MINUTES OF 52nd MEETING OF EXPERT APPRAISAL COMMITTEE (INFRASTRUCTURE-2) HELD DURING 18-19th JUNE, 2020

VENUE: Through Video Conferencing

DATE: 18-19th June, 2020

DAY 1- THURSDAY, 18th JUNE, 2020

Time: 11:00 hrs

52.1 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.

52.2 Confirmation of the Minutes of 51st Meeting of the EAC (Infra-2) held on 21-22 May, 2020 at New Delhi.

There were no comments and the minutes of 51st Meeting of the EAC (Infra-2) held during 21-22 May, 2020, were confirmed.

52.3 Consideration of Proposals: The EAC considered proposals as per agenda adopted for the meeting. The agenda item wise details of discussions held during the meeting are given as under.

Agenda item No. 52.3.1.

Development of Pondicherry Port under "Sagarmala" Scheme to carry out Capital dredging and construction of a barrier between drainage channel and navigation channel as part of Phase-I works by M/s Port Department, Government of Puducherry - Environmental and CRZ Clearance

(IA/PY/MIS/87021/2018; F.No. 10-8/2019-IA-III)

52.3.1.1. The Project Proponent (PP) along with his accredited consultant M/s Indomer Coastal Hydraulics (P) Ltd. made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is for development of existing Puducherry Minor Port by carrying out capital dredging and construction of a pile supported bridge between drainage channel and navigational channel under "Sagarmala" scheme in Uppalam, Puducherry.
- (ii) The Port Department of Government of Puducherry has proposed to re-commence operation in the Minor Port at Uppalam in Puducherry. The port is one of the wellknown minor ports in India. It had successfully handled different types of cargoes like fertilizers, iron scrap, carbon black feed oil, wheat, molasses, fluorspar, cement, sugar, palm olein oil, timber log etc. during the years from 1993 to 2006. After 2006, the port and its navigational channel could not be properly maintained due to financial constraints. The navigational channel then got silted up heavily. Now the Port Department is planning to re-establish the past status of the Puducherry Port by improving and developing the existing port. The Port Department with funds under Sagarmala from Government of India aims for a complete up-gradation of the existing Minor Port as all-weather Port.
- (iii) Puducherry Minor Port is located at Latitude 11°55'1.47" N and Longitude 79°49' 28.12" E in Re-Survey No. 402, Uppalam Village, Puducherry about 2 Km upstream from the Ariyankuppam River mouth.

- (iv) The project will include re-commencement of existing minor port by carrying out capital and maintenance dredging and construction of piled bridge between drainage channel and navigational channel. No construction of breakwaters and no land acquisition is involved. No dirty cargos i.e. coal, iron ore shall be handled.
- (v) The Project components are (a) Capital dredging in the port basin and in navigational channel, (b) Disposal of dredged sediments and (c) Construction of a pile supported bridge cum walkway across the drainage channel to prevent solid waste disposal into the port waters. The details are as follows:
 - a) Capital dredging 0.73 million m³.
 - b) Maintenance dredging 0.15 million m³ per year.
 - c) Dredged material (0.51 million m³) to be used for nourishment at the intertidal area to the north of northern breakwater with uniform dumping and not exceeding the height of 4 m. Proposed beach nourishment will further stabilize the coast.
 - d) Construction of piled bridge cum walkway to prevent solid waste draining into the port channel.
- (vi) Out of 0.73 million m³ of capital dredging, 0.51 million m³ of dredged material shall be discharged along the shore at a distance of 3 to 4 km to the north of the port for nourishing the beach while the remaining 0.22 million m³ shall be deposited on land within a distance of 1 km.
- (vii) Approximate size of the navigational channel is 2 km length and 40 m wide. Size of the pile supported bridge cum walkway across the drainage channel is 60 m length and 5 m wide.
- (viii) Shoreline modelling study has been done by IITM, Chennai. It has been recommended to deposit / nourish the northern part of the coastline with dredged sediments.
- (ix) The proposed project area is not in critically polluted area.
- (x) Terms of Reference (ToR) was granted by MoEFCC vide letter F. No. 10-8/2019-IA-III dated 19th February, 2019.
- (xi) Public Hearing was conducted on 2nd August, 2019 at Puducherry old port area, Port Department, Rue Dumas street, Puducherry.
- (xii) Puducherry Coastal Zone Management Authority (PCZMA) has recommended the project vide letter No. 1810/DSTE/PCZMA/CLR/SCI/ 2019/318 dated 13th September, 2019. While recommending the proposal, PCZMA has, inter-alia, mentioned that dredged sand from the inner channel shall be tested for physicochemical and biological analysis before depositing it on the land in proposed confined areas instead of dumping it in the offshore at -20m CD as mentioned in the proposal. As per the PCZMA's recommendations, the project site falls under CRZ-1A, 1B, CRZ-II, CRZ-IVA, CRZ-IVB as per the CRZ Notification, 2011 and the existing Coastal Zone Management Plan (CZMP).
- (xiii) The water requirement during the construction phase will be around 15 KLD, which will be sourced from the PWD. However, if there is a shortfall, it will be met with water from water tankers and water suppliers.
- (xiv) In operational phase, for domestic purpose water requirement for the proposed project will be 15 KLD, which will also be supplied by the PWD/ external agencies. No ground water will be tapped for construction as well as for operational phase. Desalination and recycling techniques of wastewater will be encouraged for future needs.
- (xv) The practice of solid and hazardous waste management as per Solid Waste Management Rules, 2016 and Hazardous and Other Wastes (Management and

Transboundary Movement) Rules, 2016 will be followed in the proposed activities. Solid waste generated at construction site should be properly collected, segregated and disposed as per the present solid waste management practice at site. Solid waste generated from the barges and dredgers shall be collected at periodic intervals and disposed off properly. Used oil and discarded drums will be stored and sold to approved recyclers. Contaminated soil, if any shall be treated in accordance with Hazardous Waste (Management and Transboundary Movement) Rules, 2016.

- (xvi) The estimated cost of the project is Rs. 44 Crore.
- (xvii) Employment potential: Temporary for 20 persons while dredging. The proponent has planned to recruit numbers of skilled, semi-skilled and unskilled man power. During the construction phase direct and indirect employment through contracts for civil construction, mechanical erection, electrification, piping works and associated amenities. The indirect employment potential of the projects would be significantly beneficial for the area. The proposed project is employing many people of various skills which would mean income to their families.
- (xviii) Benefits of the project: The proposed dredging will help the fishermen for their day to day life since they will get sufficient draft to bring their boats on 24 x 7 basis into the fishing harbor, which shares a common entrance with the commercial minor port. This proposal would generate funds for the Govt. of Puducherry in terms of lease rent. Lead to productive use of space. Construction of a piled bridge cum walkway would prevent solid waste draining into the port channel.
- 52.3.1.3. The EAC noted the following: -
- (i) The proposal is for grant of Environmental and CRZ Clearance to the project 'Development of Pondicherry Port under "Sagarmala" Scheme to carry out Capital dredging and construction of a barrier between drainage channel and navigation channel as part of Phase-I works by M/s Port Department, Government of Puducherry.
- (ii) The proposed activities are: i) capital dredging in the port basin and navigational channel, ii) disposal of dredged sediments having sand fractions on the northern side of the shoreline for beach stabilization and clay type sediments at offshore in open sea and iii) construction of a pile supported bridge cum walkway across the drainage channel to prevent solid waste disposal into the port waters.
- (iii) 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.
- (iv) Terms of Reference (ToR) was granted by MoEFCC vide letter F. No. 10-8/2019-IA-III dated 19th February, 2019.
- (v) Public Hearing was conducted on 2nd August, 2019 at Puducherry old port area, Port Department, Rue Dumas street, Puducherry.
- (vi) Puducherry Coastal Zone Management Authority (PCZMA) has recommended the project vide letter No. 1810/DSTE/PCZMA/CLR/SCI/2019/318 dated 13th September, 2019.

The Committee, inter-alia deliberated upon the issues raised during the Public Hearing/Public Consultation. It was noted that the concerns expressed during the Public Hearing/Public Consultation were primarily on welfare measures for fishermen and fishing, restriction on the release of wastes into the sea and paves way for the development of the livelihood of the fishermen, transport and road plan of port operations, Employment, Financial support, control of pollution, protection of the environment etc. The Committee

noted that issues raised during Public hearing have been addressed by the PP satisfactorily and incorporated in the final EIA-EMP 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 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. The Project Proponent is also under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein.
- (ii) 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.
- (iii) All the recommendations and conditions specified by the Puducherry Coastal Zone Management Authority (PCZMA) vide letter No. 1810/DSTE/PCZMA/CLR/SCI/2019/318 dated 13th September, 2019 shall be complied with.
- (iv) The project proponent shall comply with the air pollution mitigation measures as submitted.
- (v) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- (vi) Dredging shall not be carried out during the fish breeding season.
- (vii) Dredging, etc. shall be carried out in confined manner to reduce the impacts on marine environment. Turbidity should be monitored during the dredging.
- (viii) No underwater blasting is permitted.
- (ix) 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.
- (x) 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.
- (xi) The fresh water requirement of 15 KLD shall be met from the PWD source. It should be met with water by water tankers through authorized water supplier; only if there is a shortfall.
- (xii) Sewage generated will be treated through septic tanks soak pit system.
- (xiii) Marine ecological studies and its mitigation measures for protection of phytoplankton, zooplanktons, macrobenthos, estuaries, mangroves, coral reefs, sea-grass beds, and oceanic island etc. as given in the EIA-EMP Report shall be complied with in letter and spirit.
- (xiv) A copy of the Marine and riparian biodiversity management plan duly validated by the State Biodiversity Board shall be obtained and implement in letter and spirit.

