Minutes of the 150<sup>th</sup> meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held on 29<sup>th</sup> – 31<sup>st</sup> July, 2015 at Conference Hall (Narmada), Jal Wing, Ground Floor, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3

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1.	Opening Remarks of the Chairman		
	The Chairman welcomed all the Members to the 150 <sup>th</sup> meeting of the Expert Appraisal Committee.		
2.	Confirmation of the Minutes of the 149 <sup>th</sup> Meeting of the EAC held on 24-20 June, 2015 at New Delhi.		
	The EAC confirmed the minutes of the 149 <sup>th</sup> meeting of the EAC held on 24-26 June, 2015 in the Ministry at New Delhi.		
	In respect of Item No. 3.44 at para 3.44.2 the observation as uploaded in the draft minutes of 150 <sup>th</sup> EAC meeting has been erroneously uploaded. The correct version is as follows and may be substituted accordingly:-		
	'The EAC recommended the proposal for grant of Environmental Clearance, modifying and enlarging the EC granted on 23 <sup>rd</sup> July, 2007 with total built up area of IT park increased by 2.8% i.e. from 2,89,769 sqm to 2,98,009 sqm in the stated circumstances. The Committee desired for upgrading energy conservation upto 30%, which was agreed to by the project proponent. The remaining terms of conditions as stipulated in the earlier EC shall remain unchanged'		
2.1	Correction in minutes for proposed construction of residential apartment at S.No.4288/12 and 107, Block No.94 of Mylapore Division, Triplicane Taluk, Chennai (Tamil Nadu) by M/s CEEBROS Hotels Pvt. Ltd		
2.1.1	(i) The EAC in its 148 <sup>th</sup> meeting held in May, 2015 (Agenda 3.66) while considering the proposal for construction of residential apartments at S.No.4288/12 and 107, Block No.94 of Mylapore Division, Triplicane Taluk, Chennai (Tamil Nadu) by M/s. CEEBROS Hotels Pvt. Ltd, observed and recommended as under:-		
	Observations and Recommendations: The Committee deliberated at length on the information provided by the PP and observed certain discrepancies in the map for landscape plan. It was noted that Tamil Nadu Coastal Zone Management Authority (TNCZMA) vide letter dated 20.05.2015 has informed the Ministry that this proposal has been approved and copy of minutes of the meeting will be conveyed to MOEFCC shortly. The Committee recommended granting CRZ Clearance subject to the submission of the additional information to the Ministry namely the revised landscape plan, norms for energy efficiency, water balance chart including rain water harvesting.		
	<ul> <li>(ii) Subsequent to minutes of the meeting put in public domain, the PP requested for the amendment in minutes of the said meeting (Agenda item No. 3.66) to the effect that the proposal needs EC under EIA Notification, 2006 instead of CRZ clearance, in view of the legal provisions and also the fact that the proposal stands recommended by TNCZMA.</li> <li>(iii) On the request of PP, the proposal was placed before the EAC in its 150<sup>th</sup> Meeting held in July, 2015.</li> </ul>		

- 2.1.2 The Committee, after deliberations and taking note of the provisions contained in para 4(i) b of CRZ Notification, 2011 agreed for correction in the minutes, and recommended the proposal for grant of EC under EIA Notification, 2006 instead of CRZ clearance under CRZ Notification, 2011.
- 3. Consideration of Proposals
- 3.1 Setting up of Ice Plant in Kanyakumari District, Agastheeswaram taluk, Chinnmuttam Village (Tamil Nadu) by M/s MB Ice Plant Finalization of ToR [F.No.11-15/2015-IA.III]
- **3.1.1** During discussion, the Committee observed the following:
  - i. There was no clarity to the PP as to what was the objective and what for the proposal is submitted to the Ministry,
  - ii. Ice plant is not covered in the schedule of the EIA Notification, 2006 and thus does not require prior EC.
  - iii. If the proposal was for CRZ clearance, then the PP is to apply to Tamil Nadu Coastal Zone Management Authority (TNCZMA) along with the desired documents.

The EAC sought a clarification from PP on the above lines for further consideration.

- 3.2 Development of Multipurpose Terminal by replacement of existing EQ-2 to EQ-5 Berths to cater to 14.00 M draft vessels in Inner Harbor of Visakhapatnam Port Trust on DBFOT basis by M/s Visakhapatnam Port Trust Finalization of ToR- [F.No.11-19/2015-IA-III]
- **3.2.1** The PP made a presentation before the EAC and informed that:
  - (i) The proposal is to replace the existing EQ2 to EQ5 berths by constructing a multipurpose terminal to cater to fully laden panama vessels of 14 m draft to coterminous with this inner channel deepening project and deepening the inner harbor berths to cater to 14 m draft vessels. The entire area is within the existing port estate and the land use is as per port master plan. There is no significant change in the land use as the project area is within the existing port estate and is already under use by VPT for its activities.
  - (ii) The Pre-construction activities such as soil investigations have been carried out and the details of borehole, soil data appended in the respective Techno Economic feasibility reports.
  - (iii) No major demolition works are required. Dismantling of existing part of EQ-2, EQ-3, EQ-4 and part of EQ-5 berth and debris obtained from dismantling will be disposed at identified dumping ground of GVMC.
  - (iv) During construction phase temporary structures for storage of materials etc., will be erected at the site.
  - (v) Berths, pipelines, fire fighting monitor and control room, storage tanks, water tanks, office buildings, operational buildings will be required to be constructed for the proposed berths.
  - (vi) No activities like mining on tunneling are envisaged in the subject projects.
  - (vii) No reclamation work is envisaged under the subject project.
  - (viii) Berth front dredging up to (-) 16.10m from the present depth is envisaged in the project. The dredged material will be dumped in the existing dumping ground, designated by CWPRS, Pune after carrying out the detailed study. The existing dumping ground is presently used for

