File No.: 21-59/2015-IA.III

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan, Jor Bagh Road, Ali Ganj New Delhi – 110 003

Dated: 10th November, 2020

To

The Managing Director,

State Industries Promotion Corp. of Tamil Nadu Ltd. (SIPCOT), 19/A, Rukmani Lakshmipathy Road, Egmore, Chennai - 8

Subject: Development of Manallur Industrial Park in Gummidipoondi Taluk of District Thiruvallur, Tamil Nadu by M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited – Environmental Clearance

Sir,

This has reference to your online proposal to this Ministry on 24th December, 2019 regarding Environmental Clearance for Development of "Industrial Park at Manallur and Soorapoondi villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu State" over an extent of 279.99.5 Ha (691.587 Acres) area at Manallur and Soorapoondi villages,Gummidipoondi Taluk, Thiruvallur District.

- 2. The above mentioned proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure, CRZ and other Miscellaneous projects in its 241st meeting on 25-26th August, 2020.
- 3. The project proponent along with the EIA consultant M/S Hubert Enviro Care Systems (P) Ltd., Chennai, made a presentation through Video Conferencing and provided the following information:
- (i) **Brief description of the Proposal:** M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited had proposed the development of a Industrial Park at Manallur and Soorapoondi villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu State" over an extent of 279.99.5 Ha (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District. The ToR for the proposal was issued on 22nd July 2015, and its extension issued on 13th November, 2018. The required EIA studies were undertaken including conduct of Public Hearing on 03/07/ 2019. The project was earlier taken in 230th EAC meeting on 28 29 January, 2020. The EAC had raised queries and based on the queries, the EAC suggested for submission of revised EIA report. The extant proposal falls under Schedule 7 (c), Category A under EIA Notification, 2006.
- (ii) Nature of project (New/Expansion/Amendment/Extension etc.): New Project.
- (iii) Whether the proposal was considered in earlier meetings of EAC: If yes, provide date of EAC meeting and reasons for deferment, if any: The project was taken in 230th EAC meeting for Projects related to Infrastructure Development, Industrial estate/parks/complexes/areas, Export Processing Zones, Special Economic Zones, Biotech



Parks, Leather Complexes and National Highways projects held on 28 - 29 January, 2020. The EAC has raised queries and based on the queries, the EAC suggested revising the EIA report and submitting.

- (iv) Whether proposal is part of interlinked project: If yes, provide details in brief: No.
- (v) Address of project site (Plot No./Village/ Tehsil/ District/State): Plot No: Manallur village Survey No. 203/1, 204/2, 207/2, 208, 209/1, 209/3, 210/1, 210/3, 211, 212/1, 212/3, 213, 214, 215, 216/1, 216/3, 217/1, 217/3, 218/1, 218/3, 219/1, 220/1, 223/4, 224, 225/1, 226/1, 227/1, 227/3, 228, 229, 230, 231, 232, 233/1, 234/1, 234/3, 235/3, 236, 237/1, 237/3, 238, 239, 240, 241, 242, 243, 244, 245, 248, 249, 250, 252, 253, 270/1, 270/8, 274/1, 274/29; Soorapoondi Village Survey No. 1, 2, 3, 4, 5, 6/2, 9/1, 9/3, 9/5, 9/6, 9/11, 10/4, 10/9, 12/2, 12/3, 12/4, 12/5, 12/6, 12/7, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 13/1, 13/2, 13/3, 13/4, 13/5, 13/6, 13/7, 13/8, 13/9,15, 16/1, 37/1, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49; Taluk: Gummidipoondi, District: Thiruvallur, State: Tamil Nadu.
- (vi) **Geo-coordinates of project site:** Latitude: 13°26'54.55"N (From 13.44295446 to 13.44596133); Longitude: 80°01'34.32"E (From 80.03484487 to 80.01417061)
- (vii) Area (ha)/Length (km) of the proposed project: 279.99.5 Ha (691.587 Acres)
- (viii) Connectivity to the site: Madharappakkam- Gummidipoondi Road is adjacent to site Chennai –Kolkata Highway (NH-5) at a distance of ~8.04 km towards E.
 - (ix) Investment/Cost of the project: The total cost of the project is ₹250 Crores.
 - (x) Item of Schedule to the EIA Notification, 2006: The proposed project is categorized under Schedule 7 (c), Category A of EIA Notification, 2006.
 - (xi) Applicability of General/Specific Conditions as per EIA Notification, 2006: Interstate Boundary TN AP is situated at ~3.13 Km (towards NNW) from the project boundary and Pulicat lake bird Sanctuary ~5.77 Km (towards NE).
 - (xii) Whether project involves any violation under notification S.O 804(E) dated 14.03.2017: Not applicable.
- (xiii) Landuse/Landcover of project site in tabular form:

S. No	Land use/Land cover	Area (Ha)	Area (%)	Remarks
01.	Plotted area (including 25% green belt in plotted area)	193.01	68.93	 19. 41 Ha (47.95 Acres) for 5 (f) - Non pharma - Synthetic acrylic polymers and resins, water proofing compounds and synthetic adhesives etc. 92.11 Ha (227.51 Acres) for Non EC Category-E vehicle and its components manufacturing. 81.49 Ha (201.27 Acres) for Non EC category - Automobiles and accessories industries, Engineering and fabrication. Plastics industries etc.
02.	Common amenities	5.603	2.0	
03.	Commercial activities	5.603	2.0	
04.	Solid Waste Management	9.741	3.48	
05.	Roads, Storm water drain	15.733	5.63	



	Total plot area	279.995	100
07.	Green belt area (road side, periphery)	22.305	7.96
06.	OSR (To be developed as green belt)	28.00	10

(xiv) Landuse/Landcover around 10 km radius of project site (1 km in case of Highway projects):

S. No	Land use/Land cover	Area (Ha)	Area (%)
1.	Cropland	22444	
2.	Plantation	3445	54.42
3.	Fallow land	3104	8.35
4.	Forest Plantation	2348	7.53 5.69
5.	Scrub land	2063	5.00
5.	Forest, Deciduous	1811	4.39
7.	Rural	1718	4.17
3.	Reservoirs/ Lakes/ Ponds	1654	4.01
).	Urban	1429	3.47
0.	Coastal Wetland	910	2.21
1.	Scrub Forest	226	0.55
2.	River/ Stream/ Canals	46	0.11
3.	Sandy area	42	0.11
	Total	41240	100

(xv) List to industries to be housed with the proposed project site, only for projects covered under 7(c) category of EIA Notification, 2006:

S. No.	Industry sector	Type of Industry	As per EIA notification 2006 and its amendments		Area details	
1.	EC Coto		Schedule	Category		
2200	EC Category – Chemical: Non	Synthetic acrylic polymers and resins	5(f)	A	10 % of plotted area – 47.95	
2.	Pharma	Synthetic resins and water proofing compounds	5(f)	A	Acres (19.41 Ha)	
3.	Non EC category- E Vehicle and its	Electronic and electrical parts manufacturing industries	Nil	Nil	47.72% of plotted area - 227.51 Acres	
4.	components manufacturing industries	Electronic and electrical parts assembling industries	Nil	Nil	(92.11 Ha)	
5.		Tyre, tube and rubber Components	Nil	Nil	42.28 % of plotted area -	



6.	category-	Synthetic detergents and soaps (excluding	Nil	Nil	201.27 Acres (81.49 Ha)
	Chemical	formulation) having waste water generation < 100KLD			
7.		Paints and varnishes (mixing & blending)	Nil	Nil	
8.		Printing ink manufacturing	Nil	Nil	
9.		Spray painting, paint baking, paint shipping	Nil	Nil	
10.	Non EC	Automobile manufacturing	Nil	Nil	
11.	category- Automobile & accessories Manufacturing	Automobile parts manufacturing	Nil	Nil	
12.	Non EC category-	Foundry units <5	Nil	Nil	
13.	Engineering & Fabrication	Steel and steel products using furnaces	Nil	Nil	
14.	Faulteation	Fabrication Industries – dry process	Nil	Nil	
15.	Non EC	1 .	Nil	Nil	
16.	Glass and		Nil	Nil	
17.	Ceramics	Glass ceramics, earthen potter and tile manufacturing	Nil	Nil	
18.	Non EC category-	2	Nil	Nil	
19.		Polythene and plastic	Nil	Nil	