- (xv) A continuous monitoring programme covering all the seasons on various aspects of the coastal environs need to be undertaken by a competent organization available in the State or by entrusting to the National Institutes/renowned Universities/accredited Consultant with rich experiences in marine science aspects. The monitoring should cover various physico-chemical parameters coupled with biological indices such as microbes, plankton, benthos and fishes on a periodic basis during construction and operation phase of the project. Any deviations in the parameters shall be given adequate care with suitable measures to conserve the marine environment and its resources.
- (xvi) 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) While dredging, sediment should be monitored fortnightly at source and disposal location of dredging.
- (xviii) 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.
- (xix) If Rock blasting is necessary, there are chances of fish mortality due to blasting. Necessary and adequate planning be made while rock blasting in order to prevent impact to local biota including fish. During blasting, monitoring should be carried out for the health of fish also.
- (xx) 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.
- (xxi) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.
- (xxii) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.
- (xxiii) 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.
- (xxiv) The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
- (xxv) 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. 0.44 Crores (1.0% of the project cost) shall be earmarked under Corporate Environment Responsibility (CER) Plan for the activities such as Infra development for drinking water supply, sanitation, health, housing for BPL families, skill development, School infra, facilities and support (e.g. library, science lab etc.), Contribution to various Govt schemes (Swachh Bharat, Skill development etc.), Plantation in community areas 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. 52.3.2.

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)

52.3.2.1. The EAC noted the following: -

- 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, wherein the EAC sought some additional information. The project proponent submitted/uploaded the additional information on 5th May, 2020 and 11th May, 2020 on 'Parivesh' Portal.
- (vi) The proposal was also placed for consideration of EAC (Infra-2) in its 51st meeting held during 21-22 May, 2020. However, the project proponent did not attend the meeting and as such, the proposal was deferred. Now, on request of the project proponent, the proposal is being further considered by the EAC (Infra-2) in this meeting.

52.3.2.1. The EAC in the light of above notes deliberated on the information provided by the *PP* and further noted that the Environment and Forest (EC.3) Department, Secretariat, Chennai vide letter No. 19530/EC.3/2018-1 dated 14.11.2018 has forwarded the proposal to the Ministry to grant CRZ clearance to the project under CRZ Notification, 2011. While forwarding the proposal, it has been informed that the proposal was placed before the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) in 102nd meeting held on 22nd September, 2018 and the TNCZMA has resolved to recommend the proposal to the Ministry for grant of CRZ Clearance under CRZ Notification, 2011.

The project proponent has submitted point-wise ToR Compliance along with Annexures, copy of CZMA recommendations given by Tamil Nadu Coastal Zone Management Authority (TNCZMA) and Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum issued vide letter F.No. 22-65/2017-IA.III dated 1st May, 2018. However, PP has uploaded unsigned copy of the EIA/EMP Report on PARIVESH portal and the signed version of EIA/ EMP report is not yet been made available.

From the reply given by the Consultant to the query of EAC regarding validity of his accreditation certificate for the consultant, the EAC observed that accreditation given to Center for Environment Health and Safety (the Consultant) stood expired with effect from February, 2019. They have applied for accreditation and NABET is yet to award accreditation certificate. Hence, the consultant appointed by PP does not have a valid accreditation certificate. As per provisions of EIA Notification, 2006, only accredited consultants are eligible to make the presentation. Therefore, the EAC recommended to defer the proposal to seek following information:

- (i) Valid accreditation certificate of the EIA Consultant M/s Centre for Environment, Health and Safety, Annamalai University.
- (ii) Signed copy of EIA/EMP report containing signature of all the team members.

Agenda item No. 52.3.3.

Environmental and CRZ Clearance for expansion of JSW Port at Jaigarh, Ratnagiri, Maharashtra by M/s JSW Jaigarh Port Ltd. - Amendment and Extension of validity of Environmental and CRZ Clearance

(IA/MH/MIS/152782/2020; F.No. 10-17/2006-IA-III)

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

- (i) JSW Jaigarh Port is the first deep water, all-weather, multi-cargo port in the state of Maharashtra. Environmental and CRZ Clearance to the Port was accorded by the Ministry in May, 2007. The Port was built in a record time and inaugurated in August 2009. This Greenfield, all-weather port occupies a strategic location on the west coast, as it is situated between the ports of Mumbai and Goa.
- (ii) Phase II expansion of the Port is underway, EC and CRZ Clearance for which was accorded by the Ministry vide letter F.No. 10-17/2006-IA-III dated 19th December, 2013 and subsequently amended vide letter dated 30th March, 2015, and 10th January, 2020. In the Phase-II expansion, handling capacity of the port is being expanded to 80 MTPA.
- (iii) The berths are constructed in a phased manner, and so far, 7 berths are completed out of the 10 permitted berths. As on 30th April, 2020, about 70% of the construction work has been completed as approved in the aforesaid EC and CRZ clearance letter. Currently, the port is fully operational with 5 berths having a cargo handling capacity of 40 MTPA. The remaining berths need to be completed in the next 36 months' time period, so that the annual throughput capacity at the port would increase to 80 MTPA (catering to: solid bulk, liquid bulk, containers, and break bulk unitised cargos).
- (iv) The completion status of the various berths and the associated facilities is given as follows:

Berth No.	Likely Cargo	Status	Equipment	
1	Coal/Iron Ore	Existing	Ship Unloader – 2 Nos	
2	Fertilizer/Other bulk	Existing	Mobile harbour crane	
3A	Coal/Iron Ore	Existing	Ship Unloader – 3 Nos	
3B	Sugar/Fertilizer/Container	Existing	Mobile Cranes	
4A	LPG/Later Container	Existing	FSU/Flexible hoses	
4B	Tug Berth	To be constructed	Mooring aids	
5	LNG	Existing	Unloading arms	
6A	Transshipment of Bulk	Existing	Barge Loader – 6 Nos	
6B	Crude Berth	To be constructed	Unloading arm	
6C	POL (products)/Chemical	To be constructed	Unloading arm	
6D	Crude Berth	To be constructed	Unloading arm	
6E	LPG/Chemical	To be constructed	Unloading arm	
Bitum	Bitumen	To be constructed	Hoses	
Inlan	Fertilizer/Sugar	To be constructed	Mobile cranes	

- (v) On account of subsequent national business scenarios and consumer behaviour of the hinterland, whilst some of the cargos permitted in the above-mentioned EC and CRZ Clearance letter has become infructuous and some have grown significantly. With the national scenario on the Iron Ore consumption changing with more reliance on domestic Iron ore and lesser dependence on imported iron ore, the JSW Group has leased 4 mines in the State of Odisha. The Iron Ore from these mines would be transferred to the JSW Captive Jetty in Odisha and/or Paradip Port, where JSW has an operational Iron ore berth, through slurry pipeline, and water would be sucked by desliming process from the slurry to prepare Iron Ore concentrate. This Iron Ore concentrate containing 10% moisture would be sent to Jaigarh Port, and then sent to Dharamtar Port for consumption through transshipment at expanded Dolvi steel plant.
- (vi) Hence, the Iron Ore concentrate handling would increase from the existing 5 MTPA to 17-18 MTPA, while the Coal handling would reduce from 20 MTPA to 12-13 MTPA, due to shelving of any further expansion in the thermal power plant capacity at Jaigarh and saturation of hinterland demands. The Bauxite will cease to exist, Lime stone would also be less than the 1 MTPA required and the pallet handling of 3 MTPA in the Iron & Steel quantity of 4 MTPA earmarked for the Jaigarh hinterland will completely stop keeping the subtotal of bulk solid unchanged at 30 MTPA for the port as permitted by the EC of 19th December, 2013, intact.
- (vii) Therefore, one of the submissions of this EC& CRZ Clearance extension is to present an altered cargo profile within the sanctioned volume. This change in cargo profile neither changes the volume of total bulk solid to be handled nor the total cargo volume of 80 MTPA to be handled at the port. Moreover, practicing better environmental control, especially carrying out handling of major volumes of bulk solids under covered storage, the change in cargo profile would only increase the environmental acceptability of the port. This modification does not require any additional berths, and dredging at the port. The permitted volume of cargo with the above change in cargo profile in given in the following table:

Existing Approved Cargo Profile			Proposed Cargo Profile						
S. No.	Cargo	Throughput MTPA	Receipt	Dispatch	S. No.	Cargo	Throughput (MTPA)	Receipt	Dispatch
1	Thermal Coal	20	By Ship (Bulk)	By Conveyor/ Train/ Barges in Bulk		Coal / Coke Bauxite			Ву
2	Bauxite	1.2	By Truck (Bulk)	By Ship (Bulk)	1	Lime	30	By Ship (Bulk)	Conveyor/ Road/ Rail/
3	Lime Stone	1	By Ship	By Road		Iron			Barges
4	Iron Ore	5	By Train	By Ship		Ore			
5	Iron & Steel	4	By Trailer & train	By Ship	2	Iron & Steel	1	By Road/ Rail	By Ship

52.3.3.2. The EAC noted the following: -

(i) The proposal is for grant of Extension of validity and Amendment in Environmental and CRZ clearance accorded vide letter F.No. 10-17/2006-IA-III dated 19th

December, 2013 and subsequent amended dated 30th March, 2015, and 10th January, 2020 for expansion of JSW Port at Jaigarh, Ratnagiri, Maharashtra by M/s JSW Jaigarh Port 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

52.3.3.3. The EAC also took note of submission by PP that EC and CRZ clearance for development of Jaigarh Port (Phase-I) was accorded by MoEFCC on 10th May, 2007. The port in its phase-1 was used dominantly for coal handling. EC & CRZ clearance for Jaigarh Port (Phase-II) was accorded vide letter dated 19th December, 2013. The clearance included construction of additional berths, cargos like – coal & coke, iron and steel, fertilizer, cement & clinker, LNG, POL, Chemicals, etc. to a tune of 80 MTPA. EC& CRZ Clearance was amended on 30th March, 2015 for extension of breakwater by 200m, reclamation of additional 42.5 ha land etc. Further amendment in EC & CRZ clearance were obtained vide letter dated 10th January, 2020 to handle of 2.0 MTPA LPG within the approved capacity of 10 MTPA POL.

The EAC noted that the project proponent has made instant application for two purposes i.e. (i) extension of validity of the Environmental & CRZ Clearance and (ii) amendment in the Environmental & CRZ Clearance requesting for change in cargo profile within the sanctioned capacity. The project proponent has also proposed to change the mode of transportation for some of the cargos. EAC opined that the change in cargo profile and mode of transportation will have substantial impact on the environment. The EAC also noted that existing EC&CRZ clearance is valid up to 18th December, 2020.

