MINUTES OF 53rd MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 23-24 JULY, 2020.

VENUE: Through Video Conferencing

DATE: 23-24 July, 2020

DAY 1- Thursday, 23rd JULY, 2020

Time: 11:00 hrs

- **53.1 Opening Remarks of the Chairman:** The Chairman extended welcome to members and other participants and requested to start the proceeding as provided in agenda adopted for this meeting.
- 53.2 Confirmation of the Minutes of 52nd Meeting of the EAC (Infra-2) held on 18-19 June, 2020 at New Delhi.

There were no comments and the minutes of 52nd Meeting of the EAC (Infra-2) held on 18-19 June, 2020, were confirmed.

53.3 Consideration of Proposals: The EAC considered proposals as per agenda adopted for the meeting. The details of deliberations held and decisions taken in the meeting are as under.

Agenda item No. 53.3.1.

Expansion of Krishnapatnam Port (Phase III) at SPSR Nellore District, Andhra Pradesh by M/s Krishnapatnam Port Company Ltd - Environmental and CRZ Clearance (IA/AP/MIS/566/2009; F.No. 10-18/2016-IA-III)

- **53.3.1.1.** The Project Proponent (PP) along with his accredited consultant Cholamandalam MS Risk Services Limited made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) Krishnapatnam Port at Sri Potti Sriramulu (SPS) Nellore District, Andhra Pradesh is being developed in phases by Krishnapatnam Port Company Ltd (KPCL) as All-Weather, Deep Water, Multi-purpose Port. It is being developed through Public Private Participation on BOST (Build Operate Share Transfer) concession basis in terms of the Concession Agreement (CA) entered into with Government of Andhra Pradesh (GoAP) during 2004.
- (ii) The Port is located at 14"15'10" N Latitude and 80"08'05" E Longitude.
- (iii) The Port is being developed in three (03) phases. The following EC and CRZ Clearances have been obtained for development of Phases- I & II:

E.C Letter No:	Date of	Details of Clearance	Cargo Capacity in MTPA
F.No.10-22/2005-IA-III	Obtaining EC 26 th July 2006	EC and CRZ clearance for	28 MTPA
		Phase-I development of KPCL	
F.No.11-62/2009-IA.III	13 th Nov. 2009	EC and CRZ clearance for Phase-II	44.3 MTPA+3.3 MTEU of container cargo
F.No.11-62/2009-IA.III	18 th August 2015	Validity Extension of EC and CRZ clearance for Phase-II	Approved Cargo Handling capacity of Phase I&II developments of port =
F.No.11-62/2009-IA.III (Pt)	16 th March 2016	Amendment in EC and CRZ clearance	72.3 MTPA + 3.3 MTEU of container cargo

ĺ	F.No.11-62/2009-IA.III	16 th April, 2018	Validity Extension of EC	Extension of validity till
			and CRZ clearance for	12.11.2019
			Phase-II	

- (iv) The Port would cover land to an extent of 2752 Ha (6800 acre), which includes 418 ha forest land. Forest Clearance is still under process. According to the EC obtained for Phase-I and Phase-II developments, the total area that has been granted for development is 440 Ha. + 800 Ha. = 1240 Ha.
- (v) The total cargo handling capacity as granted was 72.3 (28+44.3) MTPA of various cargo and 3.3 MTEU of container cargo. So far 12 berths with infrastructure to cater to 68 MTPA of various cargo and 2 MTEUsPA of containers are operational as per CTO granted by AP Pollution Control Board. Development of the remaining berths and corresponding marine and onshore infrastructure are under progress. As per EC, Port has two rubble mound break waters; one on North (1312 m) and one on South (1624 m).
- (vi) The port facility has a 250 m wide approach channel, with a depth of -21.6 m CD. The port has also developed around 350 Ha of back-up area for storage of cargoes such as coal, iron ore, general cargo, ware houses, roads, drainage, STP, railway lines and sidings, illumination and power supply, cargo handling equipment, greenbelt, mangrove protection and development, Dust suppression measures, rain water harvesting and parking area etc.
- (vii) During Phase I of KPCL port development Capital dredge of 14 million M³ was done of which 6 million M³ was used for reclamation and 8 million M³ was disposed at 20 m depth identified by technical studies. During the Phase II development of KPCL port the existing approach channel and berth pockets were dredged to adequate depth which accounted to total quantity of dredge spoil of 57.31 million M³ of which 8.15 million M³ was used for reclamation and 49.16 million M³ was disposed at an offshore location where a contour depth of 20 m has been identified by technical studies.
- (viii) The total greenbelt area developed as part of Phase-I and Phase-II developments is 192 Ha against the stipulated 191.5 Ha as accorded in EC. The greenbelt has been developed along the port boundary, around coal yards, avenue and median plantations in the land provided by GoAP on lease basis. As per the EC of Phase-II development, the mangroves have been developed in the port for an area of 50 Ha. The port has an existing STP of capacity 300 KLD which is in operation.
- (ix) The main objective of the Phase-III development is to augment the port to cater the needs of the projected traffic demand. KPCL Phase-III will be facilitated with developments to handle 154MTPA (226-72.3=153.7 MTPA) of various types of noncontainer cargo plus 2.2 MTEUsPA. (5.5–3.3=2.2 MTEUsPA) of container cargo by the year 2025-26 through development of twenty (20) number of berths and three (03) numbers of Single Buoy Moorings (SBMs) along with required land-based infrastructure catering loading/unloading, storage and multimodal transhipment of cargo systems on 1512 Ha. of land.
- (x) The details of the proposed expansion are given as under:

S.	Description	Approved for	Developed in	Proposed Phase-	Total
No.		Phase-I and	Phase-I and	III expansion	(Phase-I +Phase-
		Phase-II	Phase-II		II +Phase-III)
1	Total Area	1240	1240	1512	2752
	(Ha.)				
2	Berths	17	12	20 + 03 SBM	37 +03 SBM
3	Cargo	72.3 MTPA+3.3	68 MTPA+2	154 MTPA +2.2	226.3 MTPA+5.5
	Quantity	MTEU	MTEU	MTEU	MTEU
4	Dredging	66	57.31	63	129

	(MCM)				
5	Reclamation (MCM)	15	14.15	29	44
6	Dredged Spoil Disposal (MCM)	51	43.6	34	85
7	Turning Circles	02	02	00	02
8	Storage Areas (Ha.)	410	350	900	1300
9	Sewage Treatment Plant (KLD)	300	300	700	1000
10	Greenbelt (Ha.)	167.5	192	152	344
11	Water Supply (M ³ /day)	2500	2500	2500(600 KLD Drinking Water and 1900 KLD for Dust Suppression Systems, Gardening and Fire Fighting)	5000
12	Power Supply (MW)	58	58	85	143

- (xi) Creek Straightening: The Kandaleru creek passes across KPCL to join Bay of Bengal. The creek has to be straightened by forming a straight cut across the existing sand bar to develop the west dock near the west port and thereafter the reclamation will be done to develop the storage backup yards. The mangroves of 25.1 Ha (21.4 Ha. +3.7 Ha) will be cut as part of the activity of straightening the creek and in salt department land. The mangroves that will be removed will be compensated by afforestation program in the area of about 80 Ha. that has been identified within and outside the port boundary.
- (xii) **Modulating Ephemeral Drains**: The four ephemeral drains in the area will be modulated. One drain which is crossing the port boundary on north, meeting Buckingham Canal, one drain in the south which is crossing the port boundary and meeting the Buckingham Canal are being maintained by constructing suitable culverts. The other two local drains would be reclaimed along with salt pans and the fish ponds except the part of one drain already being maintained with suitable placed pipe lines for tidal exchange to the 9 acres of mangrove being protected.
- (xiii) Construction of Road & Rail Bridges (RB): As part of the Phase-III expansion project it is proposed to develop one Road Bridge and one Rail Bridge over Kandaleru Creek. The Road Bridge and Rail Bridge located in the Kandaleru creek is proposed to be relocated. Two Road Bridges and one Road Cum Flyover are proposed over Buckingham Canal. The existing bridges/culverts on the Buckingham canal will be strengthened. In the diverted drain/creek of Buckingham canal two road bridges are proposed. Modification / relocation of existing bridge on Upputeru Creek as Rail Cum Road Bridge is proposed. To ensure free movement of cargo five flyover bridges / grade separators on important road and rail crossing are proposed.
- (xiv) Cargo Storage Facility for proposed Phase-III development will be as under:

S.No	Cargo Type	Area in Ha.
1.	Coal	204
2.	Fertiliser & Agri Products	57
3.	Other general Cargo	193

4.	Liquid Cargo	186
5.	Container Storage & Related Activities	259
Total		899

- (xv) Operational Control Buildings (CB):As a part of the development, 10 operational control buildings have proposed- 2 near the North Dock (CB-1 &CB-2), one along western end of the Northern arm (CB-3), two near the North-West (CB-4 &CB-5), four on the Western Dock (CB-6,CB-7, CB-8 & CB-9) and one near the western end of the Southern berthing front (CB-10).
- Offshore Development- Shoreline Protection Measures: To conserve the areas of (xvi) the windward sides of the South and North Breakwater, it is proposed to undertake necessary protection works to withstand waves and reclaim to a uniform level by utilizing the dredged sand. The product pipe lines, control houses and safety installations required for handling cargo of the LNG / LPG / POL berths as well as breakwater maintenance facilities are also proposed to be accommodated in the same areas. The extent of reclaimed area between the proposed protection works from the kink of the south breakwater up to the shore will be 16.0Ha (40 acre). The length of the Shore protection in south from the kink to the outfall point of the breakwater will be about 1300 m. Similarly, the extent of the reclaimed area between the proposed protection works from the curve at the north breakwater trunk head up to the shore will be 16 Ha. (40 acre). The length of the Shore protection in north; from the curve near the trunk head to the outfall point of the breakwater will be about 1050 m. The reclaimed area beyond the safety zone for the liquid berths will also be used for accommodating other essential infrastructure.
- (xvii) Offshore Developments-Jetties for Port Crafts, Coast guard Vessels and Repair Dry Docks: This project activity would include- (a)Development of Port Craft jetty to a length of 800 m; (b) Development of Coast guard Jetty to a length of 200 m; and (c) Dry dock of 150 m X 40 m with a depth of -12.0 m CD (with 9.5 m CD sill level at entrance) with 200 m long repair quay.
- (xviii) Other Facilities which are proposed to be developed as part of Phase-III expansion will include: (a)Augmenting of the navigational aids including Transit towers and harbour craft along with Pilot Boarding Jetty's/Facilities at the Breakwaters and at West Dock; (b) Augmenting the network services such as roads, railway lines, flyovers/grade separators on major road and rail crossings, surface drainage, water supply lines, and electrical power supply including power lines, erection and commission of additional transformers, electrical switch gear instrumentation and area illumination; (c) Augmenting the infrastructures such as operational and disaster management & control buildings, administrative and functional buildings, electrical substations, workshops and repair shops, truck parking; (d) Augmenting the environmental protection works such as dust suppression systems, truck wash areas, STP and greenbelt; and (e) Augmenting the welfare and amenity facilities like rest places, dispensaries, canteens, safety applications etc.
- (xix) **Greenbelt**: A green belt with 3-Tier configuration (Bushes, shrubs and trees) is proposed to be developed with the total plantation of 3,04,000 (Nos) trees. Fast growing & dust tolerant native species are proposed to be planted. Greenbelt with native species shall be developed along the boundary of the port/storage yard in consultation with the forest department which naturally traps the particulate matter that are present in the air. The details are as under

	Tier	Category	Species
٦	Tier-1	Small Bushes	Tecoma stans, Bougainvillea spectabilis, Vernona angustifolia etc.
7	Tier-2	Shrubs	Citrus limon, Calotrophis procera, etc.

Pongamia pinnata etc.	Tier-3	Trees	Azadirachta indica, Mangifera indica, Ficus benghalensis, Pongamia pinnata etc.
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- (xx) The CRZ Mapping for the proposed development was carried out by IRS, Anna University, Chennai.
- (xxi) Clearance/NOC was obtained from APCZMA vide letter No: 202/CRZ/IND/2019-30 dated 21st May 2020.
- (xxii) The following components/ activities for development of Phase-III will be carried out in the CRZ:

S. No	Activities	Coastal Regulation Zone					
3. NO	Activities	CRZ IA	CRZ IB	CRZ II	CRZ III	CRZ IVA	CRZ IVB
1	Dredging	✓	✓			✓	✓
2	Reclamation					✓	
3	Dredge Spoil					✓	
	Disposal						
4	Shore Protection		✓				
5	Extension of					✓	
	Breakwater						
6	Berth / Jetty Construction						✓
7	Dry Dock			✓			
8	Modulating			√			
	Ephemeral Drains			•			
9	Kandaleru Creek Straightening	✓					
10	Storage Area (Cargo Handling)			✓			
11	Roads and Bridges						
12	Operational Control			√			
	Buildings						
13	Other Supporting			✓			
	Facilities						
14	Greenbelt			✓			
	Development						

- (xxiii) KPCL has put a robust Disaster Management Plan (DMP in place. Existing DMP will be utilized for the proposed development. A latest copy of revised DMP of Krishnapatnam Port is submitted on 11.06.2020 at District Collector office, SPSR Nellore, Andhra Pradesh. The On-site Contingency Plan serves the purpose of operation during, Pre-Disaster stage, On-site Disaster Stage and Post-Disaster Stage
- (xxiv) The port handles liquid cargo in the existing as well as proposed development. In this context, KPCL has an existing robust oil spill response plan and spill response equipment to combat a large oil spill size of 700 Tons. (Tier 1). The KPCL will coordinate with Indian Coast Guard for spills beyond Tier-I. Periodic Mock drill is conducted and Oil Spill Contingency Plan will be updated to meet the requirements of the additional cargo capacity.
- (xxv) The Terms of Reference (ToR) for the proposed Phase- 3 expansion was granted vide Letter No 10-18/2016-IA.III dated 4thMay 2016, which was amended on 24th November, 2017 and thereafter on 27th August, 2018. Subsequently on 4th May, 2019, the extension for TOR was granted up to 3rd May, 2020.
- (xxvi) The study for baseline parameters reveals that Air Quality in the study area is in the range of Good to Satisfactory as per the AQI published by CPCB. All the parameters are within the NAAQs. The Ambient noise levels are within the prescribed standards

- of CPCB. The groundwater quality in the study area is poor and the regions receives drinking water supplied through pipelines by the Municipality. There were no major variations between the physico-chemical characteristics of off-shore and near shore waters in the region.
- (xxvii) Based on the impacts predicted EIA report, outcomes of other studies and regulatory requirements that need to be complied with, the Environmental Management Plan has been developed. The EMP comprises of air quality management plan, noise control measures, and plans for solid and hazardous waste management, greenbelt development, ecological biodiversity management and community development.
- (xxviii) There is no notified National Park/ Wild Life Sanctuary within the 10 km radius of the study area. The proposed expansion is within the KPCL facility and does not possess any national park or wildlife sanctuary within the facility and hence NBWL Clearance will not require. The permission for diverting the mangrove area is proposed as part of this project and hence CRZ clearance will be obtained.
- (xxix) No court case is pending for violation of the environmental laws in any court.
- (xxx) Corporate Environment Responsibility (CER) budget is arrived based on OM of MoEF&CC dated 1st May 2018 by considering 0.125% of the total project cost on a straight-line approach as proposed expansion is categorized as brown field project with the additional capital investment of less than 12,256 Crores. In this background, Rs. 1,532 Lakhs has been embarked for the local community development within the vicinity of the project area for 5 years.
- (xxxi) **Cost:** The approximate cost estimate of Phase-III development is Rs. 12,256 crores. Budget for EMP is Rs. 90 crore and annual recurring cost will be Rs. 9 crores.
- (xxxii) **Employment potential:** The Phase-III expansion of KPCL will provide about 1,200 numbers of direct employment and 5,000 numbers of indirect employment. The proposed development would generate large scale direct and indirect employment for the local people in both the skilled and unskilled worker class.
- (xxxiii) **Benefits of the project:** There would be an improvement to the local infrastructures in the vicinity of the port through CER & CSR. The proposed development will help in handling the increase cargo demand due to industrialization. This will contribute towards the growth in economy of the region and the nation. The increased revenue due to proposed development would contribute to the exchequer i.e., Central Government departments like Customs & Excise, Railways, Commercial Taxes and Income Tax. This will eventually contribute towards the State Government of Andhra Pradesh by way of share of revenue and lease rentals as per the Concession Agreement.