- (xvi) **Terrain and topographical features:** The site is a plain terrain. Elevation of site is 28 m AMSL. The site is mostly barren land with some trees. There are no water bodies within the site.
- (xvii) **Details of water bodies, impact on drainage, if any:** There are no water bodies within the site. But there are two water bodies adjacent to the site. One towards the south and other on the East. There will not be any impact on the nearby water bodies or the drainage. Storm water drains will be provided along the road and rainwater harvesting pits are proposed for the project.
- (xviii) Water requirements, sources (during construction and operation phases) and NOC: Construction phase: Water requirement is estimated to be 63 KLD. Source will be private tankers. Operation phase: Total water requirement 8627 KLD, Fresh water 900 KLD



- (CMWSSB), TTRO water- 4339 KLD, (CMWSSB) Recycled water 3388 KLD, Source: Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB).
- (xix) Groundwater extraction/usage and NOC/Clearance from CGWA/State Ground Water Department: Not applicable. Water requirement will be met from CMWSSB and recycling of treated wastewater.
- (xx) **ToR details:** File No.: 21-59/2015-IA.III, Proposal No.: **IA/TN/NCP/27117/2015**, Date of ToR Application Submission: 13 Mar 2015, Date of EAC Meeting (Infra-1): 147th EAC meeting held on 23rd 24th April, 2015, Date of ToR Issue: 22nd July, 2015.
- Public Hearing Details and Summary of issues raised and response/commitments by Proponent: The public hearing was conducted on 03/07/2019 at K.V.C. Mahal, Sathyavedu Road, Madharapakkam, Gummidipoondi Taluk, Thiruvallur District under the supervision of District Collector. The Project was appraised in 230th EAC meeting on 28-29th January, 2020. Following are the Summary of issues raised and response/commitments given by the Proponent:

S. No	Category of issues raised	Response / Commitment by proponent	Remarks if any
1	Employment opportunity	Skill development centre will be established for providing training related to E-Vehicle/ auto components repairing, etc to local people at cost of Rs.25 lakhs	SIPCOT will earmark ₹3.75 crores for undertaking the following CER Activities in Manallur, Soorapoondi Ramachandrapuram,
2	Proposed development will lead to Health issues in nearby areas	Health camps will be conducted once in six months by SIPCOT at Manallur and Soorapoondi villages to ensure the health condition of local people. The cost for the same will be around Rs.15 Lakhs.	 Madharapakkam, Sathyavedu. Irukulam villages: Construction of toilets Providing water supply and sewerage system Conducting Health camps Desliting of two nearby
3	Adequate toilet facilities are not available	10 no. of common toilets will be constructed. 5 Nos at Manallur Village and 5 Nos at Soorapoondi village. Total cost recurred towards construction, operation and maintenance of 10 common toilets will be Rs. 25 Lakhs.	 lakes PC with a printer and scanner to the Government schools. Drinking water dispensers for the Government schools.
4	Water availability is a problem in the areas	75 KLD of water will be provided for Manallur villages by SIPCOT along with 75 KLD water storage tank also Sewerage system will be provided. Cost towards the same will be around Rs.50 Lakhs	 Class room furniture for the Government schools. Sports equipments for the Government schools. Solar lighting facilities for the Government schools. Providing Medical
5	Desilting has not been done in two	Desilting will be undertaken in the nearby 2 lakes. The Cost for same will be around Rs.15 lakhs	 Providing Medical equipments for primary health centre.