- dumping of dredged material obtained from maintenance dredging carried out every year
- (ix) There are no offshore structures proposed.
- (x) Solid wastes will be handled as per Municipal Solid Waste (Management and Handling) Rules, 2000. A network of surface drains exists for draining out the surface water with silt traps and the wastewater will be treated at the existing sewage treatment plant of 10 MLD capacity. Burning of waste in open air will not be allowed. The wastes such as construction debris in the port will be handled as per Andhra Pradesh Pollution Control Board (APPCB) norms.
- (xi) There is no need to close or divert the exiting transport routes.
- (xii) The sites are existing ones and are used for storing the cargo and hence no realignment or other changes in hydrology of watercourses or aquifers is required to be done. There will be no change in water bodies or the land surface that may affect drain or run off.
- (xiii) The water required for the proposed berth during construction and operational phases will be procured from Greater Visakhapatnam Municipal Corporation, approximate quantity of which will be around 1000 KLD.
- (xiv) The power supply requirement will be in the range of 1.5 to 2.0 MVA, which will be obtained from AP "Transco". The construction agencies will use their own power generators during construction. It is expected that in case of use of power generators approx. quantity of 25,000 liters of diesel will be required.
- (xv) The demolition debris shall be disposed at designated Municipal land fill site and dredge spoil shall be disposed at dumping ground as per detailed study conducted by CWPRS. The dredged material will be dumped in the existing dumping ground, designated by CWPRS, Pune after carrying of the detailed study. The existing dumping ground is presently used for dumping of dredged material obtained from maintenance dredging carried out every year.
- (xvi) During construction- operation phases, emissions from mobile sources (vessels, tractors, trailers, cranes, pilling rig) etc., are expected to the insignificant in quantity.
- (xvii) The emission values will be restricted within the standard permissible limits. Dust emissions are expected during handling of construction materials and storage of materials at the stack yards and the same will be taken care of by water sprinkling on the stacks during construction as well as operational phases.
- (xviii) During construction activities fugitive emissions are expected to be generated. Therefore all necessary measures shall be taken for maintaining the ambient air quality well within the CPCB limits. Odour is expected from sewage and drainage system but care would be taken so that the air quality in the areas meets APPCB norms and all mitigative measures will be adopted to control dust and odour and other gaseous pollutants.
- (xix) During construction phase noise is expected from loading and unloading operations of construction materials, equipment, pilling operation etc. However, these are not significant. Wherever required the workers will be provided with personal protective equipment. The machinery used will be maintained properly to avoid noise pollution.

- (xx) There are no plans to handle hazardous cargoes at the proposed berths.
- (xxi) A detailed disaster management plan is available with port to stand firm agaist any natural disaster; a specific study may be carried out as additional study.
- (xxii) The underlying reasons for dismantling and reconstruction of EQ2 to EQ5 berths are as follows:
  - a. To facilitate navigation of Panamax vessels by increasing the width of the basin. It is estimated that port would be called upon to handle about 40 to 45 million tons of bulk cargo at Inner Harbour berths. In the absence of this facility, it is likely that port may lose traffic of about 5 to 5.5 million tones of traffic thus losing its competitive edge.
  - b. If these berths are not dismantled, the port will not be able to fulfill its Contractual obligations under PPP projects is to facilitate handling of Panamax vessels and there will be a breach of contract.
  - c. These berths were built in 1933 and have outlived their economic life, continuation of cargo handling operations may be at the cost of safety and security.
  - d. A berth length of 280 m is required for the safe mooring and operation of the design vessel with 230 m length. The remaining length of EQ-2 together with EQ-3 and EQ-4 berths and a portion of EQ-5 berth (about 89m) are proposed to be merged for developing two berths each of 280m.
- (xxiii) The total capital cost of the project (EQ2 (NEW) to EQ5 is estimated at Rs. 537.48 crores for handling capacity of 6.45 MMTPA. This includes cost of civil construction works viz. berth cost, dredging, mooring etc. and equipment cost of 2Nos. Harbour Mobile cranes at each of the berth for ship shore handling. The entire project is expected to be completed within 46 months from the date of commencement of the project.
- (xxiv) Road Connectivity: The port is connected by road to NH-5 (Chennai-Kolkata). The total road network within the Port limits is about 85 Kms. About 23.5 Kms, of road network is available within the operational area connecting the entire stacking areas for free movement of vehicles. Port connectivity road of length 12.47 Kms., was implemented jointly by the Port and NHAI through SPV-Visakhapatnam Port Road Limited. The flyover cum road project facilitates smooth movement of cargo traffic between Port and National Highway-5.
- (xxv) Rail Connectivity: The Port is also well connected with the Indian Railways network directly through the Waltair Railway Marshalling Yard to Chennai-Howrah Main line of East Coast. This line branches off at Kothavlasa leading to Bailadilla Iron Ore mines in Chhattisgarh. This main line goes further up North passing through coastal Orissa, West Bengal up to Assam facilitating movement of imported fertilizers, petroleum products etc. to various destinations. The port is having internal rail network connecting the berths handling bulk and container cargo. This railway network operated by the port is the largest amongst Indian Ports with over 200Km rail length and over 30 Sidings. Port is equipped with 15 WDS-6 locos of 1400 HP and 3 WDG-3 locos of 3100 HP capacity for carrying Train operations.
- (xxvi) The PP also informed that the Terms of Reference (TOR) for this Project Proposal will be as per the standard TOR formulated by the Ministry. The main objective of preparation of EIA Report will be to identify the present status of Environment and expected Environmental impact due to the

proposed "Development of Multipurpose Terminal by revamping EQ-2 to EQ-5 berths to cater to 14.00 M draft vessels in the Northern Arm of Inner Harbour at Visakhapatnam Port Trust on DBFOT basis", which may consists of different activities like construction of new berths, pipelines, development of stacking areas, dredging, etc. The study shall cover all the operations to be carried out for the proposed project to formulate proper scientific measures to mitigate any likely environmental damage and upgrade ecological system in the area. The details of environmental issues and how they are addressed with well framed EMPs will be given in the EIA study.