53.3.1.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental and CRZ Clearance to the project 'Expansion of Krishnapatnam Port (Phase III) at SPSR Nellore District, Andhra Pradesh by M/s Krishnapatnam Port Company Ltd.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.
- (iii) The Terms of Reference (ToR) for the proposed Phase- 3 expansion was granted vide Letter No 10-18/2016-IA.III dated 4th May, 2016, which was amended on 24th November, 2017 and thereafter on 27th August, 2018. Subsequently on 4th May, 2019, the extension for TOR was granted up to 3rd May, 2020. Public Hearing was exempted by MoEFCC for the proposal expansion while issuing the TOR.

- (iv) Andhra Pradesh Coastal Zone Management Authority (APCZMA) has recommended the project for CRZ Clearance vide letter No: 202/CRZ/IND/2019-30 dated 21st May 2020.
- (v) The person authorised by the Project Proponent was not present for the meeting. The person representing PP in this meeting was asked to submit the authorisation during the course of the day.
- **53.3.1.3.** The predictions for impacts on both terrestrial and marine environment as provided in the EIA Report and summary of outcomes of other additional studies carried out as per the TOR were presented. In this context, EAC took note of the following predicted impacts:
- (i) The ecologically sensitive areas within the 10 km radius from the project boundary are as follows:
 - a. Mangroves within the Port boundary,
 - b. Ipuru Reserve forest located on the western side within the port boundary
 - c. Tammenapatnam Reserve Forest located at the southern end of the port's boundary near the coast. Adjacent on south
 - d. Momidi Reserve Forest located at about 4.5 km south-west of the port's boundary.
 - e. Kottapatnam Reserve Forest located at about 3.5 km south of the port's boundary.
 - f. Inland and the marine water bodies present in the study area are Bay of Bengal adjoining on east, Kandaleru creek flowing upstream in the south-west direction, Buckingham Canal- Upstream on North and downstream in south. There are no notified national parks, marine parks, wildlife sanctuaries including biosphere reserves, structures of archaeological importance and heritage sites within the 20 km radius of the proposed project site.
- (ii) Creek straightening, modulation of ephemeral drains and construction of breakwaters are likely to affect the flow of water and tidal exchange. Water Level in rerouted channel is predicted to be reduced by 2 cm and depth averaged velocity is reported be reduced from 0.3 m/s to 0.15 m/s due to rerouting of the creek. A straight cut of Sand bar in Kandaleru Creek is proposed. The proposed activity will also result in to replacement of 25.1Ha of existing mangrove area and the ecology associated with this mangrove area would be lost. For the purpose, compensatory Mangrove Afforestation in area of 80.0 Ha is proposed. Afforestation area will be identified in consultation with Forest Department and afforestation Plan will developed in consultation with experts.
- (iii) Reclamation of quantity 31 Mm³ within the port boundary for developmental activities will cause change in land use.
- (iv) No considerable impact on the air quality as the predicted ground level concentration at port facility are within the National Ambient Air Quality Standards (NAAQS). However, dust emissions from construction activities may temporarily impact greenbelt and mangroves.
- (v) Predicted noise levels due to developed Port activities meets the noise standards. Anticipated marginal increase in noise levels due to the port operations will dissipate within port boundary.
- (vi) The PP does not draw the ground water. Contamination of groundwater through seepage of waste water from port activities will be prevented through dedicated drains for runoff and storm water.

- (vii) Temporary increase in turbidity and TSS in marine water is predicted due to dredging. Migration of marine species due to dredging is predicted. Further, the increase in turbidity will affect the productivity of phytoplankton and population of zooplankton. It is also predicted that the baseline scenario will be regained post dredging activity and the impacts are reversible. None of the disposed sediments will reach the near-shore region. Benthic communities in dredging and disposal area have the tendency to rejuvenate back to the baseline conditions and will re-establish themselves post-dredging
- (viii) Marginal variation in water quality is predicted due to cargo handling.
- (ix) The studies carried out by NCSCM Chennai indicate that a region of 20 km radius from core zone of Krishnapatnam Port has adequate carrying capacity for proposed development of Phase-III Expansion of the port.
- (x) The Compliance report from Regional office of MoEF&CC, Chennai provides for compliance status for conditions given in Environmental Clearance orders for Phase-I and Phase-II EC. It has been reported to be satisfactory.
- (xi) Studies in line to ToR have been carried out for entire master plan in addition to impact assessment, mitigation measures and Environment Management Plan. The EMP for the proposed development of Phase-III that contains mitigation measures for aforesaid predicted impacts.
- **53.3.1.4.** The EAC observed that validity of EC order for the development of Phase-II of the Port has expired 12th November, 2019 and the PP is yet to complete the project activities approved vide EC order for the Phase-II development. However, the work for development of Phase-II is reported to be "under progress" in the EIA report submitted for the project. In this Context PP confirmed that it has been inadvertently mentioned in the report and at present no activity/construction w.r.t. development of phase-II is under progress. It was also clarified by PP to the EAC that at this stage they do not intend to undertake remaining project activities as approved for Phase-II.

In this context, EAC further observed that EIA Report submitted by the project proponent while projecting the total capacity of the Port after development of Phase-I, II and III does not take in the account the project activities that could not be completed during the development of Phase-II. The EAC suggested that Port Capacity in the EIA should be mentioned after taking in the account project activities that have been successfully implemented during the development of Phase-I and II and the activities proposed to be implemented during Phase-III. The EAC also noticed that project involves diversion 418 Ha of the forest land for development of Phase-III. However, in the Application (Form-2) it has been mentioned that no forest land is involved. In this context, PP informed to the EAC that construction activities on the forest land will be started only after obtaining the Forest Clearance. Hence, may consider recommending grant of EC. In this context, EAC referred to directions of the Hon'ble Supreme Court and informed to PP that the Hon'ble Supreme Court vide its judgment dated 6th July, 2011 in Writ Petition (C) No. 202 of 1995 (Lafarge case) has held, inter-alia, that the environment clearances in respect of projects involving forest land will only be granted after the Project Proponent obtains Stage-I Forest Clearance in respect of the forest land involved in the projects.

In view of the aforesaid directions, the procedure for granting EC to such proposal has been stipulated in MOEFC's Office Memorandum Nos. J-11015/200/2008-IA.II (M) dated 31.03.2011; J-11013/41/2006-IA.II (I) dated 26.04.2011; J-11013/41/2006-IA.II (I) dated 09.09.2011; J-11013/41/2006-IA.II (I) dated 18.05.2012; J-11015/200/2008-IA.II (M) dated 19.03.2013; and J-11011/12/2013-IA.II (I) (part); dated 19.06.2014. Accordingly, pending the availability of Stage-I Forest Clearance, the Ministry cannot grant EC to the project under reference even though PP undertake to develop no component of the project on forest land. The EAC deliberated on the issues involved and decided to defer the proposal. The EAC

suggested PP to withdraw their current proposal and submit the revised proposal in case they do not wish to undertake development on the forest land involved at this stage. In this context, PP requested the EAC to allow them to revise their current application and EIA Report in line to exclusion of forest land and submit in continuation for necessary appraisal of project for grant of EC & CRZ clearance. The EAC considered the request of PP w.r.t. submission of revised application. The PP may consider, inter-alia among others the following aspects while submitting their revised application and EIA reports: -

- (i) exclude completely the activities/ project's components proposed to be developed on the Forest Land;
- (ii) revise EIA Report after making, among the other necessary changes, the changes in the light of deliberations held during this meeting at the places indicating total port capacity after development of Phase-I, II and III after taking in to account the work completed in in Phase-I and II during EC validity period and work proposed in Phase-III as per ToR issued for Phase-III and also at places wherever the status of work of Phase-II development is reported to be under progress; and
- (iii) highlight impacts predicted vis-à-vis mitigation proposed w.r.t. modulating Ephemeral Drains and substantiate the claim towards ephemeral nature of the drain.

The revised Application should contain information consistent with the EIA Report and other associated documents submitted w.r.t fields relating to forest land diversions.

Agenda item No. 53.3.2.

Expansion and Modernization of existing PNP Port at Gut No. 346, Dharamtar Creek, Village Shahbaj, District Raigad, Maharashtra by M/s PNP Maritime Services Pvt Ltd - Reconsideration for Environmental & CRZ Clearance

(IA/MH/MIS/59562/2016; F.No. 10-70/2016-IA-III)

53.3.2.1. The EAC noted the following: -

- (i) The proposal is for grant of Environmental and CRZ Clearance to the project 'Expansion and Modernization of existing PNP Port at Gut No. 346, Dharamtar Creek, Village Shahbaj, District Raigad, Maharashtra by M/s PNP Maritime Services Pvt Ltd.
- (ii) The project/activity is covered under category 'A' of item 7 (e) i.e. Ports, harbours, break waters, dredging' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.
- (iii) Terms of Reference (ToR) for the project was granted by MoEFCC vide letter No. 10-70/2016-IA-III dated 22.03.2018.
- (iv) Public hearing was conducted by Maharashtra State Pollution Control Board (MPCB) on 25.02.2019 at Collector office, District Raigad, Maharashtra.
- (v) Maharashtra State Coastal Zone Management Authority (MCZMA) has recommended the project for CRZ Clearance vide Letter No. CRZ-2017/CR-323/TC 4 dated 24.01.2019.
- (vi) The proposal was earlier considered by the EAC (Infra-2) in its 46th meeting held during 25-26 November, 2019, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 19th June, 2020 on 'Parivesh' Portal.

53.3.2.2. The project proponent informed the EAC that as per the observation of EAC in its previous meeting, action taken report for non-compliance and partially compliance EC conditions was submitted to Regional Office of MoEFCC vide letter dated 22.01.2020. The Regional Office of MoEFCC (WCZ) at Nagpur has forwarded the same to the Ministry vide letter 6-12/2003(ENV)/6316 dated 02.03.2020. The EAC noted that the project proponent has submitted Oil Spill Contingency Plan and point wise reply on the observations of Conservation Action Trust (CAT). The representation received just before this meeting was also shared with project proponent. In this context, project proponent has submitted point wise reply to the Committee vide letter dated 23.07.2020. The EAC found that the PP has denied all the allegations and confirmed that no mangroves were cut/ destroyed during construction or operation phase of the project. The PP also referred to Hon'ble NGT's ruling in Application No. 95/2014 (WZ) dated. 22.09.2017. It was also confirmed that that they have not proposed any reclamation in the project and the expansion in mangrove and mangrove buffer area. PP has submitted that they are operating the port facility as per the permission granted by various authorities and they do not find any merit in allegations made against the project.

The EAC, after deliberation and based on submissions by PP, recommended granting Environment and CRZ clearance to the project along with the following additional conditions over and above the Standard EC conditions stipulated by the Ministry for this category of project (specified at **Annexure-4** of the minutes) vide OM dated 04.01.2019:

- (i) The Environmental and CRZ Clearance to the project is primarily under provisions of EIA Notification, 2006 and CRZ Notification, 2011. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.
- (ii) The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report, submissions made during Public Hearing and also that have been made during their presentation to EAC.
- (iii) Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (iv) All the recommendations and conditions specified by the Maharashtra State Coastal Zone Management Authority (MCZMA) vide letter No. CRZ-2017/CR-323/TC 4 dated 24.01.2019 shall be complied with.
- (v) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (vi) 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. Creek water monitoring program shall be implemented during the construction phase.
- (vii) No underwater blasting is permitted.
- (viii) Dredging shall not be carried out during the fish breeding season. Dredging, etc. shall be carried out in confined manner to reduce the impacts on marine environment. As committed, Silt curtains shall be used to minimize spreading of silt plume during dredging operation. Turbidity should be monitored during the dredging. No removal of silt curtain unless baseline values are achieved.
- (ix) Wherever possible, dredged material shall be used for bank nourishment. Otherwise, deposit the dredged material within the port premises in non-CRZ areas for land development in a manner that it does not enter the channel. With the enhanced quantities, the impact of dumping on the estuarine environment should be studied

- and necessary measures shall be taken on priority basis if any adverse impact is observed.
- (x) An independent monitoring be carried out by any Government Agency/Institute to evaluate the impact during dredging. Impact of dredged material on estuarine environment along with shore line changes should be studied by the PP and necessary mitigation measures be taken in case any adverse impact is observed. The details shall be submitted along with the six-monthly monitoring report.
- (xi) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries, sea-grass, algae, sea weeds, Crustaceans, Fishes, coral reefs and mangroves etc. as given in the EIA-EMP Report shall be complied with in letter and spirit.
- (xii) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
- (xiii) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
- (xiv) The fresh water requirement of 58 KLD shall be met from MIDC water supply scheme.
- (xv) Sewage generated will be treated in STP of 50 KLD capacity. The treated water will be used for flushing, gardening and dust suppression within the port premises.
- (xvi) A continuous monitoring programme covering all the seasons on various aspects of the estuarine environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters along with PHc coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xvii) Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- (xviii) The material recovered from the cutting activity shall be used for filling low-lying areas within the project boundaries. The actions shall be in accordance with proposed landscape planning concepts to minimise major landscape changes. The change in land use pattern shall be limited to the proposed port limits and be carried out in such a way as to ensure proper drainage by providing surface drainage systems including storm water network.
- (xix) Suitable preventive measures be taken to trap spillage of fuel / engine oil and lubricants from the construction site. Measures should be taken to contain, control and recover the accidental spills of fuel during cargo handling.
- (xx) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xxi) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.

- (xxii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
- (xxiii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxiv) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 2.65 Crores (0.25% of the project expansion cost i.e. Rs. 135 Crores) shall be earmarked under Corporate Environment Responsibility (CER) Plan for the activities such as Health, Water supply, Sanitation, Road development, Solar lights in nearby areas and Education etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 53.3.3.

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 - Reconsideration for Environmental and CRZ Clearance (IA/GJ/MIS/115006/2016; F.No. 10-69/2016-IA-III)

53.3.3.1. 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 Gujarat 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.
- (vi) The proposal was earlier considered by the EAC (Infra-2) in its 51st meeting held during 21-22 May, 2020, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 25th June, 2020 on 'Parivesh' Portal.
- **53.3.3.2.** The project proponent informed the EAC that MOEF&CC had granted EC to M/s Simar Port Private Limited for construction of 1700 m long breakwater in Jan, 2014 and EC for extension of breakwater from 1700 m to 4500 m vide dated 5th March 2019. MOEF&CC vide TOR issued for the said extension on 18th June, 2014 had exempted public hearing. An appeal referred to herein is one challenging EC for extension of breakwater, filed in May

2019, on the grounds that public hearing was exempted by EAC and the proposal was not considered as interlinked project. M/s Simar Port Pvt Ltd (SPPL) and MoEF&CC are respondents. SPPL and MoEF&CC have submitted responses denying the allegations. Matter was last listed on 12th February, 2020 and could not be listed subsequently due to lockdown.

Simar Port Private Limited has received Environmental Clearance for extension of breakwater. Construction of breakwater has commenced after all necessary approvals. It is important to note that NGT has neither stayed the clearance nor the construction of breakwater. Breakwater is required for providing the tranquil conditions at berths. In the absence of breakwater, berths will be exposed to South West monsoon waves making it difficult to operate the vessels. Without breakwater berths will be operational during non-monsoon period only which is about 7-8 months a year.

After the project is built, there will be regular inspections from various government authorities like PESO, DISH, MoEF&CC (RO) and GSPCB to check the various safety and operational aspects of the terminal. The company will also have its own internal inspections through a very dedicated safety team guided by the safety policy driven by the top management of the company encompassing various facets of Health, Safety and Environment. This policy will also be shared and approved by Gujarat Maritime Board as this project is in the CRZ area.

The EAC, after deliberation and based on submissions by PP, recommends the project for grant of Environment and CRZ clearance along with the following additional conditions over and above the Standard EC conditions stipulated by the Ministry for this category of project (specified at **Annexure-4** of the minutes) vide OM dated 04.01.2019:

- (i) This is clearance is subject to the final outcome of the Appeal No. 30 of 2019 and Appeal No. 50 of 2019 pending before Hon'ble NGT (Pune Bench)
- (ii) The Environmental and CRZ Clearance to the project is primarily under provisions of EIA Notification, 2006 and CRZ Notification, 2011. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.
- (iii) The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report, submissions made during Public Hearing and also that have been made during their presentation to EAC.
- (iv) Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction works 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 the Gujarat Coastal Zone Management Authority (GCZMA) vide letter No. ENV-10-2018-199-E (T cell) dated 08.11.2019 shall be complied with.
- (vi) The facility shall be constructed in accordance with the NFPA 59 A- Standard for the Production, storage and handling of liquefied Natural gas, IOSD-194- Standard for Storage and handling of LNG, EN 1473 - Installation and equipment for LNG - Design of onshore installations and M.B. Lal Committee report.
- (vii) Precautionary measures shall be put in place to prevent leakage of LNG due to any disasters including tidal/tsunami wave, seismic and other natural calamities, Disaster Management Plan shall put in place to manage emergencies.
- (viii) Oil Spill Contingency Management Plan along with standard operating procedure (SOP) shall be prepared and demonstrated.