Therefore, the EAC was of the view that the proposal to amend EC and CRZ clearance w.r.t. change in cargo profile and their respective modes of transportation cannot be considered in view of non-availability of assessment of impact on environment due to proposed changes in cargo profile and mode of transportation. Therefore, the PP was asked to submit, (i) study on the likely impact of change in cargo profile and mode of transportation along with its mitigation measures and (ii) recommendation of Coastal Zone Management Authority, Maharashtra and its proposed mitigation measures.

As far as the validity of EC &CRZ Clearance is concerned, the EAC recommended for extension of validity of the Environmental and CRZ Clearance issued vide F. No. 10-17/2006-IA-III dated 19th December, 2013 for a further period of three years i.e. up to 18.12.2023.

All other conditions stipulated in the Environmental and CRZ Clearance issued vide *F.No.* 10-17/2006-IA-III dated 19th December, 2013 and as amended vide letters of even number dated 30th March, 2015 and 10th January, 2020 shall remain unchanged.

Agenda item No. 52.3.4.

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)

52.3.4.1. 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, wherein the EAC sought some additional information.
- (iv) The project proponent submitted/uploaded the additional information on 17th May, 2020 on Ministry's website (Parivesh Portal).

52.3.4.2. The EAC during deliberation noted that the project proponent has now submitted new matrix w.r.t. study of three alternative sites for the proposed project i.e. North Poigainallur, Nambiyar Nagar and Nagore. As per new Matrix presented to the EAC, Nambiar Location has the first ranking. PP has submitted that Nambiyar Nagar project site is found to be suitable with 800 credits out of 1000 credits whereas the other two sites North Poigainllur and Nagore are scored 550 and 550 respectively. Project proponent has submitted that in-Principal approval for the allocation of land at Nambiyar Nagar for the promotion of Fishing Harbour has been issued by the District Collector, Nagapatinam on 22nd February, 2020. The PP has also submitted that North Poigainallur site is not available. The EAC found that current submissions being made to EAC are contradicting to their earlier submissions made during 49th EAC meeting.

EAC recalled that in 49th meeting of the EAC (Infra-2) held during 25-26 February, 2020, the project proponent had submitted that North Poigainallur site is more suitable, and there are no issues related to Rehabilitation & Resettlement (R&R). It is also evident from records of discussions of 49th EAC meeting that as per the matrix presented by the project proponent to 49th EAC, North Poigainallur site was more suitable. Accordingly, the EAC in 49th meeting opined that the project proponent should select North Poigainallur site and submit revised proposal or otherwise provide proper justification for selection of Nambiyar Nagar site.

The EAC also observed that the Matrices presented so far to the EAC take in account the different parameters and hence incomparable.

The EAC after detailed deliberation deferred the proposal and asked the PP to submit the following additional information:

- (i) Reasons for contradictory outcomes from two matrices presented in 49th EAC meeting and the present meeting respectively;
- (ii) Copy of letter issued by the District Collector, Nagapatinam on 22nd February, 2020 w.r.t. allotment of land;
- (iii) Undertaking to effect that revised matrix presented to EAC in this 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.

Agenda item No. 52.3.5.

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

(IA/MH/MIS/150100/2020; F.No. 10-36/2020-IA-III)

52.3.5.1. 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) 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 0.15 MMTPA in the initial years and up to 2 MMTPA 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.
- (ii) 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.
- (iii) 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. 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. 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.

	Projected Annual Cargo				
Sr. No.	Particulars MMTPA				
1.	Steel Coils	0.4			
2.	Bulk Cement/ Bagged Cement	0.6			
3.	Silica Sand 0.2				
4.	Coarse Aggregate/ Fine Aggregate 0.5				
5.	Coal	0.1			
6.	Other Cargo 0.2				
	TOTAL	2 MMTPA			

(iv) The estimated cargo profile is given below.

- (v) Project site is located at 300 m from boundary of eco-sensitive zone of Sanjay Gandhi National Park [Protected Area notified under the Wildlife (Protection) Act, 1972].
- (vi) Adequate draft of 4 m is available so no dredging is required. Total 18210.9 sqm intertidal area will be reclaimed. Intertidal reclamation area of 12.50 acres will also be used for storage yard.
- (vii) Water supply 65 m³ 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.

- (viii) Domestic wastewater generation will be 5 KLD & will be treated in STP of capacity 5 KLD.
- (ix) Solid waste generation is about 36 kg/day. Biodegradable waste will be treated in OWC and remaining non-biodegradable waste will be disposed-off to dumping ground.
- (x) Electrical supply source will be from MSEDCL by installing transformer. 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 75 KVA will be used.
- (xi) Approximate cost of the construction of multipurpose jetty terminal during initial development i.e. in Phasel is Rs. 560 lakhs. For development of remaining all stages 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.
- (xii) 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.

52.3.5.2. 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.

52.3.5.3. From one of the slides of the Presentation, the EAC noticed presence of some industrial sheds like structures on the proposed project site. The PP also confirmed that some structures are existing admeasures to 8643.81 sqm. There are also discrepancies in the Form-1 submitted by the PP; in this context.

The EAC after detailed deliberation asked the project proponent to submit revised Application. The data / details in Form-1, Pre-Feasibility Report and in presentation must be consistent in the revised application form.

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

Agenda item No. 52.3.6.

Proposed expansion of Common hazardous waste incineration facility at Plot No. 342 B, 2nd Phase, Harohalli Industrial Area, Kanakapura Taluk, and Ramanagara District, Karnataka by M/s. E Nano Incintech - Terms of Reference

(IA/KA/MIS/155896/2020; F.No. 10-37/2020-IA-III)

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

- The proposal is for Proposed expansion of Common Hazardous waste Authorization by M/s. E Nano Incintech at 342 B, 2nd Phase, Harohalli Industrial Area, Kanakpura Taluk, Ramanagara District, Karnataka.
- The Coordinates of the location are; Corner A -12.680155, 77.441414; Corner B -12.680069, 77.441854; Corner C - 12.679471, 77.441726 and Corner D - 12.679557, 77.441279.
- (iii) M/s. E- Nano Incintech obtained Environmental Clearance for Common hazardous waste incineration facility at Plot No. 342 B, 2nd Phase, Harohalli Industrial Area, Kanakapura Taluk, and Ramanagara District for a capacity of 500 kg/hr and to incinerate 1200 MT/A of hazardous incinerable waste from MoEFCC vide letter F. No.10-88/2010-IA.III dated 10th May, 2012. EC for expansion i.e., increasing the operational hours 8 hours/ day to 16 hours/day and capacity from 1200 MT/A to 2400 MTA was also obtained from MoEFCC vide letter F.No. 10-26/2017-IA-III dated 21st March, 2018.
- (iv) Now the project proponent has submitted application for expansion of incinerator capacity from 2400 MT/A to 6000 MT/A (3600 MT/A and AFR Preprocessing (Alternate Fuel and Raw Materials Reclamation Plant)- 2400 MTA. The total Site area will be 4043 sqm. The project components are as follows:

Exis Det	-	Proposed expansion (Final Configuration)
 500 kg 8 T/day 2400 M 	y	 500 kg/hr (Rotary kiln) proposed 500 kg/hr existing (double chamber) 6000 MT/A (3600 MT/A of HW Incineration & 2400 MT/A preprocessing of HW for AFR).

- (v) The solid waste generated from facility is being dispose to authorized vendors. The scrubber water will be disposed to CETP, Pai and Pai Chemicals. The Ash from incineration of hazardous waste and flue gas cleaning is being disposing to SDF (Mother Earth Environtech Pvt Ltd). Used oil being disposing to used oil preprocessors.
- (vi) Total water requirement is 11 KLD and the source is KIADB.
- (vii) Investment/Cost of the project is Rs. 3.5 Crore.
- (viii) Employment potential: 55 nos.
- (ix) Benefits of the project: From the project the major benefits, include improving the degraded environment by establishing an Integrated Common Hazardous Waste Treatment, Storage, and Disposal Facility.
- (x) Standard Terms of Reference has already been generated by MoEFCC vide letter F.No. 10-37/2020-IA-III dated 6th June, 2020.

52.3.6.2. The EAC noted the following: -

- (i) The proposal is for grant of Terms of Reference to the project titled 'Proposed expansion of Common hazardous waste incineration facility at Plot No. 342 B, 2nd Phase, Harohalli Industrial Area, Kanakapura Taluk, and Ramanagara District, Karnataka by M/s. E Nano Incintech.
- (ii) The project/activity is covered under category 'A' of item 7(d) 'Common Hazardous Waste Treatment, Storage and Sisposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central Level by concerned EAC.

52.3.6.3. The EAC noted that the application has been made for expansion of incinerator capacity from 2400 MT/A to 6000 MT/A (3600 MT/A and AFR Preprocessing (Alternate Fuel and Raw Materials Reclamation Plant)- 2400 MTA. Standard terms of Reference have already been granted by MoEFCC vide letter F. No. 10-37/2020-IA-III dated 6th June, 2020.

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) Submit Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.
- (ii) 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.
- (iii) 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.
- (iv) Status of compliance to the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- (v) Details of various waste management units with capacities for the proposed project.
- (vi) List of waste to be handled and their source along with mode of transportation.
- (vii) Other chemicals and materials required with quantities and storage capacities.
- (viii) Details of temporary storage facility for storage of hazardous waste at project site.
- (ix) Details of pre-treatment facility of hazardous waste at TSDF.
- (x) Details of air emissions, effluents, hazardous/solid waste generation and their management.
- (xi) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xii) Process description along with major equipment and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.
- (xiii) Hazard identification and details of proposed safety systems.
- (xiv) 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.
- (xv) Ground water quality monitoring in and around the project site.
- (xvi) The Air Quality Index shall be calculated for base level air quality.
- (xvii) 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.

- (xviii) Rehabilitation & Resettlement details in respect of land in line with state Government policy.
- (xix) Details of effluent treatment and recycling process, stagewise reduction in all relevant parameters with hydraulic load.
- (xx) Leachate study report and detailed leachate management plan to be incorporated.
- (xxi) Action plan for measures to be taken for excessive leachate generation during monsoon period.
- (xxii) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
- (xxiii) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
- (xxiv) A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- (xxv) A detailed Plan for green belt development.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) 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.
- (xxix) 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.
- (xxx) A tabular chart with index for point-wise compliance of above ToRs.
- (xxxi) 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.