- (xxvii)The PP also requested that while finalizing the TOR for preparation of EIA for obtaining Environment Clearance for the above project, the EAC may consider granting exemption from the Public Hearing (PH). It was submitted for consideration of the EAC that Visakhapatnam Port Trust (VPT) has already conducted the public hearing on 22.12.2010 under the provision of EIA notification 2006, for the projects:
  - a. development of East Quay-IA (EQ-1A) berth for handling thermal coal and steam coal on south side of the existing EQ-1 berth in the inner harbor of VPT on DBFOT basis; and
  - b. development of East Quay-1 (EQ-1) berth for handling steam coal by replacing the existing EQ-1 berth & part of EQ-2 berth in the inner harbor of VPT on DBFOT basis.

(xxviii) The VPT also have conducted a public hearing on 10.04.2015 under the provisions of EIA notification 2006, for the projects below:

- a. Up-gradation of Existing Facility And Creating of New Facility at Visakhapatnam Port Trust for Iron Ore Handling on Design, Build, Finance, Operate and Transfer (DBFOT) Basis (OHC &WQ1) & Deepening of Outer Approach Channel, Turning circle and berth from (-)19.0m to (-)22.0m.
- b. Development of West Quay North (7 & 8) berth with mechanized handling facilities for handling dry bulk/break bulk cargo on Design, Build, Finance, operate and Transfer (DBFOT) basis in Inner Harbour of Visakhapatnam Port & Deepening of Inner Harbour and Turning circle to (-) 16.0 m.
- c. Extension of Existing Container Terminal in the Outer Harbour of Visakhapatnam Port on DBFOT basis.
- (xxix) Therefore as VPT have conducted public hearing with respect to other development projects as stated above it is requested to consider for the waiver of public hearing for the present proposal which is falling exclusively within the Port limits in line with the above projects for which public hearing was conducted earlier.
- (xxx) Also with respect to the above projects, VPT have prepared comprehensive EIA report hence approval may please be given for preparation of **Rapid EIA** for the present proposal for saving time and resources.
- The EAC after detailed deliberations recommended for finalization of standard TORs as proposed by the PP and also for granting exemption for conducting public hearing for the present proposal as it is falling exclusively within the port

- limits for which public hearing was conducted earlier. The EAC also allowed preparation of Rapid EIA for the project.
- 3.3 Common Hazardous Waste Treatment, Storage, Disposal Facility (CHWTSDF) located at Survey Nos 269 (Part), 270 & 272 (Part), Mellavittan Village, SIPCOT Industrial Complex Phase-I, Thoothukudi District, Tamil Nadu by M/s Industrial Waste Management Association Finalization of ToR [F.No.10-20/2015-IA.III]
- **3.3.1** The PP made a presentation before the EAC and informed that:
  - i. The proposal is for the development of Common Hazardous Waste Treatment, Storage, Disposal Facility in SIPCOT Industrial Area Thoothukudi District, Tamil Nadu. Total area of the project site is 20 Acres, and site is well connected to all the means for safe transportation. The project components include Direct Landfill, Landfill after Stabilization, AFRF. The project capacities are Direct Landfill 30,000 TPA, Landfill after Stabilization 70,000 TPA, Alternate Fuel Recovery Facility 2000 TPA.
  - ii. The location of the project is at Survey Nos 266, 267(P), 268(P), 269, 272, & 294(P), Mellavittan Village, SIPCOT Industrial Complex Phase I, Thoothukudi District, Tamil Nadu State.
  - iii. The present Hazardous Waste TSDF at Gummidipoondi is catering to the needs of all industries present in Tamilnadu. As per MOEF Technical EIA guidelines manual of TSDFs there are around 3067 industrial units in the state of Tamilnadu generating around 481760 MTA hazardous waste (land fillable waste 291790 MTA; Incinerable Waste 1173 MTA; Recyclable wastes 168796 MTA), where as the existing secured landfill capacity is for 100000 MTPA. In order to meet the deficiency for treating the additional land fillable and recyclable waste and due to large distances involved in the transportation of Hazardous Waste from one end to the other end of the state, Tamilnadu Government has decided to set up two more CHWTSDFs in Perundurai and Thoothukudi respectively, a Common Hazardous Waste Management Facility is proposed in Thoothukudi district to meet the demand of districts in and around.
  - iv. The cost of the project is Rs.41 crores.
  - v. Project does not fall under Eco-sensitive Area.
  - vi. 19 KLD of fresh water is required for the project and will be supplied by SIPCOT.
  - vii. Does not require tree cutting, site is barren and classified as industrial area.
  - viii. No Rehabilitation and Resettlement (R&R Plan) is required because the proposed site is located inside the notified SIPCOT industrial area.
  - ix. Employment potential:

S. No	Details	Construction	Operation	Remarks	
1	Management /Skilled	5	16	Permanent staff	
2	Semi Skilled	20	62		
3	Unskilled	35	102	On contract basis	
Note: Indirect employment due to the project will be around 50 persons					