	lakes near project site		 Providing trolleys to Local Panchayat for transport of Municipal Solid Waste
6	No approach to burial ground	As per the Thiruvallur Collector Letter dated 10.06.2019, the burial ground is excluded from the proposed Industrial Park area and SIPCOT will provide and maintain access road for the burial ground	 Solid Waste Disposal Bins Construction of Rainwater Harvesting Pits Avenue Plantation Solar lighting facilities Scientific Support/Awareness to farmers Skill development for youth

- (xxii) Whether the project involves diversion of forest land and status of the forest clearance: Not applicable.
- (xxiii) Whether the project is located within 10 km of Protected Areas (PA) including National Parks, Sanctuaries and Tiger Reserves etc.: Pulicat Bird Sanctuary is located 5.77 km (NE) from the project site. No Objection Certificate (NOC) from National Board for Wildlife (NBWL) has been applied.
- (xxiv) Whether the project is located within the Eco-Sensitive Zone (ESZ) or Eco-Sensitive Area (ESA) notified by the MoEF&CC: The project site is not located within any Eco-Sensitive Zone or Eco-Sensitive Area notified by MoEF&CC.
- (xxv) **Waste Management:** M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited will handles and disposes various waste generated in the following ways:
 - **Sewage generation-** 210 KLD. Individual industries will be mandated to provide STP for recycling of treated sewage for green belt development
 - Effluent generation -3472 KLD Individual industries will be mandated to provide ETP to achieve Zero Liquid Discharge concept. Treated effluent will be recycled by industries for process and utilities. The rejects from RO will be treated by individual industries in ATFD and salt will be disposed as hazardous waste. ATFD condensate will be recycled for utilities/process.

Following are the Municipal Solid Waste Generation and Management plan:

S. No.	Waste type	0 (1)		Management measure (for operational phase)	
1	Organic	13.5	1350	MSW in Industrial Plots:	
2	Inorganic waste	9	900	SIPCOT will mandate all the industries to manage the Municipal Solid generated by them within their premises as per norms.	
				Municipal Solid wastes will be segregated by individual industries	



4	Total	22.5	2250	
3				Organic wastes will be composted by vermi composting and compost will be used as manure for green belt development. Inorganic waste will be sold to TNPCB authorized recyclers
				SIPCOT has earmarked 24.060 Acres of land for establishment of Solid Waste Management facility
				MSW in area apart fron Industrial Plots:
				as organic and inorganic wasted Organic wastes will be composted by individual industries in Organic Waste Convertor or Bis methanation plant and used for green belt development. Inorganic wastes will be sold to TNPCI authorized recyclers by the industries.

Norms: waste generation @0.45 Kg/capita/day.

Population for construction phase – 50 nos. operation phase – 5000 nos. As a provision to have in house and independent Solid Waste Management facility 24.060 Acres (3.48% of Industrial Park area) has been earmarked for Solid Waste Management Facility. In future, based on need, SIPCOT will float tender and provide land to private players for the establishment of Municipal Solid Waste Management facility on BOOT basis. Hazardous waste generation and Management: Individual industries, will have their own storage area for storing Hazardous waste, within their premises and the hazardous wastes will be sent to TNWML for recycling /disposal as per the Hazardous and other Wastes (Management and transboundary movement) amended rules 2016.

- (xxvi) CETP/STP details: Not applicable. Individual industries will be mandated to provide ETP/STP. Treated sewage will be recycled for green belt development and flushing by individual industries.
- (xxvii) Details of tree cutting and Green belt development: The trees available at site are Mango, Coconut, Guava, Sappota, Eucalyptus, amla, Neem, Cashew, Banyan, Papaya, Palm, Teak and Naga. The trees along the periphery of the site and in OSR area will be preserved as such. If not possible the trees will be uprooted and planted along the green belt area allotted at site. In case of necessity to cut the trees by individual industries in their plots, the industry will plant additional 3 trees for cutting one tree as compensation in their greenbelt area. Greenbelt area is 243.437 Acres (35.20% of total area of Industrial Park).