The ToR as recommended above is 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. 52.3.7.

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 - Environmental Clearance

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

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

(i) M/s. Mother Earth Environ Tech Private Limited (MEEPL) has proposed to install a Common Effluent treatment plant (CETP - ZLD) at KIADB Industrial Area, Kadechur Village, Yadgiri Taluk, Yadgiri District, Karnataka state. Karnataka Industrial Area Development Board (KIADB) has allotted 16.2 Ha (40.01 Acres) of land to M/s. MEEPL at Plot No. 158 to 164 to establish Hazardous and Other Waste Management & CETP facility.

- (ii) The total extent of Industrial land reserved for proposed CETP is 3.567 ha. The project involves installation of a Common Effluent Treatment Plant to treat the effluent generated from proposed industries in Kadechur Industrial Area such as Textile, Pharmaceutical, Bottling, Railway Bogie in 3 phases to cater the various industries.
- (iii) In Phase-1, 0.25 MLD capacity for the treatment of organic or Low TDS trade effluent and 0.25 MLD capacity for the treatment of inorganic or high TDS trade effluent. In Phase-2, additional 1.0 MLD capacity for the treatment of organic or Low TDS trade effluent and 1.0 MLD capacity for the treatment of inorganic or high TDS trade effluent will be developed. In Phase-3, additional 1.25 MLD capacity for the treatment of organic or Low TDS trade effluent and 1.25 MLD capacity for the treatment of inorganic or high TDS trade effluent will be developed.
- (iv) The CETP is proposed for a new industrial estate under establishment. It is planned for Engineering, Pharmaceutical / Food Products, Biotechnology, Chemical, Packaging Industries, Plastic & Rubber, Textile and Garments, Ceramics & Tiles, Granite & Marble processing, Electrical & Electronics, Automobile, Building Materials & Wood Works, etc. It will serve the small and medium industries located in Kadechur industrial area of Yadgir District, Karnataka and thus ensure Zero Liquid Discharge and smooth industrial operations in compliance with water related regulations.
- (v) The proposed project of CETP falls under Category 'B' Schedule 7(h) Common Effluent Treatment Plants (CETP's) as per Environmental Impact Assessment (EIA) Notification 2006 and its subsequent amendments. As the project site located within 5 km from the interstate boundary of Telangana i.e. 2.15 km, the proposal needs appraisal at Central Level by MoEF&CC.
- (vi) It is proposed to provide 4 Nos. of 6 TPH boiler to generate steam for operation of MEE and it will be provided with individual bag filter with 24 m height stack.
- (vii) About 7 KLD of water will be required during operation phase for domestic purposes. This water will be supplied by KIADB. For Boiler operation, about 576 KLD of water will be required for which treated effluent from CETP will be used. About 4% i.e. 23 KLD from feed water will be generated as blow down in boiler operation which will be re-circulated into HTDS influent stream of proposed CETP. Sewage generation of about 6.65 KLD will be disposed through septic tank followed by soak pit.
- (viii) The sludge and MEE salt will be disposed to TSDF. Fly ash from the boiler will be disposed to brick making units / nearby cement plants.
- (ix) Total power requirement will be 5500 KVA which will be sourced from Gulbarga Electricity Supply Corporation Limited. In case of power failure, 4 Nos D.G. sets having capacity 500 KVA each will be used.
- (x) Terms of Reference to the project was granted by MoEFCC vide letter F.No. 10-22/2020-IA-III dated 13th May, 2020.
- (xi) Public hearing was exempted, as the project is located in a notified industrial estate.
- (xii) Investment/Cost of the project is Rs. 154.73 Crores.
- (xiii) Employment potential: 150 Persons.
- (xiv) Benefits of the project: The proposed CETP will provide treatment facility with ZLD concept for the effluent generated from various industries in the industrial area with cost effective way. It will also pave the way for delivering multi-pronged benefit on the

ground by establishing regulatory adherence, environmental sustainability and enhancing business and economic sustainability in the region and for this sector.

- 52.3.7.2. 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.

52.3.7.3. The project proponent informed the EAC that proposed CETP planned in 3 phases, i.e. in Phase-1, 0.25 MLD of Low TDS & 0.25 MLD of High TDS effluent, in Phase-2, Additional 1.0 MLD of Low TDS & 1.0 MLD of High TDS effluent and in Phase-3, Additional 1.25 MLD of Low TDS & 1.25 MLD of High TDS effluent.

The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity (specified at **Annexure-6** of the minutes) while considering for accord of environmental clearance:

- (i) 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. The Project Proponent is also under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein.
- (ii) The project proponents shall implement the project only after getting Consent to Establish (CTE) from the Karnataka State Pollution Control Board. The design of the CETP including stack heights for gaseous emissions from DG Sets and Boilers should be as approved by the Pollution Control Board. The detailed design of the various unit operations shall strictly conform to the directions of the State Pollution Control Board as given in the Consent to Establish.
- (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 exist in the area. A list of industries in this regard shall be prepared by the Association 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.
- (iv) Members units shall only be allowed access to the CETP if they have consent from the State Pollution Control Board. Members units shall only be allowed access to

the CETP if they have consent from the State Pollution Control Board. Individual members to the CETP shall treat their effluents in Primary treatment systems to the Inlet quality standards of the CETP as prescribed by the State Pollution Control Board.

- (v) Conformance to the influent and effluent standards shall be the responsibility of the CETP. Periodical monitoring shall be carried out for the functioning of CETP and outlet parameters.
- (vi) Individual Members shall segregate their wastes in to concentrated and diluted streams and also as per the nature of chemical contamination vis. Cr⁺⁶, Ni, Pb, Zn etc. and store them as per conditions to be specifically imposed in this regard by the State Pollution Control Board.
- (vii) Chemical recovery and reuse, either in-house or outside shall be practiced to the satisfaction of the State Pollution Control Board. Use in agriculture shall be exercised with caution after getting the irrigation management plan approved by the SPCB.
- (viii) All tankers carrying untreated wastes and all hazardous and other wastes shall be properly labeled and transported as per the Hazardous and Other Wastes (Management and Transboundary) Rules, 2016.
- (ix) Any changes in the manufacturing process, installed capacity or the quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, will only be done after an approval of the State Pollution Control Board in the matter.
- (x) Domestic water requirement is 7 KLD, which will be met through water supply from KIADB. About 576 KLD of water will be required for boiler which will be recycled from treated effluent of CETP.
- (xi) Effective and efficient pollution control measures and also the measures for prevention and control fire/ dust explosion hazards in storage area for coal shall be undertaken. The coal storage area should have proper drainages, and wind barriers or bounded by thick two-tier green belt, wherever necessary.
- (xii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 1st May, 2018, the project proponent has proposed that an amount of Rs. 2.35 Crores (@ 1.5% of project cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Water resource improvements, Education, Health and medical facilities, Infrastructure Road & electricity, Tree plantation. 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. 52.3.8.

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

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

52.3.8.1. The Project Proponent (PP) along with his accredited consultant M/s Gaurang Environmental Solutions Pvt. Ltd. made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) HSIIDC Limited proposes up gradation of existing CETP from 4 MLD to 10 MLD capacity situated at Phase-IV, Industrial Area, Kundli District Sonipat, Haryana. The project covers an area of approximately 28,105 sqm (7 Acres). The proposed up-gradation is coming up within the premises.
- (ii) The proposed project falls under item 7(h) of the schedule of EIA Notification, 2006, i.e. Common Effluent Treatment Plant, under Category "B". However, due to presence of Haryana-Delhi interstate boundary at a distance of 2.3 Km in S direction the proposed project will be treated as Category "A" project.
- (iii) Terms of Reference to the proposed expansion was granted by MoEFCC vide letter F.No. 10-23/2019-IA-III dated 31st October, 2019.
- (iv) Public Hearing was exempted as proposed project is coming within notified Industrial Area.
- (v) The existing Common Effluent Treatment Plant (CETP) have capacity of 4.0 MLD (4000 cu.M/day), with inlet units of 10.0 MLD capacity. It is proposed to enhance treatment capacity from existing 4.0 MLD to 10.0 MLD. The existing treatment scheme consists of screening, physico-chemical treatment, Secondary/ biological (ASP) treatment and sludge handling for 4.0 MLD flow.
- (vi) The existing water requirement for 4 MLD CETP unit is 3 KLD. Additional 2 KLD water will be required for the up-gradation of existing 4 MLD CETP to 10 MLD. Source of water supply will be existing water supply of Industrial Estate i.e. from HSIIDC Kundli.
- (xiii) The ultimate quantity of raw effluent from industries has been estimated as 10 MLD. The effluent generated from member units will reach the CETP through Pipeline. The Design of upgradation the CETP along with individual unit wise reduction of relevant parameters and associated pipeline network carrying effluent from member industries to CETP should be as approved by the concerned Pollution Control Board.
- (vii) Existing Power Requirement for the project is 275 KW and additional Power Requirement for up-gradation is 425 KW/Day. Total Power Requirement will be 750 KW (Source: UHBVN). 2 no. D.G set of capacity 300 KVA (200 kVA + 100 kVA) are already installed for power backup at CETP Kundli. Additional 1 no. DG set of capacity 500 KVA will be installed for CETP up-gradation project. (Fuel used: HSD)
- (viii) Investment/cost of the Project is Rs. 23.52 Crores including cost of proposed expansion (Rs. 21.02 Crore).
- (ix) Employment Potential: 43 no. during operation phase and construction phase.
- (x) Benefits of the project: The Project will generate the indirect employment around the project area.

52.3.8.2. The EAC noted the following: -

- (i) The proposal is for granting Environmental Clearance to the project 'Up gradation of existing 4 MLD Common Effluent Treatment Plant unit to 10 MLD at Industrial Estate, Kundli, Sonipat by M/s HSIIDC Kundli.
- (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 SEIA, Haryana. However, due to

applicability of General Condition i.e. Haryana-Delhi interstate boundary at a distance of 2.3 Km in S direction the proposed project, 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 51st meeting held during 21-22 May, 2020, wherein the project proponent did not attend the meeting and as such, the proposal was deferred. Now, on request of the project proponent the proposal is further considered by the EAC (Infra-2) in its 52nd meeting held during 18-19 June, 2020.