- (ix) Online sensor for load monitoring shall be installed, as committed.
- (x) Temperature sensors, gas detectors, spill detectors shall be installed and monitored to take care of any type of spillage or leakage of the gas from the plant and the trucks for loading and unloading.
- (xi) SOP for maintenance and operation of the facility should be prepared and implemented in letter and spirit.
- (xii) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (xiii) 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.
- (xiv) The fresh water requirement of 27.5 KLD shall be met from Gujarat Water Infrastructure Limited (GWIL).
- (xv) Sewage generated will be treated in STP and treated water will be used for landscaping.
- (xvi) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries, mangroves, coral reefs and sea-grass beds etc. as given in the EIA-EMP Report shall be complied with in letter and spirit.
- (xvii) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
- (xviii) A continuous monitoring programme covering all the seasons on various aspects of the coastal environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xix) Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- (xx) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
- (xxi) Suitable preventive measures be taken to trap spillage of fuel / engine oil and lubricants from the construction site. Measures should be taken to contain, control and recover the accidental spills of fuel during cargo handling.
- (xxii) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xxiii) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- (xxiv) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.

- (xxv) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxvi) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 7.0 Crores (0.50% of the project cost i.e. Rs. 1426 Crores) shall be earmarked under Corporate Environment Responsibility (CER) Plan for the activities such as Scholarship and Educational Aids for the Primary Schools of the study area, Distribution of School uniform to economically weaker sections, Renovation of school/Anganwadi building and construction of toilets for girls and boys, Basic infrastructure facilities, Arrangement of health check-up camp for the villagers at regular intervals, Arrangement of veterinary doctors for regular check-up of the cattle, Distribution of tri-cycle to physically challenged group, Provision of potable water supply for study area Schools/ villages, Construction/Renovation of internal village road in the surrounding areas, Construction of public toilets (Sulabh Shauchalaya), gutter lines and drainage system, Skill development programme for youth of the surrounding villages, Fishing Nets, Mobile Education van, Mobile health unit and Solar light panel etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 53.3.4.

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)

53.3.4.1. The EAC noted the following: -

- (i) The proposal is for grant of Environmental and CRZ Clearance to the project 'Capacity Expansion, Cuddalore Port', Tamil Nadu by M/s Tamilnadu Maritime Board.
- (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) Terms of Reference was granted by MoEFCC vide letter F.No. 10-35/017-IA-III dated 17.08.2017.
- (iv) Public Hearing was conducted by Tamil Nadu Pollution Control Board on 22.02.2018 at Cuddalore Port in Cuddalore.
- (v) The proposal was earlier considered by the EAC (Infra-2) in its 49th meeting held during 25-26 February, 2020, 51st meeting held during 21-22 May, 2020 and 52nd meeting held during 18-19 June, 2020 wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 5th May, 2020, 11th May, 2020 and 6th July, 2020 on 'Parivesh' Portal.
- **53.3.4.2.** Regarding validity of accreditation certificate for the consultant, the project proponent has submitted a letter dated 2nd July, 2020 issued by QCI-NABET. As per the letter, QCI NABET has endorsed the accreditation of the Environmental Consultant. The EAC also noted that the project proponent has also submitted signed portion of the EIA Report.

The EAC, after deliberation and based on submissions by PP, recommends the project for grant of Environment and CRZ clearance along with the following additional conditions over and above the Standard EC conditions stipulated by the Ministry for this category of project (specified at **Annexure-4** of the minutes) vide OM dated 04.01.2019:

- (i) The Environmental and CRZ Clearance to the project is primarily under provisions of EIA Notification, 2006 and CRZ Notification, 2011. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.
- (ii) The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report, submissions made during Public Hearing and also that have been made during their presentation to EAC.
- (iii) Construction activity shall be carried out strictly according to the provisions of the CRZ Notification, 2011. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (iv) All the recommendations and conditions specified by the Tamil Nadu Coastal Zone Management Authority (TNCZMA) vide letter No. 19510/EC-3/2018-1 dated 14.11.2018 shall be complied with.
- (v) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- (vi) Dredging shall not be carried out during the fish breeding season. Dredging, etc. shall be carried out in confined manner to reduce the impacts on marine environment. Turbidity should be monitored during the dredging. While dredging, sediment should be monitored fortnightly at source and disposal location of dredging.
- (vii) Dredged material shall be used for beach nourishment and left out material should be disposed safely in the designated areas so that the dumped dredged material does not enter the channel. With the enhanced quantities, the impact of dumping on the coastal environment should be studied and necessary measures shall be taken on priority basis if any adverse impact is observed.
- (viii) No underwater blasting is permitted.
- (ix) An independent monitoring be carried out by any Government Agency/Institute to evaluate the impact during dredging. Impact of dredged material on coastal environment along with shore line changes should be studied by the PP and necessary mitigation measures be taken in case any adverse impact is observed. The details shall be submitted along with the six-monthly monitoring report.
- (x) The fresh water requirement of 100 KLD shall be met from desalination plant using RO.
- (xi) Sewage generated will be collect from the conveniences and rest rooms. This will be mixed with all other liquid waste streams from washing and service yard and will be taken to ETP.
- (xii) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries, mangroves, coral reefs and sea-grass beds etc. as given in the EIA-EMP Report shall be complied with in letter and spirit.
- (xiii) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.

- (xiv) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.
- (xv) A continuous monitoring programme covering all the seasons on various aspects of the coastal environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xvi) Continuous online monitoring of air and water covering the total area shall be carried out and the compliance report of the same shall be submitted along with the 6 monthly compliance report to the regional office of MoEF&CC.
- (xvii) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (xviii) Suitable preventive measures be taken to trap spillage of fuel / engine oil and lubricants from the construction site. Measures should be taken to contain, control and recover the accidental spills of fuel during cargo handling.
- (xix) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xx) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- (xxi) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
- (xxii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (xxiii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 1.10 Crores (0.75% of the project expansion cost i.e. Rs. 135 Crores) shall be earmarked under Corporate Environment Responsibility (CER) Plan for the activities such as Potable Water Supply, Village Roads, Domestic Solid Waste Management, Primary Health and Primary Education etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

Agenda item No. 53.3.5.

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

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

53.3.5.1. The Project Proponent (PP) along with his accredited consultant M/s Perfact Enviro Solutions Private Limited made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) M/s Biotic Waste Solutions Pvt. Ltd. proposes to develop project titled "Common Bio-Medical Waste Treatment Facility" at Plot No. B2/92 & B2/93 in Mohan Cooperative Industrial Estate, New Delhi (Latitude- 28°29'50.17"N and Longitude-77°17'59.77"E) by covering total area of 3177.284 m² (0.317 ha.).
- (ii) As per Master plan of Delhi 2021, the land falls under notified industrial area and 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.
- (iii) The proposed facility shall provide services to hospitals, clinics and other forms of healthcare units from South Delhi District by fielding its services in collection, transportation, treatment and disposal of bio medical waste.
- (iv) The project attracts provision for item 7 d(a) of the Schedule to EIA Notification as well as the General Conditions as Haryana State Boundary & UP State Boundary are within 5km radius of the project. Hence, proposal requires appraisal at the Central level.
- (v) The total capacity of the proposed facility will be 30 TPD. The proposed activities will be collection, transportation, storage, treatment, (incineration, autoclaving & shredding) & final disposal. For the purpose, following is proposed to be developed at the site:

Building Plan	G+1
Incinerators	Total Incineration Capacity: 16TPD/800 Kg/hr A Rotary incinerator of 500 kg/hr and A Static Incinerator of 300 kg/hr capacity), Fuel- PNG
Autoclaves	2 No's x 350 kg/ batch each (Total 14TPD)
Plastic shredder	Shredder of 350 kg/Batch
Boiler	Capacity -200 Kg/hr, Fuel -PNG
ETP	10KLD
DG Set	1 x 250KVA for power backup, Fuel HSD @ 1000-1200 ltrs/day
Transportation	25 Four wheelers and 10 two wheelers for waste collection

- (vi) The Terms of Reference was granted by MoEFCC to the project vide letter no. F.No. 10-35/2002-IA-III dated 03.06.2020. The baseline data has been collected for the Winter season, December 2019 to February 2020.
- (vii) During Construction Phase, total water requirement for domestic purposes is expected to be 7 KLD, to be sourced through tanker supply. Mobile toilets will be provided for labours. 01 KLD wastewater will be discharged to septic tanks with soak pits to be cleaned regularly.
- (viii) During the Construction Phase, about 3 kg/day municipal waste will be generated and disposed of through authorised landfill sites. During Operational Phase, about 0.018 TPD of solid wastes will be generated from the facility. The biodegradable waste (0.007 TPD) will be processed in Organic Waste Convertor (OWC). The non-biodegradable waste will be (0.011 TPD), which will be handed over to the authorised local vendor.
- (ix) 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 tanker supply and 8.5 KLD will be sufficed from in-house ETP treated water. About 8.9 KLD of wastewater will be treated in ETP (10 KLD). The treated water will also be used for purposes like gardening, floor washing and vehicle container washing and chemical disinfection.

- (x) About 0.03 KL/month of used oil will be generated from machineries/DG Set. It will be 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.
- (xi) The incinerators' ash (0.8 TPD) will be sent to TSDF site. The ETP Sludge (0.13 kg/day) will be stored in leak proof PVC containers in isolated areas on pucca floor within the premises as per HWM Rules and handed over to authorized TSDF for hazardous waste.
- (xii) Plastics, Rubber and other associated material (13 TPD) will be sent to shredder which after shredding will be sent to authorized recyclers. Sharps (1 TPD) will be treated in autoclave. After autoclaving, sharps will be encapsulated. Glass bottles shall be sold to recyclers after chemical disinfection.
- (xiii) The total Power Requirement during the construction phase will be met by DG Set of 1x250 kVA and 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 with appropriate height of 3.5 m above roof level is proposed as per CPCB guidelines.
- (xiv) As it is a Bio Medical Waste Treatment Unit, therefore rainwater from rooftop will be channelized to the storm water drainage network of the industrial area. Other stormwater will be channelized to industrial drain outside the place.
- (xv) There will be use of approx. 25 four wheelers and 10 two wheelers daily for transportation/ collection of bio medical waste from various medical establishments. There is enough space available within the premises to park these vehicles. Thus, parking of 25 four wheelers and 10 two wheelers will be done within the facility premises.
- (xvi) Proposed energy-saving measures would save about 10% due to the use of LED and solar provision.
- (xvii) The proposed project is located at 740 m W of a residential area i.e. Pahladpur. The distance of the Asola Wildlife Sanctuary is 2.09 Km SWW from the project site & Okhla Bird Sanctuary is 7.55 Km NNE from the project site which are outside the notified boundary of the Sanctuary. Hence NBWL Clearance not required.
- (xviii) Forest Clearance is not required.
- (xix) There is no court case pending against the project.
- (xx) Cost of the Project is estimated to be Rs. 4 Crores.
- (xxi) Employment potential: In construction phase 40 persons and 120 persons at the time of Operation Phase will be employed for the proposed project.
- (xxii) 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 being 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 attract people to develop organized Bio-

medical Waste Treatment. It will provide direct and indirect employment to local people.

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

- (i) The proposal is for grant of Environmental Clearance 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.
- (iii) Terms of Reference was granted by MoEFCC vide letter no. F.No. 10-35/2002-IA-III dated 03.06.2020.

53.3.5.3. Pursuant to the EIA Report submitted and presented for the Project, the EAC made the following observations:

- i. Residential area i.e. Pahladpur is reported to be located at 740 m W from the project site. However, Post Office Pul Pehladpur, Street No.-15, Mittal Colony, Block-RZH, Pul Pehladpur, New Delhi is reported to be located at a distance of 0.22 km (220 m) SWW.
- ii. A Place of Worship, namely the Red Temple, Mathura Road, Block-E, Mohan Cooperative Industrial Estate, Badarpur is reported to be located at a distance of 0.19km (190m) SEE.
- iii. There exist schools, namely (i) Kalawati Public School, Block No.-A, Jaitpur Vistar, Badarpur, (ii) Govt. Boys Senior Secondary School No.-1, Block E, Mohan Cooperative Industrial Estate, Badarpur, (iii) D.A.V. Senior Secondary School, Milk Plant Road, Block-B-1, Block-E Mohan, Cooperative Industrial Estate, Badarpur at a distance of 0.54 km (540 m) SSE, 1.15 km NNE and 1.19 km NNW respectively.
- iv. There exists MDC Polyclinic, Main Market, Badarpur Village, Badarpur; Maternity and Child Center, Mathura Road, Mohan Cooperative Industrial Estate, Badarpur at a distance 0.78 km (780 m) NNE and 0.89 Km (890 m) SEE respectively.
- v. The results for Ambient Air Quality provided in EIA Reports reveals that mean value of PM2.5 and PM10 at all sites (A1-A6) exceeds the limits of National ambient air quality standards which could be due to fugitive dust emission by blowing of wind and vehicular movement at NH-2 highway. The Air Quality Index (AQI) for PM10 at 6 sites A1, A2, A5 and A6 are moderate and lies in the range of 101-200 which implies that there could be minor breathing discomfort to sensitive people. The Air Quality Index (AQI) for PM10 at 2 sites A3 and A4 are poor and lies in the range of 101-200 which implies that there could be minor breathing discomfort to sensitive people due to prolonged exposure.
- vi. The EIA Report with respect to noise level monitoring reports that ambient noise level in residential area i.e. Tajpur Village is 59.3 dB (A), which is slightly higher than the daytime noise standard limit of Residential area are ~ 55.0 dB (A). During night, the noise level was recorded 48.3 dB (A), which is slightly higher than the night-time noise standard limit of ~ 45.0 dB (A). The increased noise level is due to vehicular activity and increased urbanization in Tajpur village. The noise level at day time at Badarpur Village is 60.8 dB (A), which is higher than the standard limit of residential area ~ 55 dB (A). During the night the noise level was recorded as 50.2 dB (A), which

is slightly above the standard limit of residential area are ~ 45 dB (A) The increased noise level during night may be due to the increased vehicular activity at NH-2 which is located adjacent to Badarpur village. The ambient noise level in residential area i.e. Pahladpur is 58.2 dB (A) which is slightly higher than the standard limit of residential area which is ~ 55 dB (A). During the night the noise level was recorded 52.2 dB (A) which is higher than the night-time noise standard limit of ~ 45.0 dB (A) due to vehicular movement at Mehrauli Badarpur road which is in North West direction from the project location. The ambient noise level in residential area i.e. Lakarpur is 57.4 dB (A), which is slightly higher than the standard limit of residential area which is ~ 55 dB (A). During the night, the noise level was recorded 49.1 dB (A) which is higher than the night-time noise standard limit of ~ 45.0 dB (A). The ambient noise level at NH-2 is 72.4 dB (A) which is within the standard limit of commercial area are ~ 65 dB (A). During the night the noise level was recorded 66.3 dB (A) which is within the night-time noise standard limit of ~ 55.0 dB (A) due to increased vehicular activity. The ambient noise level of Mehrauli Badarpur village is 68.3 dB (A) which is slightly higher than the standard limit of Commercial area are ~ 65 dB (A). During the night, the noise level was recorded 57.4 dB (A) which is higher than the night-time noise standard limit of ~55.0 dB (A) due to the continuous vehicular movements.

EAC also observed that land has been given on lease to M/s Biotic Waste Solutions Pvt. Ltd. by RKKY Udyog Trust for a period of 09 years. In this context, EAC brought in to the notice of the PP the representation received by them. In the representation, it has been alleged, "The land-use for the allotted land is for setting up food processing unit. RKKR Udyog Trust, the owner of the land has not taken permission to change the land us. As per the revised CPCB guidelines on CBMWTF 5.1 of 5 wherein it states that any other approvals such as land use/change as applicable, are to be taken from e concerned authorities under various laws before EC is granted." The PP informed to the EAC that proposed site is located in the notified industrial area and there is no further need for the land use change. Also, the plots for proposed facility being in the notified industrial area, no alternate site has been considered for this project.