- 3.3.2 The EAC after detailed deliberations recommended the finalization of TOR to the proposal, with the additional conditions (in addition to the scope of work proposed by the PP) as under:-
  - (i) Public hearing shall be conducted while preparing the EIA/EMP report.
  - (ii) The project should be consistent with the Hazardous Waste Management Handling and Trans-boundary Movement Rules, 2008.
- Integrated Municipal Solid Waste Processing and Disposal Facility for Pahalgam Town & Amarnath Yatra at Mavoura Village, Tehsil Pahalgam, District Anantnag (J&K) by M/s Pahalgam Development Authority—Finalization of ToR [F.No.10-21/2015-IA.III]
- **3.4.1** The PP made a presentation before the EAC and informed that:
  - (i) The proposed project is an Integrated Municipal Solid Waste Management Facility to cater the needs of municipal solid waste generated from domestic, commercial activities. The proposed municipal solid waste landfill site in Pahalgam town is spread over a land of 21000 m² with Capacity of 12.00 ton/day municipal solid waste for 10 years. The proposed project is planned in accordance to the MSW (Management and Handling) Rules 2000 and it consists of Compost plant, Recyclable segregation facility, Secured Landfill, Leachate treatment and reuse facility.
  - (ii) The proposed municipal solid waste landfill site is located at Village Mavoura, Pahalgam Town, in District Anantnag (J&K). The project will be developed by Pahalgam Development Authority.
  - (iii) Need for the project: Pahalgam has a very unique topography and landscape facing geo-environmental degradation through activities like deforestation, mass wasting (Soil erosion), slope instability, loss of arable land, unsystematic and unscientific expansion with waste garbage disposal cause decreasing per capital land holding which is to be major challenge in the next fifty years. The effect of this activity is degradation of forest line, vandalisation of forests or decay of trees. After noticing, poor arrangements and number of deaths that occurred during Amarnath Yatra in the year 2012, Honorable Supreme Court of India constituted a Special High Powered Committee (for short 'SHPC', wWhich consisted of representatives from different Ministries of the Union of India, Chief Secretary and other officers of the State of Jammu and Kashmir, Director Generals of the Border Security Force and the Border Roads Organizations etc. The SHPC was expected to visit the site and make its recommendations in the form of a Report. Through its various Orders, the Hon'ble Supreme Court has referred to several issues connected with the Amarnathji Yatra and directed the SHPC to make recommendations in regard
    - a. the concerned District Administrations must identify the sites and create this infrastructure expeditiously as per the Municipal Solid Waste Rules, in consultation with the SPCB. This infrastructure is vital, not only for the Yatra, but also for the growing number of tourists and other business visitors in the larger area; and
    - b. it must be ensured that after the dismantling of Yatra Camps and Langers, consequent to the conclusion of the Yatra, all solid waste is collected and properly disposed off by the relevant authorities. CEO, SASB, should in consultation with SPCB, put in place an appropriate

monitoring mechanism in this regard.

The Pahalgam Development Authority has taken an initiative to construct an Integrated Municipal Solid Waste Processing and Disposal Facility at Pahalgam.

(iv) **Location**: The proposed municipal solid waste landfill site is located at Village Mavoura, Tehsil Pahalgam District- Anantnag, Jammu & Kashmir. The nearest railway station is Srinagar, situated approximate 42.0km in NW direction. Srinagar International Airport situated in Srinagar is approximate 50.0 km in NW direction. The site for the proposed project has been finalized and land acquisition is under process. Department is taking NOC from other concern departments for allocation of land. The co-ordinates of the project site are given below:-

Code Latitude Longitude

- a 33.914058° N 75.278514° E
- b 33.914058° N 75.278514° E
- c 33.912894° N 75.276778° E
- d 33.912892° N 75.278517° E
- (v) Initially the site at Village Khelan Gujran was selected for proposed landfill site. As it was very near to the Khelan River, hence site has been rejected. The second site at Village Mavoura has selected for proposed landfill site as it is 1 km away from Khelan River.
- (vi) The proposed project is to design a MSW landfill which comprises the area of 21000 sqm for the waste quantity 12.0 ton/day for the life span of 10 years.
- (vii) The activities planned in the proposed project include collection, transportation, treatment & disposal of municipal solid waste in compliance to the MSW Handling Rules, 2000.
- (viii) Landfill design involves development of concept, adoption of suitable procedure and safety considerations. Landfill is a typical combination of different component and each of these components has to be designed separately. For this process standard design procedure by CPHEEO Manual on Municipal Solid Waste Management, United States Environmental Protection Agency's Manual on Solid Waste Management (Subpart D, Design Criteria) and Municipal Solid Waste (Management & Handling) Rules is proposed to be adopted.
- (ix) The solid waste from Pahalgam consists of three main constituents i.e. compostable, recyclable and miscellaneous. Compostable and recyclable wastes are very valuable so far as the composting is concerned, while the miscellaneous waste will be disposed off into landfill. The municipal solid wastes generated during operation phase will consist of papers, cartons, Thermocol, plastics, polythene bags, Glass, etc. Solid waste will be generated mainly from Camps (Sangam, Holy Cave, Panjtarni, Poshpathri, Sheshnag, Zojibal, Pissutop, Chandanwari, Nunwan, Wabal and Ganeshpora) including hotels (A, B, C class), restaurants, and markets located in Pahalgam. The quantity of solid wastes generated will be approximately 50 ton/ day.
- (x) Leachate generation will be 20 KLD. Leachate treatment plant will be provided for treating leachate of capacity of 20 KLD.
- (xi) Only used oil will be generated and collected and will be handed over to authorized recyclers. 300 liter/year used oil will be generated.
- (xii) The Processing area shall comprise of following sections namely the