52.3.8.3. The EAC during deliberation noted that this is an existing CETP and the project proponent has proposed for up-gradation and expansion of existing common effluent treatment plant from 4 MLD to 10 MLD capacity (based on Extended Aeration System). However, the project proponent has not submitted copy of valid Consent to Operate for the existing CETP. EAC also noted that project proponent has proposed for ZLD. It was further noticed that data provided in EIA report w.r.t. existing CETP is contradictory in terms of disposal of treated effluent. The Para 2.6 of EIA report states that the outlet of treat effluent is being disposed off directly in the Drain No. 8 running besides the CETP by pumping system through 200mm dia PVC pipeline. Whereas, water balance provided in figure 2.5 (a) titled existing water balance of EIA report states that the treated water is being used for green belt development/ industrial use for member industry.

The EAC after detailed deliberation asked the project proponent to submit following:

- (i) Valid Consent to operate issued by Haryana State Pollution Control Board for the existing project.
- (ii) Confirm the mode of disposal or utilisation of treated effluent and submit an undertaking to the effect that discharge from existing facility is in conformity with norms prescribed by CPCB.
- (iii) Submit a revised EIA Report after removing the above-mentioned discrepancies and with proper pagination. The data provided in the revised EIA report shall be consistent with data provided in application and other supporting documents. The revised EIA report shall clearer indicate the Plan to achieve the ZLD during the proposed expansion.

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

Day 2- Friday, 19th June, 2020

Time: 11:00 hrs

Agenda item No. 52.4.1.

Proposed Integrated Municipal Solid Waste Management Facility at Village Mohanpur, District Giridih, Jharkhand by M/s Giridih Nagar Nigam - Reconsideration for Environmental Clearance

(IA/JH/MIS/141252/2017; F.No. 10-15/2020-IA-III)

52.4.1.1. The EAC noted the following: -

- (i) The proposal is for grant of Environmental clearance to the project 'Proposed Integrated Municipal Solid Waste Management Facility at Village Mohanpur, District Giridih, Jharkhand by M/s Giridih Nagar Nigam.
- (ii) The project/activity is covered under category B of item 7(i) Common Municipal Solid Waste Management Facility (CMSWMF)' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at State Level. However, due to absence of SEIAA/SEAC in Jharkhand, the proposal has been appraised at Central level by sectoral EAC.
- (iii) Terms of Reference was granted by SEIAA, Jharkhand vide letter No-EC/SEIAA/2016-17 2020/2017/221 dated 20th November, 2017.
- (iv) Public Hearing was conducted by Jharkhand State Pollution Control Board Giridih on 20th July2019 at Panchayat Bhawan, Village Motileda, Block Bengabad, District Giridih, Jharkhand.
- (v) The proposal was earlier considered by the EAC (Infra-2) in its 49th meeting held during 25-26 February, 2020, wherein the EAC sought some additional information.
- (vi) The project proponent submitted/uploaded the additional information on 28th May, 2020 on Ministry's website (Parivesh Portal). Accordingly, proposal is placed before the EAC for re-consideration.

52.4.1.2. The Committee, inter-alia deliberated upon the issues raised during the Public Hearing/Public Consultation. It was noted that the concerns expressed during the Public Hearing/Public Consultation were primarily on employment, soil pollution, movement of waste in covered trucks, water supply and provisions of street lightening etc. The Committee noted that issues raised during Public hearing has been addressed by the PP satisfactorily and incorporated in the final EIA-EMP report.

The project proponent informed the EAC that proposed leachate management system at Giridih includes Leachate Collection and Removal System (LCRS) and Leachate Treatment System. The LTP - design was modified & updated through vetting from "Regional Centre for Urban & Environmental Studies" established by Ministry of Housing & Urban Affairs, Government of India. From water balance method, the estimated capacity of Leachate Treatment plant is 25 KLD.

The EAC deliberated upon the information provided by the project proponent. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting Environmental Clearance to the project subject to the following specific conditions and Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity (specified at **Annexure-7** of the minutes), while considering for accord of environmental clearance:

- (i) 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 made during their presentation to the Expert Appraisal Committee. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein
- (ii) Air pollution control devices viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; ventury scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator.

Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NOx and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.

- (iii) Project Proponent shall develop green belt in 3 tiers, as committed. At least 30 m thick greenbelt shall be developed in the periphery of sanitary landfill facility. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- (iv) Analysis of Dioxins and Furans shall be done through CSIR National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- (v) No fresh water to be used except for potable use.
- (vi) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the 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.
- (vii) Ground water monitoring for Physico-Chemical parameters to be carried out and record maintained by providing piezometric wells along the flow channel (up and down).
- (viii) Leachates to be collected and utilized within project after proper treatment.
- (ix) Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.
- (x) The depth of the land fill site shall be decided based on the ground water table at the site.
- (xi) Environmental Monitoring Programme shall be implemented as per EIA report and guidelines prescribed by CPCB for hazardous waste facilities. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- (xii) The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- (xiii) All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- (xiv) The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.
- (xv) On line real time continuous monitoring facilities shall be provided as per the CPCB or State Board Directions.
- (xvi) Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- (xvii) Gas generated in the Land fill should be properly collected, monitored and flared.
- (xviii) Pre medical check-up to be carried out on workers at the time of employment and regular medical record to be maintained.

- (xix) Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- (xx) Rain water runoff from the landfill area shall be collected and treated in the effluent treatment plant.
- (xxi) 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. 30.5 lakh (@2.0% of project cost) shall be earmarked for activities such as to conduct awareness programs, to develop of PHC, conducting health camps and providing medicines in Village Mohanpur, drinking water (OHT, pipe laying, RO ATM's etc.), electricity, sanitation facilities in Village Mohanpur, solar based street lights in approach road & nearby village Motileda, skills through ITI & skill development organizations in getting employments in industries. Avenue plantation in nearby villages Mohanpur & Motileda and maintenance of village road in nearby areas in Motileda. 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. 52.4.2.

Construction of 3 BHK with Servant Room and 2 BHK Houses in Masoodpur Sector B Vasant Kunj New Delhi by M/s Delhi Development Authority - Environmental Clearance

(IA/DL/MIS/154574/2020; F.No. 21-38/2020-IA-III)

52.4.2.1. The Project Proponent (PP) along with his accredited consultant M/s Ind Tech House Consult made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is located at 28°31'33.51" N Latitude and 77°09'19.62" E Longitude.
- (ii) This is a new project. The plot area is 6,161.557 sqm. Proposed FAR area is 11,902.96 sqm and total built-up area of 23,914.20 sqm. The project will comprise of construction of two (02) residential towers and total no of saleable DU's is 102. Maximum no of floors is 2B+G+8. Height of the building will be 33.75 m (lift terrace level).
- (iii) Water during construction phase shall be arranged on temporary basis. During construction phase, drinking water will be sources through authorized tankers. For construction activities, water shall be taken from treated water from nearby DJB STP. During the construction phase, soak pits and septic tanks are provided for disposal of waste water. Temporary toilets will be provided for labourers.
- (iv) During operational phase, total water demand of the project is expected to be 49.88 KLD. Water requirement will be met by 36.12 KLD fresh water from DJB and 13.76 KLD from treated water from onsite STP. Wastewater generated (41.38 KLD) will be treated in STP of total 50 KLD capacity. Total 37.24 KLD treated water will available for reuse out of which 13.76 KLD of treated wastewater will be recycled (12.48 KLD for flushing & 1.28 KLD for gardening). Surplus 23.48 KLD will be used in construction/ roadside green and park.

- (v) About 0.34 TPD solid wastes will be generated in the project. The biodegradable waste (0.20 TPD) will be processed in OWC and the non-biodegradable waste generated (0.14 TPD) will be handed over to authorized local vendor.
- (vi) The total power requirement during construction phase will be met through DG sets. Total power requirement during operation phase is 1282 KW and will be met from BSES. Back-up DG sets of capacity 160 kVA (1 No.) and Ultra low sulphur diesel (ULSD) will be used as fuel.
- (vii) Parking facility for four wheelers is proposed to be provided for 324 ECS against the requirement of 238 ECS (as per Building Bye Laws).
- (viii) Asola Wildlife Sanctuary is 6.48 km, South East from the project site. Project site is outside the notified boundary of Asola Wildlife Sanctuary. Hence, NBWL Clearance is not required.
- (ix) Rooftop rainwater of buildings will be collected in 2 RWH Pits for harvesting after filtration.
- (x) No Court case is pending against the project.
- (xi) Investment/Cost of the project is Rs. 56.22 Crores.
- (xii) Employment potential: During operational phase of the project, persons will get employment opportunities as staff for management, maintenance and security. As an estimate, during operation phase, persons will get marginal employment opportunities, who would work as domestic helpers.
- (xiii) Benefits of the project: This will help in improving the quality of life of economically weaker sections of the local area.

52.4.2.2. The EAC noted the following: -

- (i) The proposal is for granting of Environmental Clearance to the project 'Construction of 3 BHK with Servant Room and 2 BHK Houses' in Masoodpur Sector B Vasant Kunj New Delhi by M/s Delhi Development Authority for plot area 6,161.557 sqm and total built-up area of 23,914.20 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.

52.4.2.3. The project proponent informed the EAC that the proposed site has total 118 nos. of trees out of which 78 nos. are required to be cut, 29 nos. and 11 nos. are required to be retained and transplant, respectively. The required number of trees will be cut / transplanted only after obtaining the Tree Cutting/ transplanting permission from Forest department. Selection of the plant species shall be based on their adaptability to the existing geographical conditions. A diverse variety of indigenous evergreen and ornamental trees would be planted. Emphasis on native plant species which are having good ornamental values and fast growing with excellent canopy cover will be given.