Taking in account the information provided in the EIA Report, Application Forms, etc. and clarifications provided by the PP during the meeting, the EAC opined that the project site is located in notified industrial area, which itself is located in the area where ambient air quality, noise levels are reported to be in the poor quality. The operation of proposed facility will involve installation of two incinerator of capacity of 800 kg/hr. Such operation has the potential to further add to burden of already environmentally stress area. The proposed site may be meeting the notified citing criterion w.r.t. its distance from ecological sensitive areas, residentials areas, etc. However, the close proximity of the proposed site to above mention, public places such as schools, temples and hospitals, post offices that too in the environmentally stressed area cannot be ignored.

The EAC also took note of another representation against the proposal which refers to Bio-medical Waste Management Rules, 2016 and states that Delhi Development Authority Land (DDA) is the land assigning authority in NCT of Delhi for allotting land for Common Bio-Medical waste Treatment facility. The PP has further alleged that DDA has allotted four sites in pursuant of the Hon'ble NGT order dated 26.02.15 in the matter of OA No.75/2014 and MA 657/2014 Hon'ble NGT vide its order dated 17-12-2014. These are reported to be (i) Site No.1 Sector -25 Rohini New Delhi (Not yet been made Functional) (ii) Site No. 4 Near DSIDC Industrial Area Narela Zone (Not Yet Been Made Functional) (iii) Sewage Treatment Plant Okhla as mentioned in NGT order (Closed down after the completion of term of Contract and Directorate of Health Services has not yet invited any tender so far) and (iv) Sewage Treatment Plant Nilothi CBWTF is functional (With an extension of Contract).

However, EAC preferred to rely on rule 17(2) of the BMW Rules, 2016 that prescribes the selection of site for common Bio-Medical Waste Treatment and Disposal Facility (CBWTF) in consultation with the prescribed authority, other stake holders and responsibility to provide suitable site lies with the department in business allocation of land assignment. The EAC after detailed deliberations on the proposal decided not to recommend the proposal at the proposed site on the following grounds:

- (i) The site may be meeting the criterion for setting up of common biomedical waste management facility. However, its close proximity to a densely populated area with mean value of PM2.5 and PM10 at all monitoring sites (A1-A6) exceeding the limits of National ambient air quality standards and higher noise levels do not warrant for recommending the project at the proposed site;
- (ii) In the light of rule 17(2) of BMW Rules, 2016, PP did not have 'No objections' from the prescribed authorities in the NCT of Delhi, namely Delhi Development Authority and Delhi Pollution Control Committee for citing of the BMW facility at the proposed site;
- (iii) PP in its EIA report has not proposed any additional (other than those required under the law) /innovative mitigation measure for reducing the incremental air pollution load.

The PP has liberty to propose the alternate site in consultation with the authorities as prescribed under the Biomedical Waste Management Rules, 2016.

Agenda item No. 53.3.6.

Nambiar Nagar Mini Fishing Harbor at Nagapatinam, Tamilnadu by M/s Nambiyar Nagar Fishing Harbor - Reconsideration for Terms of Reference

(IA/TN/MIS/140405/2020; F.No. 10-13/2020-IA-III)

53.3.6.1. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project 'Nambiar Nagar Mini Fishing Harbor' at Nagapatinam, Tamilnadu by M/s Nambiyar Nagar Fishing Harbor.
- (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 considered by the EAC (Infra-2) in its 49th meeting held during 25-26 February, 2020 and 52nd meeting held during 18-19 June, 2020, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 17th May, 2020 and 5th July, 2020 on Ministry's website (Parivesh Portal).
- **53.3.6.2.** The EAC deliberated upon the information provided by the project proponent. The EAC noted that PP was asked to submit reasons for contradictory outcomes from two matrices presented in 49th EAC meeting and 52nd EAC meeting respectively; copy of letter issued by the District Collector, Nagapatinam on 22nd February, 2020 w.r.t. allotment of land and undertaking to effect that revised matrix presented to EAC in 52nd EAC meeting is based on actual site conditions and scientific evidences that justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites.

The EAC noted that the project proponent has submitted point wise reply to the queries raised. The project proponent in its undertaking has undertaken that the revised

matrix presented in the 52nd meeting of EAC (infra-2) held on 18.06.2020 is based on actual site conditions and scientific evidences that justify site suitability in terms of environmental angle and resources sustainability associated with selected site as compared to rejected sites.

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 Tamil Nadu 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) Hydrodynamics study on impact of dredging on flow characteristics.
- (vii) Flooding and related impact on creek and control area during the cyclonic storm should be studied.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.
- (xii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xiii) Permission from CGWA in case of groundwater use being proposed for the project.
- (xiv) Wastewater Management Plan.
- (xv) Details of Environmental Monitoring Plan.
- (xvi) 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.

- (xvii) 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.
- (xviii) 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.
- (xix) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xx) 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.
- (xxi) 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.
- (xxii) Disaster Management Plan for the project.
- (xxiii) Details and status of court case pending against the project, if any.
- (xxiv) 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.
- (xxv) 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.
- (xxvi) A tabular chart with index for point-wise compliance of above ToRs.

The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Agenda item No. 53.3.7.

Development of Multipurpose Jetty Terminal in Vasai Creek, Ghodbunder Village, Tehsil and District Thane, Maharashtra by M/s Kailash Construction - Terms of reference

(IA/MH/MIS/162429/2020; F.No. 10-43/2020-IA-III)

- **53.3.7.1.** The Project Proponent (PP) along with his accredited consultant M/s Ultra Tech made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) M/s Kailash Construction is a proprietary concern and with its associates is engaged in development of real estate projects, dredging, supply of barges, tugs and cranes on hire as a part of marine logistic support.
- (ii) As an extension of existing business activities and to make long term investments in ports and harbor sector, M/s Kailash Construction are interested to develop marine infrastructure. Accordingly, the Kailash Construction team studied various locations

- along 720 km coastline of Maharashtra and found the waterfront in Vasai creek (Ulhas river) near Ghodbunder village, Taluka Thane, District. Thane as a suitable potential site for development of multipurpose jetty terminal.
- (iii) The proposed project is for developing a multipurpose jetty in phases near Ghodbunder, Taluka Thane, District Thane, Maharashtra to handle all types of cargo such as bulk, break bulk and container with projected throughput of 1.50 lakh tonnes/year in the initial years and upto about 15-20 lakh tonnes/year in the later years. The proposed approach cum berthing jetty will be constructed perpendicular to the shoreline. The size of the approach cum berthing jetty in the initial stage is proposed as 50 m long and 10 m wide. The total area of storage yard in the initial stages will be about 8 acres which will be increased to about 12.50 acres in future by reclamation in intertidal area. The storage yard will be used for stacking of cargo till it is transported to their destination or for outgoing cargo till it is loaded into barges for transporting to mother vessel.
- (iv) Major activities that would be involved in the construction/operation stages of the proposed jetty are as follows
 - Piling for construction of jetty
 - · Levelling or filling for operational area
 - · Construction of approach road
 - Stacking of materials
 - Transportation of materials.
- (v) The site for the proposed multipurpose jetty terminal is located near Ghodbundar in South bank of Vasai creek about 350 m from Ghodbundar junction on Mumbai Ahmadabad Road (NH-6). The nearest railway station on Western Railway is Mira Road at about 8.4 km (by road) from the proposed Multipurpose jetty terminal site.
- (vi) The site lies in Thane district of coastal Konkan division of Maharashtra on latitude 19°17'18.73" N & 19°17'16.51" N and longitude 72°53'58.33" E & 72°54'10.48" E. The site is about 28 nautical miles from of Mumbai port by sea and 48.00 km from Mumbai city by road.
- (vii) As the existing waterfront along with backup land was available with the promoters, no alternative site was considered due to its preferred location from all considerations.
- (viii) Water Requirement Water supply will be provided by Mira Bhayander Municipal Corporation. Domestic water requirement for administrative building, canteen is worked out considering the no. of people and their daily requirement. Accordingly, an underground tank of 50 m³ capacity is proposed along with one overhead tank of about 20 m³ capacity. Fire water will be sourced from Ulhas creek.
- (ix) The source of wastewater generated will be only domestic usage as there is no manufacturing involved in the project. The estimated quantity of wastewater generated from jetty and shipyard operation will be approximately 5 m³ per day. The wastewater will be treated in sewerage treatment plant (STP). Hazardous waste will be generated in the form of used oil, batteries, contaminated soil in case of oil spill, etc.
- (x) The estimated quantity of solid waste generated during the operation phase will be 36 kg per day out of which 14.4 kg will be biodegradable and 21.6 kg will be municipal solid waste. The biodegradable part of solid waste would be treated in organic waste converter at site. The remains of this treatment would be then used as

- manure in garden. The non-biodegradable part generated from building will be disposed-off to dumping ground.
- (xi) The electrical supply will be taken from MSEDCL from a nearby substation installing transformer of required capacity. In the initial stages, the power requirement would be 500 KVA which will be increased to about 1 MW at later stages. Standby generators of about 75 KVA will be provided for continuing critical operations in case of power failure.
- (xii) The direct employment due to proposed project during construction stage will be about 80 and during initial stages of operation will be 60. The indirect employment due to proposed project is expected to be in excess of 150.
- (xiii) Approximate cost of the construction of multipurpose jetty terminal during initial development i.e. in Phase I is Rs. 560 lakh. For development of remaining all phases in later stages i.e. Phases II, III and IV, the estimated project cost is Rs. 2380 lakh. The completion period of the project is considered as 36 months after getting CRZ/Environmental clearance as applicable.
- (xiv) Because of the construction of jetty, the project will not have any visible impact on the population in the surrounding areas. However, economic opportunities will be available to the local people in the form of employment for the new activity and ancillary activities as well as due to increase in trade and commerce.

53.3.7.2. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project 'Development of Multipurpose Jetty Terminal in Vasai Creek, Village Ghodbunder, Tehsil Thane, District Thane, Maharashtra by M/s Kailash Construction.
- (ii) The project/activity is covered under category 'B' 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 State level by SEAC. However, due to applicability of General Condition i.e. proposed project is 300 m away from Sanjay Gandhi National Park which comes under protected areas notified under the Wildlife (Protection) Act, 1972, the project is appraised at Central level by EAC.
- **53.3.7.3.** The project proponent informed the EAC that the existing sheds will be retained and not demolished. The EAC noted that a representation has been received against the project. The EAC opined that before recommending the project for grant of ToR the project proponent should address all the concerns raised in the representation, which has been already shared.

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.

Agenda item No. 53.3.8.

Integrated Municipal Solid Waste Management Project for Saraikela Nagar Panchayat at Plot No- 946/A, Village Bundu, Thana No- 261, Khata No -152, District Saraikela, Jharkhand by M/s Saraikela Nagar Panchayat - Terms of reference

(IA/JH/MIS/157095/2020; F.No. 10-38/2020-IA-III)

53.3.8.1. The Project Proponent (PP) along with his accredited consultant M/s Wolkem India Limited made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The proposed Integrated Municipal Solid Waste Management Project is for Saraikela Nagar Panchayat at Village Bundu, Thana No-261, Khata No -152, Plot No 946/A in district Saraikela of Jharkhand State.
- (ii) The proposed project is categorized under Item "7(i) Common Municipal Solid Waste Management Facility (CMSWMF)" in the EIA Notification, dated September 14th, 2006 and its amendments.
- (iii) Expected Waste Quantity- Current waste generation is 5.7 TPD, 6.7 TPD by 2030 and 7.82 TPD by 2040.
- (iv) Proposed processing facility will include 15 TPD of Aerobic Compost Plant and RDF Processing Plant and Sanitary Landfill designed for 20 Years (2020 to 2040).
- (v) Total water requirement in the project during operational phase will be about 10KLD out of which Fresh water requirement will be 5 KLD which will met from PHED supply. Approx. 1.0 KLD water will be require during construction phase.
- (vi) Power requirement power requirement will be 100 KVA which will be met from JVVNL.
- (vii) Greenbelt Development Plan: About 23,174 sqm (2.3Ha) areas will be covered under the greenbelt all around the site boundary. Proposed greenbelt is 57.26% of Total Land. Approx. 2,000 plants will be planted within project boundary.
- (viii) Man power requirement- During construction phase 10 persons will be employed. During operational phase-12-13 skilled & semi-skilled on site (about 200-250 temporary employees will be hired for primary collection, transportation and miscellaneous jobs.
- (ix) Estimated Project Cost will be Rs. 627.43 Lakh.
- 53.3.8.2. During deliberations, the EAC noted the following: -
- (i) The proposal is for Terms of Reference to the project 'Integrated Municipal Solid Waste Management Project' for Saraikela Nagar Panchayat at Plot No- 946/A, Village Bundu, Thana No- 261, Khata No -152, District Saraikela, Jharkhand by M/s Saraikela Nagar Panchayat.
- (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 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.
- **53.3.8.3.** The project proponent informed the EAC that Saraikela Nagar Panchayat has proposed to setup an Integrated MSW Management Project for Saraikela at Village Bundu, Thana No- 261, Khata No -152, Plot No-946/A, Area-10 Acre in district Saraikela of Jharkhand State. The proposed capacity of Integrated Municipal Solid Waste processing facility will be 15 TPD including Aerobic Compost Plant of 8 TPD and RDF Processing Plant of 7 TPD. The Sanitary landfill area will be of 3136 sqm.

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 sensitivity analysis of the site shall be carried out as per the MoEF&CC criteria and form part of the EIA report.

- (iii) The EIA would include a separate chapter on the conformity of the proposals to the Municipal Solid Waste Management Rules, 2016 and the Construction and Demolition Waste Management Rules, 2016 including the sitting criteria therein.
- (iv) An integrated plan of operation including the segregation of wastes at the household level and its transportation to the site shall be submitted. List of waste to be handled and their source along with mode of transportation.
- (v) Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- (vi) The EIA would give complete details of the SLF (Sanitary Landfill Facility), Compost Plant, RDF Unit, Leachate Evaporation Tanks, ETP and its impact.
- (vii) The project proponents should consult the Municipal Solid Waste Management Manual of the Ministry of Urban Development, Government of India and draw up project plans accordingly.
- (viii) Waste management facilities should maintain safe distance from the nearby pond.
- (ix) Methodology for remediating the project site, which is presently being used for open dumping of garbage.
- (x) Layout maps of proposed solid waste management facilities indicating storage area, plant area, greenbelt area, utilities etc.
- (xi) Details of air emission, effluents generation, solid waste generation and their management.
- (xii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xiii) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xiv) Hazard identification and details of proposed safety systems.
- (xv) 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.
- (xvi) Details of effluent treatment and recycling process.
- (xvii) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xviii) Detailed Environmental Monitoring Plan.
- (xix) Report on health and hygiene to be maintained by the sanitation worker at the work place.
- (xx) 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.
- (xxi) 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.
- (xxii) A tabular chart with index for point-wise compliance of above ToRs.

(xxiii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum issued vide letter F.No. 22-65/2017-IA.III dated 01.05.2018 shall be prepared and submitted along with EIA Report.

The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Agenda item No. 53.3.9.

Construction of Third Chemical Berth at Pir Pau Jetty by M/s Mumbai Port Trust - Amendment in Terms of Reference

(IA/MH/MIS/153247/2020; F.No. 10-50/2019-IA-III)

- **53.3.9.1.** The Project Proponent made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) The above proposal has been granted ToR by MOEF&CC vide letter F.No. 10-50/2019-IA-III dated 21st January 2020. M/s Mumbai Port Trust (MbPT) has prepared EIA report in compliance with ToR and notice was also issued for the information of general public w.r.t. public hearing scheduled for 17.04.2020. However due to nationwide lockdown amid COVID 19 outbreak, they are not able to submit it for Public Hearing. Since the restrictions are in place for Public gathering even after the lockdown is lifted and the situation may prevail in near future as well. Hence, the Public Hearing will not be practically possible in the near future.
- (ii) Early commissioning of this project will contribute to the nation's growing demand for LPG, a clean cooking fuel. It will support the initiatives currently being undertaken by the Government to increase LPG use. In view of the above restrictions, MoEF&CC is requested to exempt from Public Hearing for the following reasons: -
 - (i) Proposed work is expansion project from existing 4.5 to 6.5 MMTPA (44% expansion).
 - (ii) No Human Habitation as the project is in sea and shoreline is 2.4 KM from the site.
 - (iii) No Fishing activity and have no objection from fishing community
 - (iv) The Public Hearing was held for Fifth Oil Berth Project in Jan 2016
 - (v) All the conditions of MoEF&CC and MPCB for other works being complied with
 - (vi) Project is urgent requirement to meet the LPG requirement of State of Maharashtra.
 - (vii) This is one of the Infrastructure Project monitored by Government of India.