Following are the proposed Green belt area breakup within the Industrial Park:





tal greenbelt area	243.437
Green belt along the periphery of	ne site
3 m green belt along the road side	1-a gita 39.157
25% Green best along the road side	15.94
25% Green belt along the plotted a	rea 119.18
OSR area	119.18
	69.160

- (xxviii) Energy conservation measures with estimated saving: Solar lighting is proposed for 70% of lighting along the roads. The estimated solar power generation would be around 40KW. Apart from this, individual industries will be insisted to provide roof top solar panels to reduce power consumption.
 - (xxix) **Parking requirement with provision made:** 100 Sq.m areas will be allotted for parking in the common amenities. Upon establishment of the Industrial Park, individual industries will have their own parking area within the industrial plots.
 - (xxx) **Details of Rain Water Harvesting:** Rainwater harvesting pits are proposed in common amenities, green belt area and roads for recharging the ground water table. Around 166 no of pits are proposed with 250mm dia and 1000mm depth. Apart from these individual industries will be mandated to provide rain water harvesting pits in their plots.
 - Brief description of Socio-economic condition of local people: Though agriculture is the main occupation of Thiruvallur district, being close to Chennai and fast industrialization has resulted in shift in the occupation pattern. Out of the total workers only 4.78% of workers are cultivators and 17.59% of workers are Agricultural labourers. The district has good number of public health systems accessible and affordable apart from the private health facilities. The project site is free from habitation. The entire extent of land (279.995 ha) is Government poramboke land and is already handed over to SIPCOT by Government of Tamil Nadu for development of Industrial Park. Hence, there is no Rehabilitation and Resettlement for this project.
 - (xxxii) Land acquisition and R&R issues involved: The entire land of 279.995 Ha has been allotted to SIPCOT. While obtaining ToR for the Industrial Park, the land area was considered as 303.75 Ha (300.765 Ha of poramboke land and 2.985 Ha of patta land) based on the administrative sanction issued by Government of Tamil Nadu for development of Industrial Park at Manallur vide G.O (Ms) No.119 dated 07.06.2013. Details are given below.
 - **G.O (Ms) No.119 dated 07.06.2013**: While applying for EC, the poramboke land extent was reduced to 283.08 ha *vide* Government of Tamil Nadu land alienation GO (Ms) No. 285 dated 03/08/2018. Accordingly, in EC application the land extent was considered at 286.065 Ha (283.08 Ha of poramboke land vide per GO (Ms) No. 285 dated 03/08/2018 and 2.985 Ha of patta land *vide* GO.(Ms) no. 119 dated 07.06.2013).
 - GO (Ms) No. 285 dated 03/08/2018: The project area is now further reduced from 286.065 ha to 279.99.5 ha due to the following reasons:
 - 3.085 Ha of poramboke land has been excluded by Thiruvallur District Collector vide letter no. 14888/2018 dated 10.06.2019.
 - 2.985 Ha of patta land is also excluded from land acquisition and the total area of the Industrial Park is reduced to 279.99.5 Ha.



- Land Delivery Receipt in proof of taking over possession of 279.99.5 Ha of land from Zonal Deputy Tahsildar.
- Land Delivery Receipt: As per the Land delivery receipt, the entire land has been handed over to SIPCOT. There is no R&R involved for this project.

(xxxiii) **Employment potential, No. of people to be employed:** A total of 100,000 people will be employed for the current project, inclusive of temporary and permanent employees. The detailed breakup of employee numbers during both construction and operation phases are given below:

Phase	Employment Type	No. of Persons
Construction	Permanent	100
	Temporary	1000
	Permanent	10,000
Operation	Temporary	88900
	Total	100,000

(xxxiv) Benefits of the project:

- Development of facilities and infrastructure will lead to economic growth in the region.
- Proposed development will help in revenue generation for the State as well as to the Country.
- This project will have positive impact on the socio economic status of the surrounding human environment and increased inflow to the Tamil Nadu Government.
- Proposed Development will lead to creation of both direct and indirect job opportunities.
 SIPCOT in coordination with the candidate industries will improve the employment potential directly in its activities of processing, purchase/sale, management, etc., and will also indirectly enable the community to have alternative earnings through opportunities of hotels, travels, transfer, etc.
- (xxxv) Brief summary of specialised Studies carried out for the project as per the ToR: Not applicable.
- (xxxvi) Details of Court cases: There are no court cases against the proposed project.
 - 4. The EAC during its 241st meeting on 25-26th August, 2020, taken into account the submissions made by the project proponent M/s State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited that the current proposal only pertains to the development of a Industrial Park at Manallur and Soorapoondi villages of Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu State" over an extent of 279.99.5 Ha (691.587 Acres) at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District. After a detailed deliberation, the EAC recommended the proposal for grant of Environmental Clearance subject to fulfilment of specific conditions other than all standard conditions applicable for this project.
 - 5. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects) and hereby decided to grant Environmental Clearance for the



development of an Industrial Park over an extent of 279.99.5 Ha (691.587 Acres) land area at Manallur and Soorapoondi villages, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu under the EIA Notification, 2006 as amended, subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

SPECIFIC CONDITIONS A.

- The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc required (i) to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes as applicable to the project.
- 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 (ii) have been made during their presentation to EAC.
- No groundwater shall be used at any stage of project. (iii)
- No waste water shall be discharged to the rivers/streams or waterbodies. The proponent (iv) shall utilize the treated effluent and sewage for achieving zero discharge and scheme for the same shall be approved by CPCB and SPCB.
- Permission from Irrigation Department for obtaining surface water to be obtained. Consent to Operate shall not be issued without obtaining permission competent authority (v) for use of surface water.
- Detailed plan of expenditure with implementation schedule to address issues raised during Public Hearing shall be prepared and submitted to the Regional Office of this (vi) Ministry within three months. The proponent shall adhere the strict compliance of above plan to utilize funds as per schedule.
- As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them (vii) to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory Aforestation etc, either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.

B. STANDARD CONDITIONS:

I. Statutory compliance:

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).
- (ii) 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.
- (iii) 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
- (iv) 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.
- (v) 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, 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) 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.
- (vi) 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:

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- (i) 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.
- (ii) 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.
- (iii) 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) No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.

IV. Noise monitoring and prevention:

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

V. Energy Conservation measures:

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

VI. Waste management:

- (i) 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.
- (ii) The solid wastes shall be 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) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt:

- (i) An overall green area of at-least 33% of the Industrial Area should be developed with native species. The project proponent of the Industrial Area shall comply with the additional commitment made by them in the EIA report regarding the development of green belt.
- (ii) The Industrial Areas are directed to accordingly allocate the area to be developed as green cover to respective individual industrial units so as to achieve the above mentioned condition.
- (iii) The individual industrial unit, at the time of obtaining EC, shall bring a letter from the Industrial Area for the area allocated to them to be developed as green cover as a part of obligation from the Industrial Area.
- (iv) Wherever possible, plantations around the periphery of the Industrial Area, in the downwind direction and along the road sides shall be provided for containment of pollution and for formation of a screen between the industrial area and the outer civil area. The choice of plants should include shrubs of height 1 to 1.5 m and tree of 3 to 5 m height. The intermixing of trees and shrubs should be such that the foliage area density in vertical is almost uniform.
- (v) The parameters like selection of plant species, procedure for plantation, density of tree plantation etc shall be as per the CPCB guidelines.

VIII. Public hearing and human health issues:

- (i) 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.
- (ii) 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.
- (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.

X. Corporate Environment Responsibility:

(i) 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.



- (ii) 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.
- (iii) 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.
- (iv) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous:

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vi) The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, 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 Industrial Area 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.
- 7. This issues with the approval of the Competent Authority.

Copy to:

- 1. The Member Secretary, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Guindy, Chennai 32
- 2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi.
- 3. The APCCF (C), MoEF& CC, RO Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai 34
- 4. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 5. Guard File/Record File
- 6. Notice Board.

Amardeen Raju) Scientist-E