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 project proponent shall abide by all the commitments and recommendations made in the Form-I, IA and Conceptual Plan and commitment made during their presentation to the Expert Appraisal Committee. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein.
- (ii) As proposed, fresh water requirement from DJB shall not exceed 36.12 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority
- (iii) Sewage shall be treated in the onsite STP and treated effluent from STP shall be recycled/re-used for flushing and gardening. As proposed, excess treated water shall be provided to nearby construction/ roadside green and parks.
- (iv) 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.
- (v) 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 pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vi) 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, 110 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.
- (vii) No tree shall be cut/transplanted unless exigencies demand. Where absolutely necessary, tree cut/transplantation shall be with prior permission from the Tree Authority constituted as per the Delhi Preservation of Trees Act, 1994 (Delhi Act No. 11 of 1994). Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted). In case of cut/non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree) shall be done and maintained.
- (viii) 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 1279.771 sqm (20.77% of total area) area shall be provided for green area development.
- (ix) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, the project proponent has proposed that an amount of Rs. 1.13 Crores (@ 2% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Maintenance of Drain and Public Toilet in various Park at Vasant Kunj nearby site, Development/ Up-gradation of open Gym in various Park at Vasant Kunj nearby site, Road Repair of foot path/road in Vasant Kunj and Development/ Up-gradation of RWH in various Park at Vasant Kunj nearby site. The

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

Agenda item No. 52.4.3.

Expansion of Atal Bihari Vajpayee Institute of Medical Sciences & Dr. Ram Manohar Lohia Hospital (Construction of Super Specialty Block)' at Baba Kharak Singh Marg, Connaught Place, New Delhi by M/s Atal Bihari Vajpayee Institute of Medical Sciences & Dr. Ram Manohar Lohia Hospital - Environmental Clearance

(IA/DL/NCP/155080/2020; F.No. 21-11/2020-IA-III)

52.4.3.1. 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 Expansion of Hospital Project is located at Baba Kharak Singh Marg, Near Gurudwara Bangla Sahib, Connaught Place, New Delhi. The geographical coordinates of project site are 28°37'32.78"N Latitude & 77°12'2.16"E Longitude.
- (ii) The project is Expansion. Dr. Ram Manohar Lohia Hospital (RML), formerly known as Wilingdon Hospital, was established by the British for their staff and had only 54 beds. After independence, its control was shifted to New Delhi Municipal Committee. In 1954, its control was again transferred to the Central Government of Independent India. At that time, Environmental Clearance was not required.
- (iii) The total plot area is 95,697.58 sqm. FSI area is 1,41,943.95 sqm and total built-up area of 1,55,384.37 sqm after expansion. Maximum height of the building is 45 m. The new block will be 3B+G+11and have General Beds (392 nos.), ICU beds (51 nos.), Private Beds (66 nos.), Cath Lab (3 nos.), Operation Theatres (17 nos.), OPD Rooms (96 nos.), PG Seats (60 nos.), Departments (20 nos.) and Helipad. The Helipad will be used only for the Organ transplant patient facility and the VVIP treatment.
- (iv) The total water requirement for the construction Project is estimated to be approx. 126 ML. The water supply during Construction phase will be met through STP Treated water/Private water tanker. During the construction phase, soak pits and septic tanks are provided for disposal of waste water. Temporary toilets will be provided for labourers.
- (v) The total (existing + expansion) water requirement for the project will be approx. 2,161 KLD. The water supply is through Delhi Jal Board (DJB). The fresh water requirement will be approx. 934 KLD post expansion. It is expected that waste water (domestic sewage) generated from the project will be approx. 692 KLD (@ 80% of fresh water, 100% flushing water). The domestic sewage will be treated in onsite STP capacity of 1000 KLD (Existing) generating 623 KLD of recoverable water from STP which will be reused for Flushing, Horticulture, HVAC Cooling, etc. The wastewater (trade effluent) generated from OPD, IPD, OT, Blood bank, labs & laundry will be approx. 335 KLD, which will be treated in onsite ETP of 400 KLD capacity. Treated effluent from ETP will be provided to the nearby construction site for the purpose of the water sprinkling & washing of the commercial vehicle tyres of the vehicles used in transportation of raw material.
- (vi) About 4,020.5 kg/day solid waste will be generated from the project. The biodegradable waste (742 kg/day). Hospital has signed MoU with M/s Biotic Waste

Solutions Pvt Ltd for the Bio-Medical Waste for the existing hospital and same will be followed for the proposed expansion of the project.

- (vii) The power is being supplied by NDMC. The total connected load for the project for expansion will be 6,000 KW. Power back up will be through 4no. of DG (3 Working + 1 Standby) sets of capacity 400 kVA each.
- (viii) Rooftop rainwater of buildings will be collected in 24 RWH Pits of total 31.79 KLD capacity for harvesting after filtration.
- (ix) Parking facility for 1,093 ECS is proposed to be provided against the requirement of 1,092 ECS as per state bye laws.
- (x) Proposed energy saving measures: Energy will be saved using energy efficient lighting fixtures, Electronic Ballast, Timer based lighting and APFC Panel.
- (xi) No Eco Sensitive Zone present within 10 KM radius of the project site. Hence, NBWL Clearance is not required.
- (xii) No forest land is involved. Hence, Forest Clearance is not required.
- (xiii) There is no court case pending against the project.
- (xiv) Terms of Reference (ToR) for the proposed expansion was granted by MoEFCC vide letter F.No. 21-11/2020-IA-III dated 17th March, 2020.
- (xv) Estimated Cost of the project is Rs. 463.76 Crore,
- (xvi) Employment potential: It will generate direct and indirect employment opportunities for both skilled and unskilled labour during construction & operation phase.
- (xvii) Benefits of the project: Direct & Indirect employment opportunities and Better medical facility for the treatment.

52.4.3.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the project 'Expansion of Atal Bihari Vajpayee Institute of Medical Sciences & Dr. Ram Manohar Lohia Hospital' (Construction of Super Specialty Block) at Baba Kharak Singh Marg, Connaught Place, New Delhi by M/s Atal Bihari Vajpayee Institute of Medical Sciences & Dr. Ram Manohar Lohia Hospital in a plot area of 95,697.58 sqm and Built-up area of 1,55,384.37 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal is appraised at Central Level by sectoral EAC.
- (iii) Terms of Reference (ToR) was granted to the project by MoEFCC vide letter F.No. 21-11/2020-IA-III dated 17th March, 2020.

52.4.3.3. The project proponent informed the EAC that Atal Bihari Vajpayee Institute of Medical Sciences & Dr. Ram Manohar Lohia Hospital, formerly known as Wilingdon Hospital, was established by the British for their staff and had 54 beds. After independence, its control was shifted to New Delhi Municipal Committee. In 1954, its control was again transferred to the Central Government of Independent India. Presently, the hospital has about 1,469 beds and total site area measures approx. 24 acres. The hospital is providing free health care facilities of OPD, Indoor, Casualty & Emergency services of all common specialties along with free drugs and investigation to patients. It is proposed to add a Super Speciality-cum-Paid Ward Block under the proposed expansion which will have 509 beds. Post expansion, the built-up area of Hospital will increase from 87,343.72 sqm to 1,55,384.37 sqm, no. of beds will increase from 1469 to 1978, whereas site area (95,697.58)

sqm) will remain unchanged. The new block will be 3B+G+11 and have General Beds (392 nos.), ICU beds (51 nos.), Private Beds (66 nos.), Cath Lab (3 nos.), Operation Theatres (17 nos.), OPD Rooms (96 nos.), PG Seats (60 nos.), Departments (20 nos.) and Helipad.

The project proponent further informed that they have in-house facility at RML hospital for the Bio-Medical waste management but as per the Hon'ble SC order and subsequently BMW Rules, 2016 they have signed MoU with M/s Biotic Waste Solutions Pvt Ltd for the Bio-Medical Waste for the existing hospital and same will be followed for the proposed expansion of the project.

Regarding Consent to Operate (CTO), the project proponent informed that application for CTO has been submitted to the DPCC on 25th Nobvember, 2019 which is under process. It is further informed that the condition regarding requirement of CTO was given in Terms of Reference (ToR) dated 17th March, 2020 and in the same month, RML Hospital was designated a nodal centre to quarantine and treat Covid-19 patients. Since then, the project proponent couldn't follow it up with DPCC due to challenges and immense pressure caused by novel Covid-19. The project proponent assured that they will line up to accelerate the CTO process by providing all requisite information/ documents to DPCC once the effect of Covid-19 is reduced in Delhi also ensured that the copy of CTO will be submitted to Ministry, as soon as the same is issued from the DPCC. Looking present covid-19 status in Delhi above said project to be made operational urgently.

Regarding water balance, the project proponent informed that they will supply the total treated water from ETP to the nearby construction site for the purpose of the water sprinkling & washing of the commercial vehicle tyres of the vehicles used in transportation of raw material. It is further informed that there are total 60 no's of certain native species trees exist at site among 24 no's to be cut and 36 will be shifted/transplanted from there to other place and. Survey report for tree cutting & shifting along with application has been submitted to office of the Dy. Conservator of Forests (South), New Delhi. The project proponent has given an undertaking that a helipad is also proposed at site which will be used only for the Organ transplant patient facility and the VVIP treatment.

The EAC deliberated upon the information provided by the project proponent. It was opined that in the wake of crisis situation caused by Covid-19, the health care service needs, new, affordable and state of the art health care facilities have to be provisioned at the earliest in the mega cities where a large number of Covid-19 cases have been reported upon.

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

- (i) The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein. The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report and submissions made during their presentation to the Expert Appraisal Committee.
- (ii) The building design may take in to account guidelines of concerned State Health Department, if any issued, particularly in context of highly contagious diseases like novel Covid-19.
- (iii) As proposed, fresh water requirement from NDMC shall not exceed 934 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, Horticulture, HVAC Cooling. As proposed, excess treated water from ETP shall be provided to the nearby construction site for the purpose of the water sprinkling & washing of the commercial vehicle tyres of the vehicles used in transportation of raw material.
- (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, 24 Nos. of rain water harvesting recharge pits shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vii) Separate bins for dry and wet waste must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.
- (viii) Biomedical wastes shall be managed in accordance to the BMW Rules, 2016 and radio-active waste shall be disposed off as per the atomic Energy Commission regulations, as applicable.
- (ix) No tree shall be cut/transplanted unless exigencies demand. Where absolutely necessary, tree cut/transplantation shall be with prior permission from the Tree Authority constituted as per the Delhi Preservation of Trees Act, 1994 (Delhi Act No. 11 of 1994). Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted). In case of cut/non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree) shall be done and maintained.
- (x) A minimum of one tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 19,139.51 sqm (20% of total area) area shall be provided for green area development.
- (xi) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, the project proponent has proposed that an amount of Rs. 3.47 Crore (@ 0.75% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as to Provide Solar power facilities on nearby Areas, Rain water harvesting Facility, Plantation in community area, Sanitation, Health education, skill development nearby areas around the project site. 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. 52.4.4.