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

- (i) The proposal is for grant of Amendment in Terms of Reference to the project Construction of Third Chemical Berth at Pir Pau Jetty by Mumbai 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) Terms of Reference (ToR) was granted by MOEF&CC vide letter F.No. 10-50/2019-IA-III dated 21st January 2020.

53.3.9.3. The EAC noted that Terms of Reference (ToR) was granted to the project by MOEF&CC vide letter F.No. 10-50/2019-IA-III dated 21st January 2020 with a specific condition that "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". Regarding submission of PP that the Public Hearing will not be practically possible in the near future because restrictions will be in place for future as well, EAC informed that recently in the Delhi, the public hearing for a project has been conducted after putting in place all safety measures w.r.t. social distancing. The EAC also noted that a notice for conduction Public hearing on 17.04.2020 was issued by Maharashtra State Pollution Control Board. However, it was not held due to challenges posed by COVID-19. Since, the proposed project activities have already been brought in to the notice of public, so exempting the project from conduct of public hearing at this stage is not advisable.

The EAC also deliberated upon the other aspects of the proposal and opined that there are many local and environmental issues which are to be discussed during the public hearing. Exemption in public hearing will not be advisable in such situation. In view of foregoing, the EAC did not recommend granting exemption from conduct of public hearing.

In view of the foregoing observations, the EAC recommended to return the proposal in original form.

Agenda item No. 53.3.10.

Treatment Storage Disposal Facility' at Plot No. N1, Sector 5 Bawana Industrial Area, Narela, Delhi (adjacent to Waste to Energy Plant and Pragati Power Plant) by M/s Tamil Nadu Waste Management Limited - Environmental Clearance

(IA/DL/MIS/127887/2019; F.No. 10-60/2019-IA-III)

53.3.10.1. The Project Proponent (PP) along with his accredited consultant M/s Ramky Enviro Services Private Limited were presented for the meeting.

At the outset EAC informed to PP about the letter No. F.12(615)/Env/TSDF/2020/01 dated 21.07.2020 sent by Department of Environment, Government of NCT of Delhi and letter No. DSIIDC/SE(Env)/TSDF/2020/1895 dated 17.07.2020 sent by Delhi State Industrial & Infrastructure Development Corporation Limited (DSIIDC) received in the Ministry. Vide these letters, both have conveyed that DSIIDC awarded work to M/s TNWML only for the treatment of hazardous waste generated from industries and CETPs, and for domestic hazardous waste as per the provisions of the hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016. Besides this, the scope of work awarded to TNWML doesn't have the provision of Bio-Medical Waste facility and E-waste in this TSDF.

In this context, the PP requested EAC to allow them to make their presentation as they do not intend to setup a common biomedical waste management facility. PP clarified that their proposal is for setting up TSDF for Hazardous Wastes with the provisions for management of domestic hazardous waste including biomedical waste and e-waste being generated from the households. The EAC deliberated at length on the issues and decided to listen to PP and their team.

Thereafter, PP made a presentation and presented following parameters and salient features of the project to the Committee:

(i) M/s Tamil Nadu Waste Management Limited proposes to set up Treatment, Storage and Disposal Facility (TSDF) at Plot No. N1, Sector 5 of Bawana Industrial Area, Narela, Delhi. The plot is adjacent to Waste to Energy Plant and Pragati Power Plant.

- (ii) There is a growing concern all over the country for the disposal of hazardous wastes generated from anthropogenic sources. Understanding that a huge quantum of hazardous waste is lying in the premises of industries and CETPs and they are facing difficulties to accommodate more hazardous waste due to lack of space in their premises leading increasing pollution the state of Delhi, the Hon'ble NGT intervened and gave directions in different cases to develop a TSDF in the State of Delhi.
- (iii) In compliance to the direction contained in one of the hearings in the matter of Balamsingh Rawat vs. Govt. of NCT of Delhi & Ors., DSIIDC filed an affidavit before Hon'ble NGT in July 2015 that the work of TSDF shall be completed within two years. In the other case, M/s Rajiv Naryana & Anr. Vs. Union of India & Ors., Honourable NGT has directed vide its order Dt. 30.07.2018 that TSDF is to be set up within three months in Delhi. Later, the Hon'ble NGT vide their order dated 19/11/2019 directed DSIIDC that setting up of TSDF may also be completed latest by June 2020, positively.
- (iv) In this regard, Delhi State Industrial and Infrastructure Development Corporation Ltd. (DSIIDC) has selected M/s Tamil Nadu Waste Management Limited as successful bidder for the development of Treatment, Storage and Disposal Facility (TSDF) in an area of 14 acres at Plot No. N1, Sector 5, Bawana Industrial Area, Narela, Delhi. This land is part of the Master Plan of Delhi (MPD). The land is Notified Land for Waste Management in the MPD falling near the notified industrial estate of Narela Bawana.
- (v) The proposed TSDF facility is proposed to be developed with a Secured Landfill (SLF) 65000 MTA, Landfill after Treatment (LAT) 20000 MTA, Incineration (INC)-modular and scalable up to 1.5 TPH, handling of alternative fuel and raw material 10000 TPA, E waste management- 2000 TPA, Used Oil Recycling 1000 KLPA which will be scalable up to 10,000 KLPA.
- (vi) The facility would also cater to management of Biomedical Waste (Domestic Hazardous Waste)- 40 TPD for which installation of another incinerator scalable up to 2 Ton/hr (2-3 nos)], Autoclave: 25 Ton/Day, Shredder: 20 Ton/day) are proposed. In addition, it would also include arrangements for spent solvent recycling - 1000 KLPA, paper recycling - 1000 TPA, plastic recycling- 1000 TPA and Drum recycling 200 numbers per day.
- (vii) Power requirement for the total facility is 500 kVA which will be sourced from Tata Power Delhi Distribution Ltd. (North Delhi Power Ltd.).
- The water requirement for the project is 53 KLD. The present water requirement for (viii) TSDF operations will be met from Pragati Power Corporation Ltd. (PPCL). Treated cooling tower blow down water will be recycled and used. However, water required up to 100 KLD will be drawn from PPCL if needed in future for TSDF operations. Around 6 KLD of wastewater generated from through other operations of TSDF will treated and reused for greenbelt, circulation into the scrubber/quencher, spray on landfill, and floor washing. Around 1.5 KLD of sewage generated will be sent to septic tank. There will not be any discharge of wastewater to the nearby water bodies or outside the facility and zero wastewater discharge would be adopted.
- (ix) Hazardous & biomedical solid wastes generated within the premises shall be disposed of in incinerator or landfill as required within the proposed facility. The municipal wastes generated however, shall be segregated and sent to nearest municipal waste facility as per MSW Rules, 2016.
- (x) Sufficient greenbelt will be developed along the boundary and either side of roads of the TSDF site. All necessary air pollution, water pollution, noise pollution and soil

- contamination mitigation measures and hazard safety measures will be followed and implemented as per the guidelines prescribed.
- (xi) The CER fund shall be allocated as per the MoEF&CC office memorandum F.no.22-65/2017-IA.III dated, 1st May, 2018, which is around Rs. 0.48 Crores which shall be utilized over a period of 3 years. The CSR budget will be allocated as per rules prescribed by the Government of India / Companies Act 2013.
- (xii) ToR for the project was granted by MoEFCC vide letter F.No. 10-60/2019-IA-III dated 16.12.2019 followed by amendment in ToR dated 19.03.2020.
- (xiii) Public hearing was conducted by Delhi Pollution Control Committee on 14.07.2020 at TSDF site, adjacent to waste to energy plant and Pragati power plant, Bawana Delhi.
- (xiv) The total cost of the project is around Rs. 23.40 Crores. The EMP cost of the project is estimated to be 2 Crores.
- (xv) Employment potential: The man power for the proposed project during construction and operation phase will be 40 during operation, 50 during construction and 40 Indirect employment during operation.
- (xvi) Benefits of the project are: The huge quantum of hazardous waste lying in the premises of industries and CETPs of Delhi will be treated and disposed in scientifically and environmentally safe manner. Other wastes generated from existing industries will also be addressed in a better and environmentally safe way. It will provide a one stop solution for the management of various types of wastes such as hazardous waste and domestic hazardous waste etc. Minimizes pollution load on environment with an additional benefit of green and clean surroundings. Possibility for recovery of materials thereby conserving the natural resources. Management of wastes is relatively easier and economically viable at a common facility. Most viable option in the absence or availability of expertise. Reduced environmental liability due to captive storage of hazardous waste in the premises of industries. Prevention of natural resource contamination.

53.3.10.2. The EAC noted the following: -

- (i) The proposal is for granting Environmental Clearance to the project 'Treatment Storage Disposal Facility' at Plot No. N1, Sector 5 Bawana Industrial Area, Narela, Delhi (adjacent to Waste to Energy Plant and Pragati Power Plant) by M/s Tamil Nadu Waste Management Limited.
- (ii) The project/activity is covered under category A of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.
- (iii) ToR for the project was granted by MoEFCC vide letter F.No. 10-60/2019-IA-III dated 16.12.2019 followed by amendment in ToR dated 19.03.2020.
- (iv) Public hearing was conducted by Delhi Pollution Control Committee on 14.07.2020 at TSDF site, adjacent to waste to energy plant and Pragati power plant, Bawana Delhi.
- **53.3.10.3.** The EAC Noted the information as provided above by the PP and also the communications received from Government of NCT of Delhi. The Committee also deliberated, inter-alia, upon the issues raised during the Public Hearing/Public Consultation meeting. It was noted that the concerns were expressed primarily on CSR activities, Corporate Environmental Responsibility (CER); Job Opportunities; treatment of medical waste (including infectious waste and disposal of Domestic Hazardous Waste. The Department of Environment Government of NCT of Delhi and Delhi Pollution Control

Committee vide their above mentioned communications have brought in to the notice the objections raised during public hearing; namely, the PP is going beyond the scope of the tender and concession agreement and trying to get permission for activities that are not mentioned in the tender document and concession documents, which is illegal. In this context, objections were raised for expanding the scope of work of the project for activities including plastic waste, e-waste and biomedical waste as these are not part of the concession agreement. 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. However, the concerns and replies to such concerns from PP raised with respect of development of plants and machinery for management of domestic hazardous waste (biomedical and e-waste from households) needs further consideration in the light of aforesaid communications from Government of NCT of Delhi.

However, prior to initiating deliberation of the aforesaid issue related with the proposal, the EAC preferred to convey to project proponent the following deficiencies in the EIA/EMP report submitted for the proposed:

- (i) Baseline data generated is said to be between September 2019-November 2019. There is no clarity on what primary data was collected during this period and how much of data included in the report is from secondary sources. This needs to be clarified. Micro-met station, data logged to be provided/exhibited. Impression one gets after reading the report is that it is prepared substantially on secondary data and textbook prescriptions.
- (ii) The EIA mentions the quantity of Hazardous waste readily available for treatment & Disposal. But no information on characterization of these wastes. This is required to be included in EIA.
- (iii) Hazardous Waste generated by 1123 industries and 13 CETPs as reported is 4197.76 TPA. Accumulated waste in CETPs is 25000 Tonnes and industries are 20000 Tonnes. So design capacity should have been for 150000 Tonnes (4197.76 x 25 + 45000=149944). Why the capacity is only for 65000 Tonnes.
- (iv) Secure landfill capacity is for 25 years and is not based on TPA processed. It should be designed on TPA processed and not on years.
- (v) Report mentions 65000 TPA will go through treatment/stabilization? Nothing is indicated for stabilization capacity. This needs a mention in the report.
- (vi) Incinerator facility is said to be 300 g/hr scalable to 1.5 T/hour. Processing capacity in terms of TPA is required as on-site storage is decided on this basis.
- (vii) EIA also mentions used oil contaminated with hazardous wastes. Possible source and type of industry?
- (viii) Facility is to include a spent solvent recycling facility. What is the end use of the recovered solvent? Where and how it will be disposed of?
- (ix) Paper recycling: Report mentions that contaminated paper waste will be decontaminated and later recycled? What is the probable type of contamination? What is the methodology for decontamination? Where will it be used as part of recycling?
- (x) In the water requirement considerable quantity is mentioned for the incinerator? Why for an incinerator? Where will it be used?
- (xi) Is not water required for firefighting? If required why it is not taken into consideration while computing water requirement?
- (xii) Autoclaving is an essential part of the facility? What is the quantity of water required for this facility and the basis for the same?

- (xiii) Page 1.5 last Para-report mentions BMW & E-Waste recycling facility for handling LED/Tube lights. Please clarify how it will be managed and disposed of? How will mercury be recovered from CFL/Tube lights?
- (xiv) Table 3.5: Particulate matter PM 10 & PM 2.5: How and why only at the site it is within the standards while the values are exceeding in other sites?
- (xv) Table 3.20: It is mentioned as other authenticated data? What are they? Please refer to the sources.
- (xvi) Emission load from vehicular pollution and DG sets not included while computing GLCs. This needs revision.
- (xvii) The report is silent of dimensions including depth and number of cells to be developed. This needs to be added.
- (xviii) Risk & Hazard study. Very sketch and only text book prescriptions. VOC emissions not included. No "incidence analysis"/probability of occurrence carried out. In the light of the recent incidence at vizag, this is essential. EIA needs to be revised. Further EMP does not mention any description of measures for R & H including the budget. This needs to be included.
- (xix) As per report EC is sought for Waste to Energy facility. But the report does not have any description on the capacity and type of facility. EIA needs to be revised if W2E is to be considered or EC cannot be approved to include W2E project.
- (xx) Closure plan is an essential component of TSDF. Only a passing remark is mentioned. Detailed closure plan with budgetary provision needs to be included in the EIA. How this is incorporated in the agreement and responsibility also needs to be spelled out in the EIA as part of EMP.

Taking in to account of the Rules notified by the MoEFCC for management of Solid Waste, Hazardous Waste, E-waste and Biomedical Waste and the objections raised by the prescribed authorities w.r.t to proposal under consideration, it implies that proposal to setup TSDF Facility along with plants and machineries for domestic hazardous wastes, biomedical waste and e-waste is contrary to the allotment of land and scope of work as per the award given by DSIIDC to M/s. TNWML because the land and work was awarded by DSIIDC for development of TSDF for Hazardous Waste only and no other facilities have been allowed to M/s. TNWML.

The EAC opined that the project Proponent must revise the EIA to cover the questions raised by the EAC and to address the concerns expressed by the public and concerned authorities. As desired by the Government of NCT of Delhi, Biomedical and e-waste management facilities being proposed as part of the proposed TSDF Facility may be excluded from the revised the EIA/EMP Report. Otherwise, the PP may revert back to EAC along with requisite NOCs from concerned authorities.

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.

Day 2- Friday, 24th July, 2020

Agenda item No. 53.4.1.

Expansion of Group Housing 'Nav Sansad Vihar' at Plot No. 4, Sector 22, Dwarka, New Delhi by M/s Nav Sansad Vihar C.G.H.S. Ltd. - Reconsideration for Environmental Clearance

(IA/DL/MIS/153256/2020; F.No. 21-39/2020-IA-III)

53.4.1.1. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project 'Expansion of Group Housing 'Nav Sansad Vihar' at Plot No. 4, Sector 22, Dwarka, New Delhi by M/s Nav Sansad Vihar C.G.H.S. Ltd. The total plot area is 21,501 sqm. The total built-up area after expansion will be 46,967.388 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 52nd meeting held during 18-19 June, 2020, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 6th July, 2020 on Ministry's website (Parivesh Portal).
- **53.4.1.2.** The project proponent submitted point wise reply to the query raised by the EAC in its earlier meeting. However, the PP has again not provided information w.r.t. components of the proposed expansion (Building plan after expansion). Instead, block-wise break of built-up area has been provided. Certificate of structural safety of the proposed alteration through an institute of repute was not submitted rather they have submitted an undertaking that all the measures shall be followed for structural safety. The project proponent has claimed that the foundation stone of the project was laid in the year 1996 and was completed in the year 1999-2000. However as per their latest reply, Completion certificate was issued by Delhi Development Authority vide letter File No. F23 (47)95/Bldg./ dated 26.11.2014. The EAC also informed PP that some complaints posing serious allegations have now been received against the project. One of the allegations made in the complaint that DDA has issued order dated 21.01.2019 for sealing and demolition of Basement No. 1, Nav Sansad Vihar CGHS Limited, Plot No.4 Sector 22 New Delhi.

The EAC after detailed deliberation asked the project proponent to submit following details/documents for further deliberation on the proposal:

- (i) Details of construction work to be done mentioning the component to be added in the proposed expansion.
- (ii) Elaborate the permissibility/structural safety of the proposed alteration through an institute of repute.
- (iii) Reasons for delay in obtaining Occupancy certificate for the existing building after a long gap of 14 years.
- (iv) Point wise reply to the issue raised in the complaint received by EAC and that has been shared with Project Proponent including the reasons for issuance of aforesaid sealing cum demolition order by the DDA.