- Leachate Treatment Facility, Leachate Holding Tank, Compositing area, DG set Room, MCC Panel, Panel room and Temporary Storage Area/ Yard.
- (xiii) The non-Processing Area Requirement of residential area will inlude Administration building, Truck parking area, Security cabin, Utility area, Laboratory and Canteen
- (xiv) Total 33% of green area either inside or outside the periphery will be provided.
- 3.4.2 The EAC after detailed deliberations observed that the land use of the site identified for the said project is paddy agriculture, and no alternate sites have been explored. However, the Committee recommended for finalization of TOR as proposed by the PP, subject to conformity of the site with the MSW Rules, 2002, the Wetland Rules, 2010 and Eco-sensitive areas.
- 3.5 Construction of Fifth Oil Berth at Jawahar Dweep, Mumbai by M/s Mumbai Port Trust Amendment in ToR [F.No.10-4/2015-IA.III]
- **3.5.1** (i) The PP made a presentation and informed that.-
  - (ii) EIA studies were done in the year 2010. However, the study could not be processed further due to expiry of its validity. The project DPR was updated in December 2014 and the Mumbai Port Trust applied for fresh TOR on 20.01.2015. The proposal was considered by EAC in its 147th meeting. The Mumbai Port Trust (MbPT) requested the Committee for waiver of Public Hearing (PH). A letter requesting for waiver of PH was also forwarded to Member Secretary of EAC on 28.04.2015. However, the TOR letter for rapid EIA study received from MoEF on 19.06.2015 with a noting for conducting Public Hearing as stated in para (xviii) of the TOR letter. The para 3.xvii) of the letter states as under:

"The EAC observed that request of PP for granting exemption from Public Hearing cannot be considered since the PP so far has not placed the justification /valid ground on records in this regard. Thus, EAC recommends conduct of Public Hearing (PH)".

- (iii) Therefore, the present proposal is for amendment in TOR for granting exemption in Public Hearing. The PP informed that the proposal project is a replacement to the Fourth Oil Berth, which has outlived its life. It is a very critical infrastructure for the Oil Refinery. The existing facility at Jawahar Deep is in use since 1954. There is no habitation at Jawahar Dweep and at the shore (Tata Power, HPCL and BPCL). The fishing activity is prohibited at the location of Proposed Project. The submarine Pipeline is laid parallel to the existing submarine pipelines. The project is within Mumbai Port Limit. The PP also reported that there are some inhabitants on Elephanta Island. However, their status/authorized stay is not known.
- 3.5.2 The EAC suggested to the proponent to resubmit the request to Ministry for getting exemption from PH. The Ministry shall examine the matter in the light of legal provisions and take an appropriate decision.
- 3.6 Expansion of Group Housing Complex at Sector-86, Village Nakhnaula, Gurgaon (Haryana) by M/s. Deepanshu Projects Pvt. Ltd. Finalization of ToR [F.No.21-120/2015-IA-III]

### **3.6.1** The PP made a presentation before the EAC and informed that:

- i. The proposed Expansion of Group Housing Complex is expansion of under construction project which is located at Village- Nakhnaula, Sector-86, Gurgaon, Haryana.
- ii. The land has been licensed by DTCP vide license no. 104 of 2010 dated 03.12.2010 to M/s Deepanshu Projects Pvt. Ltd. for the development of group housing complex.
- iii. Project has already been granted Environment Clearance vide letter no. SEIAA/HR/2013/643 dated 04/09/2013 for the plot area 59258.11 sq m and built up area 148623.86 sq m. it is now proposed to increase total built up area from 148623.86sq m to 167999.1 sq m. Hence it falls under the category 8 (b) of the EIA notification, 2006. The total estimated cost of the project is Rs. 394.40 Crores.
- iv. As the tenure of the SEAC/SEIAA Haryana has been completed thus they are applying online under Category A in MoEF.
- v. After Expansion, No. of blocks in complex will be 17 & no. of Floors will be G+21.
- vi. The total population of the group housing complex after expansion has been estimated to be 5051 persons.
- vii. After Expansion of Group Housing Complex, total water requirement is estimated as 685 KLD and will be met by HUDA supply. Water shall be used mainly for domestic, flushing, D.G. cooling, misc. & gardening purposes. Total 565 KLD waste water shall be generated from the Complex.
- viii. The generated sewage will be treated in in-house Sewage Treatment Plant of capacity 700 KLD based on MMR technology. The treated water generation will be 537 KLD out of which 246 KLD shall be reutilized for flushing, gardening, cooling & miscellaneous purposes & the rest 291 KLD excess treated water shall be given to tanker supplier.
- ix. 14 no. of Rain water Harvesting structure will be provided within the complex to recharge the storm water to ground.
- x. Total 2134 kg/day Municipal solid waste will be generated out of which 1494 Kg/day of Bio- Degradable waste will be sent to Municipal Solid Waste Site & 640 Kg/day of Recyclable Waste shall be given to Authorized Recycler.
- xi. Among hazardous waste approx. 56 ltr/month of used oil generated from D.G. Set shall be collected in leak proof containers at isolated place and then it will be given to approved vendor of CPCB as per Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 and Amended till date & approx. 2 Kg/month of E-Waste generated will be disposed off through approved vendor of SPCB as per Electronic Wastes (Management & Handling) Rules, 2011. STP Sludge generated will be passed through filter press where it will be dewatered/ dried to form a cake and then will be used as manure in green areas. The unused sludge shall be given to farmers or nursery.
- xii. The estimated quantity of dried sludge will be approx. 35 kg/day.
- xiii. The proposed power requirement is about 6849.26 KW, which will be supplied by Dakshin Haryana Bijli Vitran Nigam. D.G. set of capacity 3