Group Housing Project `Parsvnath La Tropicana' at Magazine Road, Khyber Pass, New Delhi by M/s Parsvnath Landmark Developers Pvt Ltd - Environmental Clearance

(IA/DL/MIS/152851/2019; F.No. 21-73/2019-IA-III)

52.4.4.1. The Project Proponent (PP) along with his accredited consultant M/s Ind Tech House Consult made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is located at $28^{\circ}41'45.91$ " N latitude and $77^{\circ}13'18.67$ " E longitude.
- (ii) This is an Expansion project. Earlier Environmental Clearance was obtained from MoEF vide letter F.No. 494/2006-IA.III dated 2nd July, 2007 followed by corrigendum dated 7th July, 2007. Extension of Environment Clearance was obtained from SEIAA, Delhi vide letter No. DPCC/EC/7451/09/04/2014/1128 dated 3rd June, 2014.
- (iii) Terms of Reference (ToR) for the proposed expansion was granted by MoEFCC vide letter F.No. 21-73/2019-IA-III dated 17th March, 2020.
- (iv) The total plot area is 68,158.35 sqm, FSI area is 1,53,983.38 sqm and total construction (built-up) area of 2,55,262 sqm. The project envisages construction of 22 building blocks of max. S+39 floors having 390 EWS units and 505 DU's. Maximum height of the building is 125.65 m.
- (v) During construction phase, total water requirement is expected to be 5 KLD which will be met from treated water supply. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (vi) During operational phase, total water demand of the project is expected to be 443 KLD and the same will be met by 299 KLD fresh water from Delhi Jal Board (DJB) and 144 KLD Recycled Water. Wastewater generated (335 KLD) will be treated in STP of 450 KLD capacity. 144 KLD of treated wastewater will be recycled (106 for flushing, 32 for gardening, 6 KLD from DG cooling etc.).
- (vii) About 2.93 TPD solid waste will be generated in the project. The biodegradable waste (1.80 TPD) will be processed in OWC and the non-biodegradable waste generated (1.13 TPD) will be handed over to authorized local vendor.
- (viii) The total power requirement during construction phase will be met from BSES, Rajdhani Power Ltd and total power requirement during operation phase is 4990 KW and will be met from BSES, Rajdhani Power Ltd.
- (ix) For rain water harvesting, two number of rain water harvesting tanks shall be provided after filtration.
- (x) Parking facility for 3256 ECS is proposed to be provided (according to local norms).
- (xi) It is not located within 10 km of Eco Sensitive areas/Zone. Hence, NBWL Clearance is not required.
- (xii) Forest Clearance is not required.
- (xiii) No Court case is pending against the project.
- (xiv) Investment/Cost of the project is Rs. 738 Crore, which includes cost of Rs. 110 Crores for the proposed expansion.
- (xv) Employment potential: 100 Labours during construction phase
- (xvi) Benefits of the project: The project will be equipped with dedicated internal road, parking, internal water distribution system, fire fighting system, internal sewage

collection network, lighting facilities, solar lighting, and power backup facility. Employment will be generated during construction & operation phase.

52.4.4.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the Group Housing project `Parsvnath La Tropicana' at Magazine Road, Khyber Pass, New Delhi by M/s Parsvnath Landmark Developers Pvt Ltd in a plot area of 68,158.35 sqm and total built-up area of 2,55,262 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at State level. However, due to absence of SEIAA/SEAC in Delhi, the proposal has been appraised at Central Level by sectoral EAC.
- (iii) Terms of Reference (ToR) was granted by MoEFCC vide letter F.No. 21-73/2019-IA-III dated 17th March, 2020.

52.4.4.3. The project proponent informed the EAC that the earlier Environmental Clearance was obtained from MoEF vide letter F.No. 494/2006-IA.III dated 2nd July, 2007 followed by corrigendum dated 7th July, 2007. Extension of Environment Clearance was obtained from SEIAA, Delhi vide letter No. DPCC/EC/7451/09/04/2014/1128 dated 3rd June, 2014. No construction has been done at site in expansion area.

The EAC also deliberated on the certified compliance report letter No. 4-37/2007/RO(NZ)/660 dated 21st January, 2020 issued by the MoEF&CC's Regional Office (CR), Lucknow. The EAC noted that there was some non-compliance reported in the Compliance report. The project proponent informed that they have submitted action taken report on the non-compliances to Regional Office, Lucknow vide letter dated 2nd June, 2020.

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 Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein. The project proponent shall abide by all the commitments and recommendations made in the Form-II, EIA and EMP report and submissions made during their presentation to the Expert Appraisal Committee.
- (ii) As proposed, fresh water requirement from DJB shall not exceed 298 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority
- (iii) 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.
- (iv) 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.

- (v) 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.
- (vi) 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, 150 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.
- (vii) 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 31620.837 sqm (46.4% of plot area) shall be developed as green area.
- (viii) The company shall draw up and implement Corporate Social Responsibility Plan as per the Company's Act of 2013.
- (ix) 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. 0.825 Crores (@ 0.75% of project expansion Cost i.e. Rs. 110 Crores) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Sanitation (preparation of toilets), Electrification including solar power, Solid waste management facility, Rain water Harvesting and Avenue Plantation/ plantation in community area. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office 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. 52.4.5.

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 - Environmental Clearance

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

52.4.5.1. The Project Proponent (PP) along with his accredited consultant M/s Amaltas Enviro Industrial Consultants LLP (AEC) made a presentation and presented following parameters and salient features of the project to the Committee:

- (i) The project is located at Plot No. 4, Sector-22, Dwarka, New Delhi. Site co-ordinates of the project site is 28°33'31.64"N latitude and 77°3'40.53"E longitude.
- (ii) This is an Expansion of Group Housing "Nav Sansad Vihar". The total plot area is 21,501.00 sqm (5.313 Acres), total FSI area is 37,421.228 sqm and total construction (built-up) area of 46,967.388 sqm (Existing 33,377.907 sqm and Expansion 13,589.481 sqm). Maximum height of the building is 24.80 m.
- (iii) During construction phase, total water requirement is expected to be 1,296 ML which will be met by treated water from DJB during the construction phase, soak pits and

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

- (iv) During operational phase, total water demand of the project is expected to be approx. 148 KLD and the same will be met by 115 KLD fresh water from Delhi Jal Board and 33 KLD recycled water from CSTP. Domestic wastewater generation will be 100 KLD which will be treated in Dwarka CSTP. 31 KLD for landscape and 1.5 KLD for DG cooling will be suffice from Dwarka CSTP.
- (v) About 0.717 TPD solid wastes will be generated in the project. The biodegradable waste (0.430 TPD) will be processed in OWC and the non-biodegradable waste generated (0.215 TPD) will be handed over to authorized local vendor.
- (vi) Maximum Electrical load requirement after overall diversity factor works out to 1300 KW. To meet the load, the HT supply will be received at 11 kV from the BSES. Backup power supply DG sets will be 125kVA × 1 Nos. 160 kVA × 1 Nos.
- (vii) Roof top rainwater of buildings will be collected in 5 Rainwater harvesting storage pits after filtration.
- (viii) Parking facility for 509 ECS is proposed to be provided against the requirement of 508 ECS respectively (according to local norms).
- (ix) It is not located within 10 km of Eco Sensitive areas/Zone. Hence, NBWL Clearance is not required.
- (x) Forest Clearance is not required.
- (xi) No Court case is pending against the project.
- (xii) Investment/Cost of the project is Rs. 20 Crores.
- (xiii) Employment potential: During Construction phase approx. 100-150 persons shall get employment.
- (xiv) Benefits of the project: Environment Wastewater treatment, green belt, parking management, rainwater harvesting and Social Group housing.

52.4.5.2. 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. In a total plot area of 21,501 sqm and total construction (built-up) area of 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

52.4.5.3. The project proponent informed the EAC that M/s Nav Sansad Vihar Co-Operative Group Housing Society Ltd. (CGHS Ltd) was registered in the year 1999. The foundation stone of the project was laid in the year 1996 and was completed in the year 1999-2000. This project consists of 256 residential units that are embedded in 9 high rise towers. Plot area measuring approx. 21,501.00 sqm (5.313 Acres) and total built up area 46,967.388 sqm (Existing - 33,377.907 sqm + Expansion - 13,589.481 sqm).

The EAC during deliberation noted that the project proponent has not mentioned the details of the expansion work to be executed in application submitted and also failed to explain during the deliberation. It was also noted that the occupancy certificate for the existing project has not been submitted by the project proponent. Further, the project

proponent has not submitted any document related to permission from authorities like DDA for expansion of the existing building. It was informed to the EAC that domestic wastewater generation will be 100 KLD which will be treated in Dwarka CSTP. However, no permission from the concerned authority was submitted. After detailed deliberations, the EAC asked project proponent to submit following documents:

- (i) Details of construction work to be done in the proposed expansion.
- (ii) Elaborate the permissibility/structural safety of the proposed alteration through an institute of repute.
- (iii) Permission from concerned Department/Authority for expansion of the existing building and its permissibility as per building bye-laws.
- (iv) Occupancy certificate for the existing building.
- (v) Quantum of current sewage generation and details of existing arrangements made with common Sewage Treatment Plants, Dwarka w.r.t. sewage treatment and reuse of treated water. Also indicate clearly, the changes in waste water/ sewage generation, if any envisioned due to proposed expansion.
- (vi) Submit the plan for installation of Organic Waste Converter (OWC).

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. 52.4.6.