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.

Agenda item No. 53.4.2.

Construction of 'Motel Building' at Khasra No. 2 Min (1-1), 3 Min (3-10), 4 Min (4-12), 5 Min (2-7), 3 Min (1-8), Shahurpur Tehsil Hauz Khas, Delhi by Anant Raj Limited - Reconsideration for Environmental Clearance

(IA/DL/MIS/143072/2020; F.No. 21-26/2020-IA-III)

53.4.2.1. The EAC noted the following: -

- (i) The proposal is to grant Environmental Clearance to the project i.e. Construction of 'Motel Building' at Khasra No. 2 Min (1-1), 3 Min (3-10), 4 Min (4-12), 5 Min (2-7), 3 Min (1-8), Shahurpur Tehsil Hauz Khas, Delhi by Anant Raj Limited for net plot area 10,508.27 sqm and total built-up area of 48,012.36 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 50th meeting held during 22-24 April, 2020, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 24th June, 2020 on Ministry's website (Parivesh Portal).
- **53.4.2.2.** The project proponent submitted point wise reply to the query raised by the EAC in its earlier meeting. The EAC noted that the project proponent has satisfactorily addressed all the issues except the certificate from Wildlife Warden/Forest Officer which is to be submitted to the effect that the project site does not lie within notified boundary of Asola Wildlife Sanctuary /Eco Sensitive Zone. The project proponent informed that they have requested the Chief wildlife warden and Deputy Conservator of Forest for distance verification of the project site from ESZ Boundary of Asola Wildlife Sanctuary on 06.05.2020 and 12.06.2020 respectively. The matter is still under pursuance with the Deputy Conservator of Forest and Geo Spatial Department for Distance verification. In this regard the project proponent has submitted an affidavit stating that as soon as they get the distance verification from the department, they will submit the same to MoEF & CC and for any compliance related to the Forest department, they will be responsible for the same.

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 4th January, 2019 for the said project/activity (specified at Annexure-8 of the minutes):

- (i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project including the Wildlife Protection Act, 1972 based on findings of the concerned department w.r.t. distance of the site.
- (ii) The project proponent shall abide by all the commitments and recommendations made in the Form-I, IA and Conceptual Plan and submissions made during their presentation to the Expert Appraisal Committee.
- (iii) As proposed, fresh water requirement from tanker water supply shall not exceed 127 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after

- getting necessary permission for required water supply from DJB/concerned authority.
- (iv) Sewage shall be treated in onsite STP and treated effluent from STP shall be recycled/re-used for flushing, gardening and DG cooling. As proposed, excess treated water shall be used for landscaping in nearby parks and construction activity.
- (v) 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.
- (vi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 03 no. of rain water harvesting recharge tanks shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vii) 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 designated/authorized landfill site.
- (viii) 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 2,547 sqm (24.23% of plot area) shall be developed as green area.
- (ix) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (x) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, project proponent has proposed that an amount of Rs. 1.725 Crores (@ 1.5% of the project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Development of Health centre with modern facility in village Shahurpur (5 bedded) and providing coloured dust bins with disposable bags for collection of segregated waste and their disposable items, Provision of two organic waste converters in the village. 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.

Agenda item No. 53.4.3.

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/158041/2020; F.No. 21-42/2020-IA-III)

- **53.4.3.1.** The Project Proponent (PP) along with his accredited consultant M/s Perfact Enviro Solutions Private Limited made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) The project is located at Khasra No. 8/26/2, Village Kapashera, Tehsil Vasant Vihar, New Delhi Latitude- 28°31'42.37"N and longitude- 77° 4'41.90"E.
- (ii) The project is new to be developed on Plot area of 11,930 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. Total No. of dwelling units will be 178 Nos. of 3 BHK & 4 BHK type and 72 Nos. of EWS type. 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 09 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 m³ 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) NBWL Clearance is not required as Asola Wildlife Sanctuary is located 13.15 km, ESE direction.
- (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.

53.4.3.2. The EAC noted the following: -

- (i) The proposal is to grant Environmental Clearance to the 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 net 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.
- **53.4.3.3.** The project proponent informed that proposed project titled "Group Housing" will be located at Khasra No. 8/26/2, at Village Kapashera, Tehsil Vasant Vihar, New Delhi will be developed by M/s Anant Raj Ltd. The land is in the name of M/s Sarvodaya Builders (P) Ltd. which was later merged with M/s Anant Raj Ltd vide amalgamation order by Hon'ble High Court of Delhi vide CP Nos. 117-121/2006 order dated 03rd October, 2006. The total plot area of the proposed project is 11,930 sqm (2.947 Acres) and the total built-up area of the project will be 50,220.705 sqm. The activities in the proposed complex will be Dwelling Units (178 No.), EWS Units (72 No.) & Community Facility (Club with proposed area of 367.851 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 4th January, 2019 for the said project/activity (specified at Annexure-8 of the minutes):

- (i) The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.
- (ii) The project proponent shall abide by all the commitments and recommendations made in the Form-I, IA and Conceptual Plan and submissions made during their presentation to the Expert Appraisal Committee.
- (iii) As proposed, fresh water requirement from DJB shall not exceed 92 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority
- (iv) Sewage shall be treated in onsite STP and treated effluent from STP shall be recycled/re-used for flushing, gardening and DG cooling. As proposed, excess treated water shall be used for landscaping in nearby parks and construction activity.
- (v) 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.
- (vi) 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, 02 no. of rain water harvesting recharge tanks shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vii) 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, 81 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 designated/authorized landfill site.
- (viii) 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 3171.952 sqm (34.61% of plot area) shall be developed as green area.
- (ix) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, (x) 2018, project proponent has proposed that an amount of Rs. 1.37 Crores (@ 2.0% of the project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Infrastructure development of government school and Rao Mansa Ram School at Kapashera in the form of development of smart classroom facilities, Chemical and Biological lab along with testing equipment and library in consultation with the principal, Providing 10 computers in each school and green belt development along the boundary of the schools, Development of public toilets at feasible locations in Kapashera & Dundahera villages areas in consultation with MCD, Providing 20 KW solar panels in both schools and in Kapashera and Dundehera villages and Beautification of Shiv Vihar Park and providing metallic seating. 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.

Agenda item No. 53.4.4.

Expansion of Shanti Mukand Hospital located at Plot No. 2, Institutional Area, Vikas Marg Extension, Karkardooma, Delhi by Shri Mukandilal Memorial Foundation for Heart & Medical Care - Environmental Clearance

(IA/DL/NCP/154800/2020; F.No. 21-43/2020-IA-III)

- **53.4.4.1.** The Project Proponent (PP) along with his accredited consultant M/s Grass Roots Research & Creation India (P) Limited made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) The project is located at Plot No. 2, Institutional Area, Vikas Marg Extension, Karkardooma, Delhi. Latitude: 28°38'43.88"N and longitude: 77°18'07"E.
- (ii) The project category is Expansion. Earlier, Environmental Clearance was not required, as project was constructed before 1995. The built-up area of existing hospital buildings is 8,947.022 sqm and as on date Block A & Block B are operational.

- (iii) The total plot area is 6,852.64 sqm. FSI area is 19,071.284 sqm and total built-up area of 27,862.512 sqm (Existing 8947.022 sqm, Proposed Expansion-18915.49 sqm). Total no. of beds will be 400 (existing 200 and proposed 200). Maximum height of the building will be 39.3m.
- (iv) During construction phase, total water requirement will be approx. 56 ML and same will be met through Private water tanker. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary toilets will be provided for labourers.
- (v) During operation phase, the water requirement will be met from Delhi Jal Board. The total water requirement will be approx. 464 KLD out of which domestic water requirement is 266 KLD. The fresh water demand will be approx. 206 KLD. Waste water (domestic sewage) generated from the project will be approx. 171 KLD. The domestic sewage will be treated in onsite STP capacity of 205 KL generating 137 KLD of recoverable water from STP which will be reused for Flushing, Horticulture, HVAC Cooling, etc. Surplus treated effluent will be discharged to external sewer. The wastewater (trade effluent) generated from OPD, IPD, OT, Blood bank, labs & laundry will be approx. 64 KLD, which will be treated in onsite ETP of 80 KL capacity. Treated effluent from ETP will be further discharged into sewer line.
- (vi) About 1,117 kg/day solid waste & 279 kg/day Bio-medical waste will be generated from the project. The biodegradable waste (335.1 kg/day) will be processed in OWC, Inert waste (111.7 kg/day) will be used for land filling and the non-biodegradable waste generated (670.2 kg/day) will be handed over to vendors.
- (vii) The power will be supplied by TATA Power Ltd. The maximum demand load for the project will be approx. 1,366 kW for the project.
- (viii) Rooftop rainwater of buildings will be collected in 02 RWH Pits of total 201.9 m³/hr capacity for harvesting after filtration.
- (ix) Parking facility for 327 ECS is proposed to be provided against the requirement of 326 ECS.
- (x) Proposed energy saving measures: Energy will be saved using energy efficient lighting fixtures, Electronic Ballast, Timer based lighting and APFC Panel.
- (xi) It is not located within 10 km of Eco Sensitive Zone. Hence, NBWL Clearance is not required.
- (xii) Forest Clearance is not required.
- (xiii) There is no court case pending against the project.
- (xiv) Estimated Cost of the project is Rs. 99.86 Crores.
- (xv) Employment potential: It will generate direct and indirect employment opportunities for both skilled and unskilled labor during construction & operation phase.
- (xvi) Benefits of the project: Direct & Indirect employment opportunities and Infrastructural Development of the Area.

53.4.4.2. The EAC noted the following: -

(i) The proposal is to grant Environmental Clearance to the project i.e. Expansion of Shanti Mukand Hospital located at Plot No.2, Institutional Area, Vikas Marg Extension, Karkardooma, Delhi by Shri Mukandilal Memorial Foundation for Heart & Medical Care for net plot area 6,852.64 sqm and total built-up area of 27,862.512 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.
- **53.4.4.3.** The EAC also noted that expansion of Shanti Mukand Hospital is proposed by Shri Mukandilal Memorial Foundation for Heart & Medical Care at Plot No. 2, Institutional Area, Vikas Marg Extension, Karkardooma, Delhi on a land measuring of 1.69 acres. Earlier EC was not required, as project was constructed before 1995 and was not under purview of EIA Notification. The existing built up Area of the hospital i.e. 8,947.022 sqm has been constructed. Block A and Block B are in operation. Following components will be added:
 - Vertical expansion by adding three (3) new floors on existing Block-B
 - Construction of new Block-C

Further, the PP in its application (Form-2) has submitted that no tree will be cut during the proposed expansion. However, in response to a query by EAC, PP admitted that 22 nos. tree may be cut. After detailed deliberations, the EAC asked project proponent to submit following documents:

- (i) Revise Application (Form-2) as it did not provide details for trees to be cut. Further Provide details of tree cutting/transplantation proposed due to proposed expansion. Further, there are inconsistencies in submissions made to EAC and submissions in Conceptual Plan w.r.t. reuse of treated water from the ETP. EAC cautioned PP that data provided in the Application and other associated documents shall be consistent with the data present before EAC and asked to clarify their stand on this aspect.
- (ii) Elaborate the permissibility/structural safety of the proposed alteration through an institute of repute.
- (iii) Submit the plan for solid waste management and bio medical waste management. Also highlight location and space allocated for management of biomedical and solid waste management.
- (iv) Submit revised Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May, 2018.

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.

Agenda item No. 53.4.5.

Setting Up of 5 MLD Common Effluent Treatment Plant' at Kadechuru Industrial Area, Yadgiri Taluk, Yadgiri District, Karnataka by M/s Mother Earth Environ Tech Pvt Ltd - Reconsideration for Environmental Clearance

(IA/KA/MIS/152717/2020; F.No. 10-22/2020-IA-III)

53.4.5.1. The EAC noted the following: -

(i) The proposal is for granting Environmental clearance to the project 'Setting Up of 5 MLD Common Effluent Treatment Plant' at Kadechuru Industrial Area, Yadgiri Taluk, Yadgiri District, Karnataka by M/s Mother Earth Environ Tech Pvt Ltd.

- (ii) The project is covered under category 'B' of item 7(h) 'Common Effluent Treatment Plant (CETP)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and required appraisal by SEAC and SEIAA, Karnataka. However, due to applicability of General Condition i.e. the project site is 2.15 km away from the state boundary of Telangana (District Mahbubnagar, Maganur Mandal), the proposal has been considered under Category 'A' and appraised at Central level by sectoral EAC.
- (iii) The proposal was earlier considered by the EAC (Infra-2) in its 52nd meeting held during 18-19 June, 2020. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, the EAC recommended the project for grant of environmental clearance with specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019.
- (iv) Subsequently the PP vide their e-mail dated 6th July, 2020 requested MoEFCC to keep in abeyance their proposal as they intent to expand the area for collection of effluent beyond the industrial estate as proposed in the EIA Report. It was also conveyed that there are no CETP's in the neighbouring districts and industrial area developed by Karnataka State Govt. There are several Bulk drug industries existing in Raichur Growth centre with no CETP in their vicinity at present. The association of Raichur Growth Centre have made a request to accommodate effluent from their industries in 5 MLD CETP to be developed by M/s Mother Earth Environ Tech Pvt Ltd. PP also informed that presently industrial units as envisioned for Kadechur Industrial Area are yet be developed. Hence the project proponent wishes to revise its proposal to the extent that they also propose to receive and accommodate effluent from industries in Raichur Growth centre. The PP also requested to allow them to submit their revised proposal before the EAC.
- (v) The PP has submitted the revised EIA Report.
- **53.4.5.2.** The project proponent informed the EAC that there is request from other industries and industrial areas of surrounding districts of similar type of industries like Engineering, Pharmaceutical / Food Products, Chemical, Plastic & Rubber, Textile & Garments, Ceramics & Tiles, Granite & Marble processing, Electrical & Electronics, Automobile, etc. As Kadechur Industrial Area is occupying slowly, they have plan to source effluent from the industries of nearby districts of Karnataka state to operate CETP techno-financially viable. Proposed state of art 5.0 MLD capacity Common Effluent Treatment Plant (CETP) will serve the small and medium industries located in Kadechur industrial area and surround districts and ensure Zero Liquid Discharge and smooth industrial operations in compliance with water related regulations. The effluent from the individual industrial unit to CETP will be conveyed by pipeline / Rubber lined Tankers fitted with GPS following all legal formalities as manifest, TREM card, Leveling etc.

The EAC after detailed deliberation recommend granting environmental clearance to revised proposal under reference with the same specific conditions stipulated in the 52nd meeting of EAC by amending specific condition (iii), mentioned in the para 52.3.7.3. of minutes of 52nd meeting of the EAC (Infra-2), as under:

- (iii) The project proponent and the State Pollution Control Board should ensure that the membership of the CETP is restricted to only those industries which legitimately exists in the Kadechuru Industrial area, Raichur Growth Center and surrounding districts. A list of industries in this regard shall be prepared be prepared by the PP, which will have the following details:
 - Name of Industry
 - Office Address
 - Location of Industry

- Status of Consent under Water Act along with order number.
- Status of consent under Air Act along with order number.
- Production capacity as per consent orders.
- Total industrial Effluent to CETP as per consent order.

Agenda item No. 53.4.6.