- x 1500 KVA & 2 x 1010 KVA will be installed for power back-up in the basement of complex. Hence, proper stack height of 6 m above roof level shall be provided to reduce the air emissions meeting all the norms prescribed by CPCB. D.G. sets will be used during Power failure only. Total Green area of the residential plotted complex is 11901.74 sq m i.e. 21.75 % of total net plot area.
- xiv. Parking requirement of the project is 1403 ECS and parking provision of 1411 ECS shall be maintained.
- xv. It will be an environmentally sustainable project. It will attract people to develop organized Group Housing Complex. It will provide direct and indirect employment to local people.
- **3.6.2** The EAC, after deliberation recommended for grant of scoping clearance to the proposal, with the finalized scope of work/study besides that proposed by the PP, as under:-
  - (i) Public hearing to be conducted while preparation of EIA/EMP report, suitably addressing the concerns therein,
  - (ii) Many of the districts/areas in the State of Haryana have been identified as grey areas in respect of ground water withdrawal. As such, a detailed study of the area to be carried out taking into account cumulative water withdrawal and the replenishment/recharging. Such a study necessarily needs to be endorsed by the Central Ground Water Authority,
  - (iii) For other sources of water supply (like from HUDA), a firm commitment by the State Agency for sustainable water supply from the identified sources giving water balance in view of prior commitments and availability needs to be furnished,
  - (iv) Land use pattern of the project site has to be in accordance with the regional plan approved by NCR Planning Board. A certification in this regard from the competent authority is to be submitted,
  - (v) Impact on ambient air quality due to increased traffic density, and the traffic planning to minimize the same.
  - (vi) Traffic Management Plans of Sector and arterial roads to be given.
- 3.7 Expansion of Group Housing "PRESTON" will be located at Village-Shahpur Turk, Sector-9 & 18, Sonipat, Haryana by M/s Parsvnath Developers Ltd. Finalization of ToR [F.No.21-121/2015-IA-III]
- **3.7.1** The PP made a presentation before the EAC and informed that:
  - i. The Environmental Clearance application for project, Expansion of Group Housing "Preston", at Sec 9 & 18, Shahpur Turk Sonepat, Haryana The application for Grant of ToR was submitted to SEIAA, Haryana on 25-02-2015 vide file no. SEIAA/HR/15/790.Due to completion of the tenure of Haryana SEIAA/ SEAC, the project was transferred from SEIAA, Haryana to MoEF&CC vide memo no. SEIAA/HR/2015/378-381 dated 24-03-2015.
  - The application for Grant of ToR was uploaded online on MoEF&CC website vide proposal No. IA/HR/NCP/27888/2015 on 30-05-2015. for the development.

- iii. Project has already been granted Environment Clearance vide letter no. 21-545/2007-1A.III dated 24/12/2007 for the plot area 1,13,741.41 sq m and built up area 2,03,903 sq m. The license has been granted by DTCP vide license no. 1205 of 2006 dated 06.10.2006 for 13.5 acre land to M/s Dreamweaver Realtors Pvt. Ltd. C/o M/s Parsvnath Developers Ltd. & license no. 1206 of 2006 dated 06.10.2006 for 14.606 acres land to M/s Evergreen Realtors Pvt. Ltd. C/o M/s Parsvnath Developers Ltd. which is valid upto 05.10.2015 for the development of group housing Colony.
- iv. The total plot area 113741.41 sq m and increased built up area is 230224.675 sq m. Hence it falls under the category 8 (b) of the EIA notification.
- v. The estimated project cost will be Rs. 238.20 Crores.
- vi. The ground coverage will be 20740.3 sq m. The FAR of the project will be 199038.5 Sq m. The total built-up area will be 230224.67 Sq m.
- vii. The green belt development area will be kept as 26199.28 Sq m.
- viii. The road & open area will be 16291.35 sq m.
- ix. Maximum no. of floors will be S+19 for complex and maximum height of building will be 57 m.
- x. Total population of the complex will be 10870 Nos. (9570 residents, 300 staff, 1000 visitors).
- xi. The total water requirement will be 1417 KLD. The source of water will be HUDA supply.
- xii. The total waste water generation will be 1138 KLD. The waste water shall be treated in sewage Treatment Plant (STP) of total capacity 1400 KLD based on Extended Aeration Technology.
- xiii. 493 KLD treated water will be reused in flushing, DG cooling, gardening & misc and rest 588 KLD treated water discharge to tankers. 28 no. of RWH pits shall be provided for storm water recharging to ground.
- xiv. The total power requirement will be 11 MW which will be provided by Uttar Haryana Bijli Vitran Nigam Limited (UHBVN). D.G. sets for power back up is proposed 4 X 2000 KVA & 2 X 1010 KVA with stack height at 6m above from roof level.
- xv. About 4502 Kg/ day solid waste will be generated in the project. The biodegradable waste (2800 Kg/ day) will be sent to Municipal Solid waste site and the recyclable waste generated (1702 Kg/ day) will be handed over to authorized local vendor/recycler.
- xvi. As per zonning provision of 2045 ECS shall be provided on surface area & basement area.
- **3.7.2** The EAC, after deliberation recommended for grant of scoping clearance to the proposal, with the finalized scope of work/study other than that proposed by the PP, as under:-
  - (i) Public hearing to be conducted while preparation of EIA/EMP report, suitably addressing the concerns therein,
  - (ii) Many of the districts/areas in the State of Haryana have been identified as grey areas in respect of ground water withdrawal. As such, a detailed study of the area to be carried out taking into account cumulative water withdrawal and the replenishment/recharging. Such a study necessarily needs to be endorsed by the Central Ground Water Authority,