Proposed 'Integrated Office Complex' for Central Board of Secondary Education at Sector 23, Dwarka, New Delhi by M/s Central Board of Secondary Education - Environmental Clearance

(IA/DL/NCP/153857/2020; F. No. 21-40/2020-IA-III)

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

- (i) The project is located at 28°33' 52.7724"N latitude and 77°3'23.4972" E longitude.
- (ii) This is a new project. The total plot area is 12,000 sqm, FSI area is 27,634.53 sqm and total construction (built-up) area of 56,396.72 sqm. The project will comprise of one building. Total numbers of floors will be 2 Basements + Ground floor + 9 floors. Maximum height of the building is 41.2 m.
- (iii) During construction phase, total water requirement is expected to be 30 KLD which will be met by outside water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (iv) During operational phase, total water requirement of the project is expected to be 38.7 KLD and the same will be met by 10.5 KLD fresh water from Delhi Jal Board and 27.8 KLD Recycled Water (including 9.4 KLD water from nearby CSTP). Wastewater generated (19.8 KLD) will be treated in onsite STP of total 30 KLD capacity 19.8 KLD of treated wastewater will be recycled and reused (11.4 KLD for flushing and 7.4 KLD for gardening etc.). No treated water will be disposed in to municipal drain.

- (v) About 150 kg/day solid wastes will be generated in the project. The biodegradable waste 100 kg/day will be processed in OWC and the non-biodegradable waste generated 50 kg/day will be handed over to authorized local vendor.
- (vi) The total power requirement during construction phase is 250 KVA and will be met from local municipal supply from BSES and total power requirement during cooperation phase is 2078 KVA and will be met from local municipal supply from BSES
- (vii) Rooftop rainwater of buildings will be collected in 04 RWH tanks of total 149 KLD capacity for harvesting after filtration.
- (viii) Parking facility for 688 four wheelers is proposed to be provided against the requirement of 553 ECS (according to local norms).
- (ix) Proposed energy saving measures would save about 25% of power.
- (x) It is not located within 10 km of Eco Sensitive Areas/Zone. Hence, NBWL Clearance is not required.
- (xi) Forest Clearance is not required.
- (xii) No Court case is pending against the project.
- (xiii) Investment/Cost of the project is Rs. 220 Crore.
- (xiv) Employment potential: 300.
- (xv) Benefits of the project: In order to maintain better coordination among the various branches/units of the Board in Delhi and to meet the increasing challenges due to an increase in the number of CBSE-affiliated schools, the Board had earlier proposed to create an integrated office complex in Delhi, and, for this purpose, a plot measuring three acres of land has been obtained from the Delhi Development Authority at Sector 23, Dwarka.

52.4.6.2. The EAC noted the following: -

- (i) The proposal is for grant of Environmental Clearance to the Proposed 'Integrated Office Complex' for Central Board of Secondary Education at Sector 23, Dwarka, New Delhi by M/s Central Board of Secondary Education in a total plot area of 12,000 sqm and total construction (built-up) area of 56,396.72 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

52.4.6.3. It was informed by the project proponent that in order to maintain better coordination among the various branches/units of the Board in Delhi and to meet the increasing challenges due to an increase in the number of CBSE - affiliated schools, the Central Board of Secondary Education (CBSE) had earlier proposed to create an integrated office complex in Delhi, and, for this purpose, a plot measuring three (03) acres of land has been obtained from the Delhi Development Authority at Sector 23, Dwarka. The proposed integrated campus building will be state-of-the-art while fulfilling green building norms. The building will have green features such as zero waste discharge, solar power generation, an automated control for efficiency through use of sensors, grey water recycling, rainwater harvesting, low energy consumption equipment, use of automated shades to reduce day light energy, use of water efficient fixtures etc. Some of the special features of the building complex will include the installation of an efficient building management system that will facilitate energy conservation. Solar panels will be installed that will produce 300 KWH of

electricity from the roof of the building. A sewage treatment plan is also been proposed for flushing toilets and the reuse of gray water in landscaping.

It was further informed that total five (05) trees are required to be cut as they are coming onto building foot print. Tree felling permission has already been sought from Forest Department, Delhi.

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

- (i) The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project and comply with specific conditions mentioned therein. 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.
- (ii) As proposed, fresh water requirement from DJB shall not exceed 10.5 KLD. Consent to Operate (CTO)/Occupancy Certificate shall be issued only after getting necessary permission for required water supply from DJB/concerned authority.
- (iii) Sewage shall be treated in onsite STP and treated water from STP shall be recycled/re-used for horticulture, Flushing use and HVAC water makeup. As proposed, no excess treated water shall be discharged to municipal drain.
- (iv) 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.
- (v) 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, 04 no. of rain water harvesting recharge pit shall be provided for rain water harvesting after filtration as per CGWB guidelines.
- (vi) Separate bins for dry and wet waste must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from project will be sent to designated/authorized landfill site.
- (vii) As proposed only five (05) trees can be felled/cut with prior permission from the Tree Authority constituted as per the Delhi Preservation of Trees Act, 1994 (Delhi Act No. 11 of 1994). Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted). Compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every one tree to be cut) shall be done and maintained.
- (viii) 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 2,953.08 sqm (24.6% of total area) area shall be provided for green area development.

(ix) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May, 2018, the project proponent has proposed that an amount of Rs. 3.30 Crore (@ 1.5% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Providing sanitation facility in nearby areas in accordance of 'Swach Bharat Abhiyan', Skill development courses in around area, Avenue plantation in nearby DDA park and areas, Providing machineries to local municipality for solid waste management, Drinking water supply in nearby villages and schools and Education scholarships/grants. 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.

52.5 Any other item with the permission of Chair- Nil

The meeting ended with vote of thanks to the Chair.

LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 52nd MEETING OF EAC (INFRASTRUCTURE-2) HELD DURING 18-19 JUNE, 2020 THROUGH VIDEO <u>CONFERENCING</u>

S.	Name	Designation	Attendance		Sign
No.		_	18.06.202	19.06.2020	
			0		
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	Р	Р	
10.	Dr. (Mrs.) Mayuri H.	Member	A	A	
	Pandya				
11.	Dr. M. V. Ramana	Member	P	A	
	Murthy				
12.	Prof. Dr. P.S.N. Rao	Member	A	A	
13.	Shri Shard	Scientist E&	Р	Р	
		Member			
		Secretary			
14.	Dr. Vinod Kumar Singh	Scientist E	Р	Р	

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.
- (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet
- (v) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- (vi) Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- (vii) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation:

- (i) Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
- (ii) Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.
- (iii) The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.
- (iv) Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area. Domestic and industrial waste water shall not be allowed to be discharged into storm water drains.
- (v) Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- (vi) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- (vii) Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression
- (viii) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- (ix) A detailed drainage plan for rain water shall be drawn up and implemented.

IV. Noise monitoring and prevention:

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

- (iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- (iv) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7
- (v) am to 6 pm.

V. **Energy Conservation measures:**

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

VI Waste management:

- Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that (i) soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986. (ii)
- Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, (iii) plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.
- Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to (iv) the Construction and Demolition Waste Management Rules, 2016.
- (v) The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:
 - Trash collected in flight and disposed at the airport including segregation, collection and disposed. a.
 - Toilet wastes and sewage collected from aircrafts and disposed at the Airport. b.
 - C. Wastes arising out of maintenance and workshops
 - Wastes arising out of eateries and shops situated inside the airport complex. d.
 - e. Hazardous and other wastes
- The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of (vi) wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.
- A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing (vii) civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing (viii) guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt:

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

VIII Public hearing and Human health issues:

- Construction site should be adequately barricaded before the construction begins. (i)
- (ii) Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- (iii) Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster (iv) Management Plan shall be implemented.
- (v)Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (vi) Occupational health surveillance of the workers shall be done on a regular basis.

IX. **Corporate Environment Responsibility:**

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

Х. Miscellaneous:

The project proponent shall make public the environmental clearance granted for their project along with the (i) environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days and in addition this shall also be displayed in the project proponent's website permanently.

- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The criteria pollutant levels namely; 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.

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

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

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

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

VI. Waste management:

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

VII. Green Belt:

IX.

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

VIII. Public hearing and Human health issues:

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

Corporate Environment Responsibility:

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

X. Miscellaneous:

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

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

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (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:

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
- iii. Process effluent/any waste water should not be allowed to mix with storm water.
- iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.

ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention:

i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

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

VI. Waste management:

- i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
- ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.

- iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016
- v. No landfill site is allowed within the CBWTF site
- vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

IX. Corporate Environment Responsibility:

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

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular languagewithin seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 vi. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical
- 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 State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

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

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

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.No dredging is allowed in protected habitat areas without prior permission from NBWL.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (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:

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

V. Energy Conservation measures:

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

VI. Waste management:

ii.

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

VII. Green Belt:

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

ii. Top soil shal VIII. Marine Ecology:

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

IX. Public hearing and Human health issues:

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

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

X. Corporate Environment Responsibility:

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

XI. Miscellaneous:

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

Standard EC Conditions for Project/Activity 7(g): Aerial ropeways

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)
- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of iv. Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- ٧. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- II. Air quality monitoring and preservation:
 - The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters i. relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission) covering upwind and downwind directions.
 - Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all ii. the dust generating points inter alia including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.
 - Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules iii. made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
 - iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation:

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

Noise monitoring and prevention: IV.

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

۷. **Energy Conservation measures:**

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

VII.

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

VIII. Public hearing and Human health/safety issues:

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

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

IX Corporate Environment Responsibility:

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

Miscellaneous:

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

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. Air quality monitoring and preservation:
- 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.
 - Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards.

III. Water quality monitoring and preservation:

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

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

IV. Noise monitoring and prevention:

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Waste management:

- i. ETP sludge generated from CETP facility shall be handled and disposed to nearby authorized TSDF site as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- ii. Non Hazardous solid wastes and sludge arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non Hazardous solid wastes and sludge shall not be mixed with Hazardous wastes.
- iii. The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
- iv. The site for aerobic composting shall be selected and developed in consultation with and to the satisfaction of the State Pollution Control Board. Odour and insect nuisance shall be adequately controlled.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- vi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

VI. Energy Conservation measures:

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

VII. Green Belt:

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

VIII. Public hearing and Human health issues:

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

IX. Corporate Environment Responsibility:

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

X. Miscellaneous:

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

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

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

V. Transportation:

- i. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent unwanted access.
- ii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

VI. Green belt:

VII.

i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.

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

Public hearing and Human health/safety issues:

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

VIII. Corporate Environment Responsibility:

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

IX. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; PM_{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 (in case of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

I. Statutory compliance:

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

II. Air quality monitoring and preservation:

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. 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:

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

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

VII. Green Cover:

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility:

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

XI. Miscellaneous:

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