Extension of Runway with Blast Pad, RESA, Taxiway, Apron, GSE Area, Isolation Bay, New Domestic Terminal Building and Miscellaneous works at Tuticorin Airport by M/s Airports Authority of India, Tuticorin Airport - Terms of reference

(IA/TN/MIS/153310/2020; F.No. 10-41/2020-IA-III)

53.4.6.1. The Project Proponent (PP) along with his accredited consultant M/s ABC Techno Labs made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) Tuticorin Airport is a domestic airport located about 16-km from Tuticorin city, Tamil Nadu. It is serving the districts of Tuticorin, Tirunelveli, Kanyakumari, Ramanathapuram and Virudhunagar in southern Tamil Nadu. It is the fifth busiest airport in Tamil Nadu after Chennai, Coimbatore, Tiruchirapalli & Madurai. Tuticorin Airport is located at Kumaragiri, Servaikaranmadam, Mudivaithanandal & Kattalankulam villages of Tuticorin Taluk and District.
- (ii) Geographically, airport is located at Latitude 08^o43'11.9" to 8^o44'09.03" N, Longitude 78^o00'30.9 to 78^o02'50.1" E and altitude of 24 m above MSL.
- (iii) The proposed expansion project involves extension of Runway with Blast Pad, Runway End Safety Area (RESA), Taxiway, Apron, Ground Support Equipment (GSE) Area, Isolation Bay, New Domestic Terminal Building & Miscellenious Works, as detailed below.
 - a. extension of Runway in the beginning of 'Runway 10' by total 1000 M x 45 M;
 - b. extension of runway in the beginning of 'Runway 28' by 765M x 45M to make total runway length from 1350 M x 30 M to 3115 M x 45:
 - c. strengthening of existing runway to cater for the strength of Code 'C' critical aircraft A-321;
 - d. increasing width of existing runways from 30m to 45 m by constructing 7.5m wide pavement on either side of centre line of runway;
 - e. constructing 60 M x 60 M Blast Pad at Runway 10 and Runway 28;
 - f. constructing 90 M x 240 M RESA at both the ends of Runway strip of Runway 10/28;
 - g. Construction of centrally air-conditioned Domestic Terminal Building having an area of 10,800 sqm capable of handling 600 PAX (300 ARR PAX +300 DEP PAX) peak hour passengers with all modern facilities and amenities (with provision of three number aerobridges), which is proposed to have aesthetically appealing, soothing interior decoration matching the modern structure and adopt GRIHA measures in the design and consideration of the project to achieve the 4-star rating under GRIHA V-2015;
 - h. provision of 23 m wide Link Taxi Track of length 344 m (195 + 149) with 3.5 m shoulder at both sides as well as required fillets, from Runway to Apron;

- provision of 23 m wide and 1573 m long part Parallel Taxi Track with 3.5 m shoulder at both sides as well as required fillets to cater for Code-C aircraft (A-321);
- j. provision of 23 m wide and 149 m long Link Taxi Track from Runway to Parallel Taxi-Track with 3.5 m shoulder on both sides as well as required fillets to cater for Code - C aircraft (A - 321);
- k. provision of Apron of size 191m X 89m for parking aircraft 5 nos. Cat-C aircraft (A-321) aircraft in power-in and power-out configuration with 20 m wide GSE Area;
- I. New Isolation Bay of 76 m X 91 m with 3.5 m wide shoulder;
- m. provision of 23 m wide link taxi track of length 244.5 m long Link Taxi Track to Isolation Bay with 3.5m shoulder on both sides as well as required fillets to cater for Code C aircraft (A- 321);
- n. construction of 6 Nos of Security hut / Watch Tower-along the perimeter Boundary Wall at newly acquired land; and
- o. other allied Works including Electrical Work, CNS Works, IT & Airports Systems Works, etc.
- (iv) Land available for the operation of existing airport is about 188.56 acres (76.31 ha). About 600.97 acres (243.21 ha) of additional land free from all encumbrances has already been hand over by State Govt. for the proposed development activities. The site for the proposed development activities and allied works is free from vegetation and buildings.
- (v) Total fresh water requirement for domestic use, HVAC and landscaping will be about 465 KLD. Out of it 235 KLD will be fresh water which will be met through TWAD Board water supply. Treated wastewater from STP will also be utilized for toilet flushing and landscaping.
- (vi) No water body will be affected by the proposed development activities and allied works within Tuticorin Airport.
- (vii) No forest land is involved in the proposed project. There is no eco-sensitive area, biosphere and state / national boundary within 10 km distance from the site.
- (viii) Solid waste generated at the Tuticorin Airport will be about 500 kg/day which will be disposed as per Solid Waste Management Rule 2016.
- (ix) The estimated cost of the proposed development of Tuticorin Airport is estimated as about Rs. 380.87 Crores.
- (x) Employment Potential Construction Phase: 200 Persons directly and 500 persons indirectly. Operation Phase: 200 Persons Direct and 1000 Person Indirect Employment.
- (xi) Benefits of the projects: Better infrastructure facilities for air passengers, Promotion of tourism, trade, commerce, etc, Increase in regional economy as it will boost tourism and commercial activities in the region, Generation of more revenue to the state, hence more development of the region, More employment opportunity to people and More business and industrial opportunities.
- (xii) Standard Terms of Reference has already been generated by MoEFCC vide letter F.No. 10-41/2020-IA-III dated 27th June, 2020.
- 53.4.6.2. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project titled 'Extension of Runway with Blast Pad, RESA, Taxiway, Apron, GSE Area, Isolation Bay, New Domestic Terminal Building and Miscellaneous works at Tuticorin Airport by M/s Airports Authority of India, Tuticorin Airport.
- (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.
- **53.4.6.3.** The project proponent informed the EAC that the proposal is for expansion of the existing airport by extending runways, strengthening of existing runway to cater for the strength of Code 'C' critical aircraft A-321, provision of 60 M x 60 M Blast Pad, construction of RESA at both the ends of Runway strip, construction of centrally air-conditioned Domestic Terminal Building capable of handling 600 (300 arrival + 300 departure) peak hour passengers with all modern facilities and amenities (with provision of three number aerobridges) as detailed by PP above. Standard Terms of Reference has already been granted by MoEFCC vide letter F.No. 10-41/2020-IA-III dated 27th June, 2020.

After detailed deliberations on the proposal, the Committee recommended for grant of following specific Terms of Reference in addition to Standard ToR granted by MoEFCC vide letter F.No. 10-41/2020-IA-III dated 27th June, 2020.for preparation of EIA-EMP report:

- (i) Importance and benefits of the project.
- (ii) Submit valid Consent to Operate (CTO) for the existing Airport and compliance to the conditions of the CTO and authorization for the existing Airport.
- (iii) The EIA will discuss the compliance to the Pollution Control Laws and the notifications under the E.P. Act 1986 and get a certified report from the Pollution Control Board.
- (iv) The E.I.A. will give a justification for land requirements along with a comparison to the guidelines established by the Airport Authority of India/Ministry of Civil Aviation in this regard.
- (v) 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).
- (vi) Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- (vii) Cost of project and time of completion.
- (viii) Submit Fire NOC for existing project from concerned Department.
- (ix) The impacts of demolition and the activities related thereto shall be examined and a management plan drawn up to conform to the Construction and Demolition rules under the E.P. Act, 1986.
- (x) 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.
- (xi) Detail plan for 'deplane waste' and impact of noise on the sensitive environment specially the wildlife sanctuaries and national parks.
- (xii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and

- specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (xiii) The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.
- (xiv) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xv) 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.
- (xvi) Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
- (xvii) Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft.
- (xviii) The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.
- (xix) The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.
- (xx) The management plan will include compliance to the provisions of the MSW Rules, 2016.
- (xxi) 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 05 Km radians of the Airport.
- (xxii) The E.I.A. will also examine the impacts of construction and operation of the proposed STP and draw up a detailed plan for management including that for odour control.
- (xxiii) Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.
- (xxiv) 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.
- (xxv) Noise monitoring shall be carried out in the funnel area of flight path.
- (xxvi) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xxvii) Ground water abstraction and rain water recharge shall be as prescribed by the CGWA. A clearance/permission of the CGWA shall be obtained in this regards.
- (xxviii) Details of fuel tank farm and its risk assessment.

- (xxix) The E.I.A. should present details on the compliance of the project to the Fly Ash notification issued under the E.P. Act of 1986.
- (xxx) The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios.
 - (a) Trash collected in flight and disposed at the Airport including the segregation mechanism.
 - (b) Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - (c) Maintenance and workshop wastes.
 - (d) Wastes arising out of eateries and shops situated within the airport.
- (xxxi) 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.
- (xxxii) Submit an affidavit signed by the Board of Directors, that there is no violation and no part of the project has been implemented without Environmental Clearance.
- (xxxiii) 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.
- (xxxiv) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be prepared and submitted along with EIA Report.
- (xxxv) A tabular chart with index for point-wise compliance of above ToR.

The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Agenda item No. 53.4.7.

Mother Earth Environ tech Pvt Ltd. (Unit 2) Integrated Treatment, Storage & Disposal Facility of Hazardous waste with incineration and landfill facility at Plot no. 667 to 689, Harohalli KIADB Industrial area Phase III, District Ramanagara, Karnataka by M/s Mother Earth Environ Tech Private Limited (MEEPL) - Terms of reference

(IA/KA/MIS/157127/2020; F.No. 10-39/2020-IA-III)

- **53.4.7.1.** The Project Proponent (PP) along with his accredited consultant M/s Samrakshan, Bangalore made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) The proposal is for Mother Earth Environ tech Pvt Ltd (unit 2) Integrated Treatment, Storage & Disposal Facility of Hazardous waste with incineration and landfill facility at Plot no. 667 to 689, Harohalli KIADB Industrial area Phase III, District Ramanagara, Karnataka by M/s Mother Earth Environ Tech Private Limited (MEEPL)
- (ii) Land use of the site is Industrial area developed by KIADB to develop TSDF.
- (iii) Land use around the site up to 10 km radius includes Harohalli Industrial Area, phase I, II, III for establishing varied industries, CETP, CSTP, Solid and Hazardous waste disposal facility at Harohalli Industrial area III. Total extent of the industrial area is 904.86 hectares (phase II 371.92 ha & phase III 532.94 ha). Outside the industrial

- area there are agricultural/Horticulture activities, Habitation and other infrastructures like educational institutions etc.
- (iv) The project site will satisfy the Siting guidelines HAZWAMS/17/2000-01 published by CPCB in "Criteria for Hazardous waste Landfills".
- (v) The area details of the project are as follows:

S. No.	Particulars	Area (sqm)	Area in percentage
1.	Total plot area	35771	100
2.	Land fillable area	14296	40
3.	Landscape/Green-belt area	11800	33
4.	Other Infrastructures including storage and incinerator facility	9675	27

- (vi) The project is for land filling & Incineration of the hazardous waste. Two landfill cells of each area 10854 sqm & 3442 sqm. Incinerator of capacity 400 kg/h & its configuration. A leachate collection system with collection tank, a surface water drainage system
- (vii) The project does not fall within 10 Km of eco-sensitive area. Nearest eco sensitive area is Bannerghatta National Park. it is at a distance of 10.22 km from BNP Eco-sensitive Zone.
- (viii) The project is not located in critically polluted area.
- (ix) The project site does not involve any forest land.
- (x) Waste/residue containing oil, Contaminated aromatic, aliphatic waste/ residue containing naphthenic solvents not fit for originally intended use, Distillation residues, Process wastes, residues, and sludges, Process residue and wastes, off specification products, Date-expired products, Date expired and off specification pesticides as specified in Schedule-I of the Hazardous and Other Wastes(Management and transboundary Movement) Rules 2016.
- (xi) Industries generating incinerable hazardous waste will be collected from small/medium/large scale industries. The wastes collected and transported through the truck having registration under the MV Act and as per the specification contained in the Chapter V of the Hazardous and Other Wastes (Management and transboundary Movement) Rules 2016. The wastes will be pre-processed if required to attain the required calorific value and then incinerated as per the approved specifications. The ash generated is disposed in landfill site & scrubber bleed is sent to CETP along with leachate & other effluents after primary treatment.
- (xii) Water requirement during operation phase will be 70 KPLD which will be sourced from KIADB. Already a storage reservoir is built by the developing authority. KIADB has made arrangement to draw water from Vrishabhavati treatment plant and Cauvery River water from BWSSB.
- (xiii) There are about 136 trees of different species (6 species). The age of the trees is around 5 to 10 years. All trees are at the boundary /periphery of the plot. Hence, no tree cutting will be done.
- (xiv) There is no litigation involved in the site.
- (xv) Investment/cost of the project will be Rs.43 Crores.
- (xvi) Employment potential: during construction 70 and during operation 30.
- (xvii) Benefits of the project The TSDF will cater for disposal of industrial hazardous waste from the industries in Karnataka.

53.4.7.2. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project 'Mother Earth Environ tech Pvt Ltd., (unit 2) Integrated Treatment, Storage & Disposal Facility of Hazardous waste with incineration and landfill facility at Plot no. 667 to 689, Harohalli KIADB Industrial area Phase III, District Ramanagara, Karnataka by M/s Mother Earth Environ Tech Private Limited (MEEPL).
- (ii) The project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.
- **53.4.7.3.** *M/s.* Mother Earth Environ Tech Private Limited (MEEPL), is operating a Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at Harohalli II Phase in Karnataka Industrial Area Development Board (KIADB), Harohalli Industrial area, Ramanagara District, Karnataka since 2016 and has valid CFO (Consent No-AW-311640 valid up to 30.06.2021). MEEPL now proposes to establish a new integrated common TSDF facility with Landfill and Incineration facility in 8.83 acres of land at Phase III in the same Industrial area. KIADB has obtained Environmental Clearance from MoEF&CC vide EC no. F.No.21-142/2015-IA.III dated 21st September, 2017 for the Phase II and Phase III of the Harohalli Industrial area, Ramanagar District, Karnataka.

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 for the above-mentioned project:

- (i) The EIA would address to the conformity of site to the stipulations as made in the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and will have a complete chapter indicating conformity to the said rules.
- (ii) Project proponents would also submit a write up on how their project proposal 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 24th May, 2010.
- (iii) Status of compliance to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- (iv) Details of various waste management units with capacities for the proposed project.
- (v) List of waste to be handled and their source along with mode of transportation.
- (vi) Other chemicals and materials required with quantities and storage capacities.
- (vii) Details of temporary storage facility for storage of hazardous waste at project site.
- (viii) Details of pre-treatment facility of hazardous waste at TSDF.
- (ix) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (x) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xi) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xii) Hazard identification and details of proposed safety systems.

- (xiii) 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.
- (xiv) Ground water quality monitoring in and around the project site.
- (xv) The Air Quality Index shall be calculated for base level air quality.
- (xvi) Status of the land purchases in terms of land acquisition Act. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- (xvii) Rehabilitation &Resettlement details in respect of land in line with state Government policy.
- (xviii) Details of effluent treatment and recycling process, stagewise reduction in all relevant parameters with hydraulic load.
- (xix) Leachate study report and detailed leachate management plan to be incorporated.
- (xx) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xxi) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- (xxii) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- (xxiii) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xxiv) A detailed Plan for green belt development.
- (xxv) 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.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May, 2018 shall be prepared and submitted along with EIA Report.
- (xxix) A tabular chart with index for point-wise compliance of above ToRs.
- (xxx) 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. However, submit details of issues raised during public hearing held before grant of environmental clearance dated 21.09.2017 for Harohalli Industrial area, Ramanagara District, Karnataka.

The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Agenda item No. 53.4.8.

Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) of Gwalior Zone in Madhya Pradesh at Mohna Industrial Area Village Mohna, Tehsil Gatigaon District Gwalior, Madhya Pradesh by M/s Madhya Pradesh Industrial Development Corporation Limited - Terms of reference

(IA/MP/MIS/159478/2020; F.No. 10-42/2020-IA-III)

- **53.4.8.1.** The Project Proponent (PP) along with his accredited consultant M/s Shivalik Solid Waste Management Ltd made a presentation and presented following parameters and salient features of the project to the Committee:
- (i) MP Industrial Development Corporation Ltd. (MPIDCL), Bhopal proposes to set up an Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) along with Secured Land Fill (SLF) at Mohna Industrial area, District Gwalior, Madhya Pradesh.
- (ii) The details of the project are:
 - a. Secure Landfill- 33712 MTA, Period-25 Years,
 - b. Incinerator About 1TPD,
 - c. Electronic Waste Management facility- 15,000 MTA,
 - d. Area for Pre-processing of waste for co- processing, Plot Area -36.30 Acres (14.7 Hectares).
- (iii) Proposed project will cater to environmentally and economically sound disposal of waste generated in Gwalior zone of Madhya Pradesh, which encompass the Gwalior, Bhind, Morena, Datia, Guna, Ashoknagar, Sheopur, Shivpuri, Chhatarpur, Tikamgarh, Niwari Districts of Madhya Pradesh within 200-250 km radius minimizing long distance haulage of waste.
- (iv) Maximum water consumption will be total 91 KLD. The source of water will be Ground Water. Application shall be made to CGWA for permission.
- (v) Domestic Wastewater- Sewage treatment by septic tank and soak pit. Vehicle Wash/Tyre Wash/ Lab Waste and Leachate from SLF will sent to MEE Plant after primary treatment. Residual salts will be disposed of in the Landfill.
- (vi) The waste will be received from the industries generating hazardous waste as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, located in Gwalior Zone. The waste will be collected in dedicated vehicles/closed containers authorized by the state pollution control board. Based on the characteristics of the waste received appropriate treatment shall be provided as per CPCB norms before disposal in the landfill/Incinerator. Ash from the incinerator shall be disposed in secured landfill.
- (vii) Total manpower requirement for the proposed project will be around 68 personnel. Preference will be given to residents as far as possible. However, for senior & technical posts, qualification & experience will be a benchmark.
- (viii) The power requirement is 200 KW. In case of power failure, 1 D.G. Set of 200 KVA capacity is available to fulfil the requirement.
- (ix) Investment/Cost of the project will be Rs. 7692.56 Lakh.
- (x) Employment potential: Total manpower requirement for the proposed project will be around 68 personnel.