- (iii) For other sources of water supply (like from HUDA), a firm commitment by the State Agency for sustainable water supply from the identified sources needs to be furnished, giving water balance in view of prior commitments and availability,
- (iv) Land use pattern of the project site has to be in accordance with the regional plan approved by NCR Planning Board. A certification in this regard from the competent authority is to be submitted,
- (v) Impact on ambient air quality due to increased traffic density, and the traffic planning to minimize the same,
- (vi) Traffic Management Plans of Sector and arterial roads to be given.
- 3.8 Proposed Group Housing Colony Project "The Melia" at Village Mohammadpur Gujjar Kila Nos. 5//8, 13, 14, 16, 17, 18, 22, 23, 24, 25/1, 25/2, 6//20, 21, 22, 7//1, 2, 3, 7, 8, 9, 10/1, 10/2, 8//2, 3, 4, 5, 6, Sector 35, Sohna Distt Gurgaon, Haryana by M/s DSS Buildtech Pvt Ltd. Finalization of ToR [F.No.21-122/2015-IA-III]
- **3.8.1** The PP made a presentation before the EAC and informed that:
  - i. M/S DSS Buildtech Pvt Ltd is a renowned infrastructure developer and promoter company having its registered office at 506, Time Square Building, B Block, Sushant Lok, Phase 1, Gurgaon Haryana is proposing to develop a Group Housing Colony Project "The Melia" is a residential colony project proposed at Village Mohammadpur Gujar, Sector 35 of Sohna, Dist. Gurgaon The total plot area of the project is 17.41 acres with built-up area 167805.04 Sq.m.
  - ii. License to develop a Group Housing Colony Project has already been granted by Directorate Town and Country Planning, Haryana vide license no. 77 of 2013.
  - iii. The Project is located at Village Mohammadpur Gujar, Sector 35 of Sohna, Dist. Gurgaon the GPS Coordinates of the project are: 28°16'53.65"N and 77° 3'25.64"E
  - iv. The site has good connectivity to State Highway no. 13
  - v. The site has been earmarked as Residential zone in the Sohna Master Development Plan 2025 as Sector 35, Due to the rising industrialization in district Gurgaon the demand for residential apartments with high living standards is rising. The area around the project is developing very fast and accordingly the license has been granted by Directorate Town and Country Planning, Haryana vide license no. 77 of 2013 to develop a group housing colony project. Moreover the site has good connectivity to Gurgaon city by SH 13 which is adjacent to the project site.
  - vi. The project activity involves Dwelling Units , EWS Units, Commercial , Community Centre Club, Primary school etc.
  - vii. The Maximum height of building structure would be 51.2 m, Maximum No. of Floors are proposed G + 14, Power Requirement & Sources is 6063 KW (Dakshin Haryana Bijli Vitran Nigam Limited), 2 DG sets of total capacity 1635 KVA (625 KVA + 1010 KVA)
  - viii. Total Water Requirement: 910 KLD, Fresh Water Requirement: 694 KLD, Treated Water Requirement: 216 KLD, Source: HUDA Supply.
  - ix. The project is not located in any critically polluted area.
  - x. Project does not require any diversion of forest land. Moreover the NOC

from Divisional Forest Officer Gurgaon has been obtained Enclosed as Annexure 1 and NOC regarding non applicability of Aravali Notification from Deputy Commissioner Gurgaon has also been obtained Enclosed as Annexure 3.

- xi. There is no such Eco Sensitive area within 10 KM of the project.
- xii. The total cost of project is Rs 430 crores
- xiii. The Plot area is 70455.77 m2 (17.41 Acre), Built-up/ covered area is 167805.04.
- xiv. The Green area to be developed on 18217.71 m2 area (25.84%).
- xv. Parking details:

S.No	Parking Type		No. of cars	
1.	Stilt Parking	@30 sq.mt/ECS	67	
2.	Surface Parking	@25 sq.mt/ECS	390	
3.	Basement	@35 sq.mt/ECS	1301	
	Parking	-		
		1758		
Total ECS required @1.5 ECS /units(1.5 X 912) 1368				

- **3.8.2** The EAC, after deliberation recommended for grant of scoping clearance to the proposal, with the finalized scope of work/study other than that proposed by the PP, as under:-
  - (i) Public hearing to be conducted while preparation of EIA/EMP report, suitably addressing the concerns therein,
  - (ii) Many of the districts/areas in the State of Haryana have been identified as grey areas in respect of ground water withdrawal, a detailed study of the area to be carried out taking into account cumulative water withdrawal and the replenishment/recharging. Such a study necessarily needs to be endorsed by the Central Ground Water Authority,
  - (iii) For other sources of water supply (like from HUDA), a firm commitment by the State Agency for sustainable water supply from the identified sources needs to be furnished giving water balance in view of earlier commitments and availability,
  - (iv) Land use pattern of the project site has to be in accordance with the regional plan approved by NCR Planning Board. A certification in this regard from the competent authority is to be submitted,
  - (v) Impact on ambient air quality due to increased traffic density, and the traffic planning to minimize the same.
  - (vi) Traffic Management Plans of Sector and arterial roads to be given.
- 3.9 Proposed development of Independent Villas at Sector 61, Village Ullawas, Rectangle No. Killa No. 50 11/2 51 16 24 25/1 25/2 52 25/2 25/3 57 5/1 5/2 58 4/2 52 16/2 24/2 25/1 1 25/2 5 5 12 21/1 22/1 11 14 15 16 17 24 25 15 6 10 7/2 14 5 20 21 9 5/3 10 1/1 9 5/1 5/2 6/1 6/2/1 5 22/1 22/2 12 23/1/1 1 15/1 11 3 4/1 2 21/2 22/2/1 15 1 2/1 16 5 1 16 17/1 24 25 51 21 22 58 1 5 13/3 18/1 10 8/1 5 17/1 10 9/1 10 4 6 7/1 12 19 20 11 4/2 7 8 9 13 5 24 25 10 2/1/1 5 22/3 1 14/3 10 1/2 10 2/1/2 11 5 13/2 5 12/1 10 15/1 16 17 25/1/1 11 11 12 19 20 21/1 22 10 5 6 24/2/2 5 19/2 19/3 58 2/1 3/1 4/1/1 3/3 4/1/2 8/1 2/3 9/2 2/4 3/2 8/2 9/1 2/2 9/3 10/1 11/2 4 21 22 23 4 19/2 11 1 2 10 26 2 12 18 19 20 22/1 23/1 11 18 23 15 5 15 3 4 7 8 2 23/2 24 10 18 2 22/1/1 10 19/1 10 2/2 3 5 16, Gurgaon, Haryana by M/s IREO Pvt. Ltd. Finalization of ToR [F.No.21-123/2015-IA-III]

