission) covering upwind and downwind directions.
- Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all ii. the dust generating points inter alia including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules iii. 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:

- Storm water from the project area shall be passed through settling chamber. i.
- 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.
- Prior permission from competent authority shall be obtained for use of fresh water. iv.
- No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for v. 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.

#### Noise monitoring and prevention: IV.

- Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to i. Regional Officer of the Ministry as a part of six-monthly compliance report.
- The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during ii. day time and 70 dB(A) during night time..

#### ۷. **Energy Conservation measures:**

- Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project i. design and should be in place before project commissioning.
- Solar energy shall be used in the project i.e. at upper terminal and lower terminal to reduce the carbon footprint. ii. Waste management

# VII.

- The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management i. 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.
- Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to iii the Construction and Demolition Waste Management Rules, 2016.

#### VIII. Public hearing and Human health/safety issues:

- Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS i. 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.
- Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or iii. belts.
- The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in iv. this regard shall be obtained.
- Adequate infrastructure, including power, shall be provided for emergency situations and disaster management. v.
- Adequate first aid facility shall be provided during construction and operation phase of the project. vi.
- 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.

#### Miscellaneous:

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- 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.

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#### Standard EC Conditions for Project/Activity 7(h): Common Effluent Treatment plants (CETPs)

#### I. Statutory compliance:

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- 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. 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 through 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.

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#### 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, SO<sub>2</sub>, NOx 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. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx 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<sup>°</sup> 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:

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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.

#### 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:

- 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.
  The company shall have a well laid down environmental policy duly approve by the Board of Directors. The
- 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.

#### 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 MoEFCC/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<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NOx (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.

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#### **ANNEXURE-8**

### 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 lightening 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. PM<sub>10</sub> and PM<sub>2.5</sub>) 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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> 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.

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