(xi) Benefits of the project: Positive impact on environment in terms of better management of hazardous waste in the region. More employment opportunities will be created. Aesthetics of the area shall improve.

53.4.8.2. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project 'Integrated Common Hazardous Waste Treatment Storage and Disposal Facility (ICHWTSDF) of Gwalior Zone in Madhya Pradesh at Mohna Industrial Area Village Mohna, Tehsil Gatigaon District Gwalior, Madhya Pradesh by M/s Madhya Pradesh Industrial Development Corporation Limited.
- (ii) The project/activity is covered under category 'A' of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level.
- **53.4.8.3.** The project proponent informed the EAC that as per the Madhya Pradesh Pollution Control Board Report (2017-2018) there is only one common facility for Treatment, Storage and Disposal (CTSDF) of Hazardous waste in the State, which is located at Pithampura, District Dhar. There are 374 large/ medium/ small scale industries located in Gwalior Zone generating 25197 MT/yr of hazardous waste, presently being sent to the existing TSDF at Pithampura located at about 550 Km away. This is being found to be highly uneconomical due to high transportation cost, increased chances of accidental spillage during long distance transportation and monopoly of Operator. The three sites namely Sitapur Pahadi Industrial area, Morena, Mohna Industrial area, Gwalior and Malanpur Industrial area, Bhind were identified and based on preliminary assessment for selection of sites as per Criteria provided by CPCB, prima-facie suitable site was identified.

The EAC noted that PP has not presented any comparative site analysis details for three sites referred to in the presentation. Pending the availability of the information the EAC could not examine suitability of the site selected for the proposed facility by the project proponent. It was also noticed during presentation that Parbati River is about 300 m from project site and there exists other ecological sensitive areas and waterbodies within 10 km of the project site. However, no details of river, water bodies and Reserve/Protected Forest have been provided in the Form-1 and Pre-feasibility Report. The Committee opined that the project proponent should remove all these discrepancies and submit Revised Form-1 and Pre-feasibility Report.

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.

Agenda item No. 53.4.9.

Integrated Municipal Solid Waste Management Project for Jhumri Telaiya and Koderma at Village Chandrodih Tehsil Koderma, District Koderma, Jharkhand by M/s Jhumri Telaiya Nagar Parishad - Terms of reference

(IA/JH/MIS/157101/2020; F.No. 10-40/2020-IA-III)

53.4.9.1. The Project Proponent (PP) along with his accredited consultant M/s Wolkem India Limited made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The proposed Integrated Municipal Solid Waste Management Processing Facility is situated in near Village Chandrodih, Tehsil & District Koderma in Jharkhand.
- (ii) The proposed project is categorized under Item "7(i) Common Municipal Solid Waste Management Facility (CMSWMF)" in the EIA Notification, dated September 14, 2006 and its amendments.
- (iii) Expected Waste Quantity:
 - a. Current waste generation in Jhumari Telaiya is about 30.01 MT and in Koderma is about 9.81 MT.
 - b. Waste generation projected for 2040 for Jhumri Telaiya and Koderma are 44.48 MT and 16.86MT respectively.
- (iv) Proposed processing facility will be of 52 TPD including composting and RDF. Design Life of Landfill is 20 Years (2020 to 2040).
- (v) Land breakup of the site is as follows:

S.No.	Area	in sqm	%
1	Built up area	280.0	0.86
2	Platform area 1523.0		04.76
3	Road area	ad area 7228.78.0	
4	Plantation area	10700.0	33.09
5	Landfill area	11703.0	
6	Leachate evaporation tank	912.0	02.81
	Total area	32366.77	100

- (vi) Water Requirement Total water requirement in the project during operational phase will be about 15.5 KLD (Fresh water requirement-6.2 KLD) which will be met from PHED supply. There is no any surface & ground water source exist in project site; however, there is surface water bodies are existing in study area.
- (vii) Man power requirement During construction phase- 30 persons will be employed. During operational phase- 15 on site (about 150-200 temporary employees will be hired for primary collection, transportation and miscellaneous jobs).
- (viii) Power requirement The energy requirement for operating the proposed integrated MSW processing and disposal facility is about 250 KVA met from JBVNL.
- (ix) Greenbelt Development Plan: About 10,700 sqm (2.64 acres) areas will be covered under the plantation. Proposed greenbelt is approx. 33.09% of total land.
- (x) The project doesn't come under Critically Polluted Area.
- (xi) Koderma Wildlife Sanctuary is within 10 km radius of project site. The boundary of Eco sensitive zone of Koderma Wildlife Sanctuary is at a distance of 3.3 Km from project site.
- (xii) Capital cost of EMP is estimated to be Rs. 40.0/- Lakhs & Recurring cost Rs. 15.0/- Lakhs per annum. The project will contribute Rs. 25.0 Lakhs as funds for CER activities to contribute 2% of the Capital Investment of the project.
- (xiii) Investment/Cost of the project is Rs. 10.2325 Crores.
- (xiv) Employment potential- During Construction Phase: 30 persons, During Operational Phase: 15 skilled & semiskilled on site. (Appx.150-200 temporary Labours (collection, transportation and Segregation).
- (xv) Benefits of the project- As of now, there is no scientific disposal method being followed in this area so this project has the prime requirement in the area. The importance of effective Municipal Solid Waste Management (MSWM) services is to

protect public health, the environment and natural resources. To promote the ecological management of solid waste in compliance with the principle of the 4 Rs: Reduce, Reuse, Recycle, Recover and safe disposal. Development of the facility will create more jobs in the area and also present the opportunity to provide improved products or services to people in the area.

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

- (i) The proposal is for Terms of Reference to the project 'Integrated Municipal Solid Waste Management Project for Jhumri Telaiya and Koderma at Village Chandrodih Tehsil Koderma, District Koderma, Jharkhand by M/s Jhumri Telaiya Nagar Parishad.
- (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 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
- **53.4.9.3.** The project proponent informed the EAC that the project is proposed by Jhumri Telaiya Nagar Parishad for Jhumri Telaiya & Koderma at Khasra No-598, Rakba- 8.00 acre, Thana no-290, Jamabandi No- 18, circle- koderma in district Koderma of Jharkhand state. It will be developed as processing and disposal site for pre-segregated waste. Source of waste will be all wards of Koderma and Jhumri Telaiya. It will include Processing facility, namely 52 TPD, Aerobic Compost Plant 25 TPD, RDF- 20 TPD and Sanitary landfill of 11,703 sqm area.

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

- (i) Importance and benefits of the project.
- (ii) Submit NOC/certificate from Chief Wildlife Warden/Forest Officer to the effect that the project site does not lie within notified boundary of Koderma Wildlife Sanctuary /Eco Sensitive Zone.
- (iii) A sensitivity analysis of the site shall be carried out as per the MoEF&CC criteria and form part of the EIA report.
- (iv) The EIA would include a separate chapter on the conformity of the proposals to the Municipal Solid Waste Management Rules, 2016 and the Construction and Demolition Waste Management Rules, 2016 including the sitting criteria therein.
- (v) An integrated plan of operation including the segregation of wastes at the household level and its transportation to the site shall be submitted. List of waste to be handled and their source along with mode of transportation.
- (vi) Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided.
- (vii) The EIA would give complete details of the SLF (Sanitary Landfill Facility), Compost Plant, RDF Unit, Leachate Evaporation Tanks, ETP and its impact.
- (viii) The project proponents should consult the Municipal Solid Waste Management Manual of the Ministry of Urban Development, Government of India and draw up project plans accordingly.
- (ix) Waste management facilities should maintain safe distance from the nearby pond.

- (x) Methodology for remediating the project site, which is presently being used for open dumping of garbage.
- (xi) Layout maps of proposed solid waste management facilities indicating storage area, plant area, greenbelt area, utilities etc.
- (xii) Details of air emission, effluents generation, solid waste generation and their management.
- (xiii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xiv) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xv) Hazard identification and details of proposed safety systems.
- (xvi) Details of Drainage of the project upto 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.
- (xvii) Details of effluent treatment and recycling process.
- (xviii) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xix) Detailed Environmental Monitoring Plan.
- (xx) Report on health and hygiene to be maintained by the sanitation worker at the work place.
- (xxi) 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.
- (xxii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum issued vide letter F.No. 22-65/2017-IA.III dated 01.05.2018 shall be prepared and submitted along with EIA Report
- (xxiii) 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.
- (xxiv) A tabular chart with index for point-wise compliance of above ToRs.

The specific ToRs as recommended above are in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

Agenda item No. 53.4.10.

Construction (Including Structural Design) of 640 dwelling unit in 20 Nos. of G+3 Blocks (32 DU's in each Blocks) at Plot No. 2302, Khata No. 148, Thana No. 25, Village Kalapathar, Tehsil Chas, District Bokaro, Jharkhand by M/s. Jharkhand Urban Infrastructure Development Company Limited - Environmental Clearance

(IA/JH/NCP/161991/2020; F.No. 21-45/2020-IA-III)

The project proponent vide e-mail dated 23.07.2020 has requested to defer their proposal as they would not attend the meeting due to unavoidable circumstances on their end. PP also requested to include proposal in upcoming EAC Meeting. As such, the proposal was deferred.

53.5 Any other item with the permission of Chair- Nil

53.5.1 Note for Consideration w.r.t. Application No. IA/KL/MIS/146249/2020 by M/s Western Ghats Development Ltd seeking Terms of Reference for EIA Report for construction of about 3.7 km long 'Passenger Ropeway' connecting Adivaram in Kozhikode District to Lakkidi in Wayanad District, Kerala

It was informed that the proposal under reference was examined by the EAC (Infra-2) in its 50th Meeting held in April, 2020 as Agenda item No. **50.4.8.1** wherein Committee deliberated upon information provided by the project proponent and noted that proposed project lies within 5 km area of Malabar Wildlife Sanctuary and also lies within the ecosensitive area of Western Ghats. A decision was taken by EAC that a sub-committee consisting of Dr. H. C. Sharatchandra, Shri B C Nigam and Dr. Manoranjan Hota, Member of the EAC (Infra-2) may visit the project site and submit the report. On receipt of abovementioned site inspection report from the sub-committee, EAC (Infra-2) would further deliberate on the proposal. It was also decided that the Sub-committee would furnish its report as early as possible and preferably within three months provided that situation turns out to be normal from the lockdown due to COVID -19 pandemic.

The proposal was received in the Parivesh Portal on 29th February, 2020. It has been pending at the portal on the part of the MoEFCC for a considerable time for the site visit. The restriction for inter-state movement due to spread of COD-19 are still in place and may continue in future also. Hence, this note for consideration of the EAC (Infra-2) w.r.t. suggest the way forward.

The Committee deliberated on the issue and suggested that the Ministry may consider exploring the possibility of visit by the regional office of the Ministry; if possible, in the current situation. Otherwise, PP may be called for the next meeting along with kml file, site photographs, videos, etc. as appropriate to depict the ecological sensitivity, habitation, terrain, etc. for the proposed project site and other relevant details of the proposal.

The meeting ended with vote of thanks to the Chair.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 53rd MEETING OF EAC (INFRASTRUCTURE-2) HELD DURING 23-24 JULY, 2020THROUGH VIDEO CONFERENCING

S.	Name	Designation	Attendance		Sign
No.		_	23.07.2020	24.07.2020	
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. Manoranjan Hota	Member	Р	Р	
8.	Dr. Dipankar Saha	Member	Р	Р	
9.	Dr. Jayesh Ruparelia	Member	Α	Α	
10.	Dr. (Mrs.) Mayuri H.	Member	Α	Α	
	Pandya				
11.	Dr. M. V. Ramana	Member	Р	Α	
	Murthy				
12.	Prof. Dr. P.S.N. Rao	Member	Α	Α	
13.	Shri Shard	Scientist E &	Р	Р	
		Member			
		Secretary			
14.	Dr. Vinod Kumar Singh	Scientist E	Р	Р	
15.	Shri R. K. Kodali	Scientist F &	Р	-	
		Member			
		Secretary			
		(Infra-1)			
16.	Dr. Ashish Kumar	Scientist D	Р	-	

ANNEXURE-1

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. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ 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.
- 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.

٧. **Energy Conservation measures:**

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.

VΙ Waste management:

- Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.
- 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.
 - 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.
 - Hazardous and other wastes
- The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.
- 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.
- Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

- Construction site should be adequately barricaded before the construction begins.
- (ii) Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- (iii) Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster (iv) Management Plan shall be implemented.
- 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.
- 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 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 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 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:

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, PM₁₀, PM_{2.5}, SO₂, 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.

ANNEXURE-2

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

I. Statutory compliance:

- The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case
 of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
- vi. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May 2010.
- vii. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- viii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ 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:

- 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:

 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:

- The TSDF should only handle the waste generated from the member units.
- ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.
- iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

- Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
- ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly 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.
- 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_{2.5}, PM₁₀, SO₂, 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
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-3

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

I. Statutory compliance:

- 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/Nm³.
- v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control 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:

- 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:

 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:

- 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
- No landfill site is allowed within the CBWTF site V.
- The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the νi. CPCB/SPCB.

VII. Green Belt:

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:

- Feeding of materials/Bio-medical waste should be mechanized and automatic no manual feeding is permitted.
- Proper parking facility should be provided for employees & transport used for collection & disposal of waste ii.
- Necessary provision shall be made for fire-fighting facilities within the complex. iii.
- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster iv. Management Plan shall be implemented.
- Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards ٧. 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.
- Occupational health surveillance of the workers shall be done on a regular basis. vii.

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. 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.
- 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
- Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be ٧. carried out

X. Miscellaneous:

- 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.
- 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 iv. clearance portal.
- The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned ٧. State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

 The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical
- vi. 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.
- The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final vii. approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the viii. State Government.
- The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, ix. commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- 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).
- Concealing factual data or submission of false/fabricated data may result in revocation of this environmental xi. clearance and attract action under the provisions of Environment (Protection) Act, 1986.

- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE-4

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

I. Statutory compliance:

- 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. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ 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:

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

V. Energy Conservation measures:

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

VI. Waste management:

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

VII. Green Belt:

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

VIII. Marine Ecology:

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

IX. Public hearing and Human health issues:

- i. The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.
- ii. Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration
- iii. In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.
- iv. Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.

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

vii. Occupational health surveillance of the workers shall be done on a regular basis.

X. Corporate Environment Responsibility:

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

XI. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular 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_{2.5}, PM₁₀, SÓ₂, 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.

ANNEXURE-5

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)
- İV. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- V. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- Vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission) covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation:

- i. Storm water from the project area shall be passed through settling chamber.
- ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- iv. Prior permission from competent authority shall be obtained for use of fresh water.
- v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.
- vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VII. Waste management

- i. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.

VIII. Public hearing and Human health/safety issues:

- Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
- v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
- vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.

viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

IX Corporate Environment Responsibility:

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

X. Miscellaneous:

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

ANNEXURE-6

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

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

III. Water quality monitoring and preservation:

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

xvi. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CFTP.

IV. Noise monitoring and prevention:

- 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

- 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:

- 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.

ANNEXURE-7

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (for projects involving incineration).
- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, 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. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ 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.

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.

A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing iv. civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

٧. Transportation:

- Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or i. 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
- . Traffic concestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking ii. should be fully internalized and no public space should be utilized.
- A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of iii. 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:

- 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.
- Top soil shall be separately stored and used in the development of green belt.

VII. Public hearing and Human health/safety issues:

- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster i. 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.
- Occupational health surveillance of the workers shall be done on a regular basis. iii.

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 i.
- 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. 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.
- 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.
- Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be ٧. carried out.

IX. Miscellaneous:

- 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.
- The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, iv. including results of monitored data on their website and update the same on half-yearly basis.
- The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated ٧. environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned vi. State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- The criteria pollutant levels namely; $PM_{2.5}$, PM_{10} , $\acute{S}O_2$, NOx (ambient levels as well as stack emissions) or critical vii. 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).
- The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final viii. approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the ix. State Government.
- The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, х. 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.

ANNEXURE-8

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

I. Statutory compliance:

- 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:

- Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5}) covering upwind and downwind directions during the construction period
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, 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:

- A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.

- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover

- 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.
 - 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:

- 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.