- **3.9.1** The PP made a presentation before the EAC and informed that:
  - i. The project area has been earmarked as residential zone in Gurgaon Manesar Urban Complex (GMUC) 2031 AD and will be developed as per the same. Hence no land use change is envisaged.
  - ii. The project site is located at Sector 61, Village Ullawas, Tehsil Sohna, Dist. Gurgaon (Haryana).
  - iii. The surrounding area of the project site possesses residential landuse pattern, as the surrounding area will be developed as per the Master Plan, therefore, the development in the project site will be consistent with the surroundings.
  - iv. The proposed Independent Villas Development Project will be spread over an area of 90.925 acres (3,68,142.23 sq m), which comprises of 441 Nos. of Villas. Each Villa has a G+2 level with Single basement.
  - v. Salient features of the Project
    - Total Site Area: 90.925 acres (3,68,142.23sq m)
    - Ground Coverage Area: Proposed 92,008.25 sq m
    - FAR (A): Proposed 2,35,046.22 sq m
    - Basement Area (B): 1,37,286.50 sq m
    - Non FAR area (C): 2,31,720.24 sq m
    - Built up Area (A+B+C): 4,66,766.46 sq m
    - Dwelling Units-Total 441 Nos
    - Residing Population: 5,292 Nos
  - vi. Water Requirement:
    - i. Construction Phase: 160 KLD, Construction activities requirement 100 KLD; Source: Treated wastewater from HUDA STP which will be further treated at on-site STP as per desired construction water quality, Domestic water requirement- 60 KLD for laborers (Considering 1000 construction labor during the peak construction period @ 45 lpcd water demand as per CPHEEO and 200 will be residing in labor camp @ 86 lpcd as per Manual on Construction & Large Building projects) Source: Potable Water from Tanker Supply
    - ii. Operation Phase: 1345 KLD- Fresh water requirement 689 KLD (Source: HUDA Public Supply. In case of any deficit of municipal supply, ground water shall be abstracted after obtaining permission from CGWA.)
    - iii. Recycle Water Requirement 656 KLD (*Source*: Treated Wastewater from Onsite STP)
  - vii. Rainwater Harvesting: Rainwater harvesting will be done by creating recharge pits within the site. The rain water from the roof, open and paved areas will be diverted to the rain water harvesting pits within the site. Rain water harvesting will be carried out through the required numbers of pits.
  - viii. Power requirement:
    - i. Construction Phase- Power Requirement Approx. 1000 kVA (source: DG sets)
    - ii. Operation Phase- The power requirement of the proposed Independent Floor development when fully developed and occupied and functional is estimated as: Demand Load: 9787 KW (Source: Dakshin Haryana Bijlee Vitran Nigam Ltd (DHBVNL))
  - ix. Backup Power- 16 nos. of DG sets of 750kVA each will be used as backup power for proposed project only in case of power failure.

- x. The site is well connected with the existing Golf course extension road (Southern Peripheral Road). Apart from this 2 nos. roads one towards East and other towards west has been developed recently, which also increase the connectivity of the proposed development.
- xi. Parking: Sufficient Parking will be provided within the Project premises to maintain smooth flow of Traffic. Total Parking: 778 Nos.
- xii. The green area for the proposed project has been planned in an area of 29.94 Acers (121180.45 sq. m) (32.92 %) of the total site area.
- xiii. Mitigation measures to control air pollution during construction phase
  - a. Air quality around the project site will be adversely impacted during construction stage. Various construction activities especially related to handling of loose material are likely to generate fugitive dust that will affect the air quality of the surrounding area of the project site. To minimize such impacts following measures has been proposed:
  - All the loose material either stacked or transported will be provided with suitable covering such as tarpaulin, etc.
  - Water sprinkling shall be done at the locations where dust generation is anticipated.
  - To minimize the occupational health hazard, proper personal protective gears i.e. mask shall be provided to the workers who are engaged in dust generation activity.
- xiv. Mitigation Measures for Air Pollution during Operational Stage:
  Operation of DG Sets is the only source of air pollution during operational phase. Sufficient stack height will be provided for proper dispersion of pollutants. Also, it is proposed to minimize air pollution by providing plantation as buffer on the periphery of the project site and on the open spaces.
- Waste Water Generation: Groundwater will not be abstracted for XV. construction purpose during construction phase and the source of water for the same shall be treated raw water from nearest STP of HUDA. Toilets shall be provided on the site during construction phase and wastewater from the toilets / bathroom will be disposed off through mobile STP / Septic Tank. Approximately 729 KLD of sewage will be generated and the same will be treated in a sewage treatment plant. Separate pipelines will be laid for using the treated water. The proposed STP will be designed appropriately to take care of the expected peak and average flow in order to maintain the characteristics of the treated sewage as per the standards. The STP will have design capacity of 875 KLD. STP based on Sequential Batch Reactor (SBR) Technique will be established. The waste water will be collected through a network of sewer system to be designed accordingly keeping in view the location of the STP. The treated effluent will be reused for flushing, Road maintenance, horticulture purposes and other construction activities. Dual plumbing system will be provided for utilizing treated water for flushing of toilets. Reuse of treated effluent within the project site will reduce the overall requirement of fresh water.
- xvi. Noise Environment: It is envisaged that within the Independent Floors development there shall be maximum movement of light motor vehicles like cars and 2-wheelers which will lead to some increase in noise levels. It is proposed to minimize the noise levels by providing plantation as buffer on the sides of internal roads, on the open spaces inside and around the

periphery of whole complex. During the construction stage, expected maximum noise levels shall be in the range of 80-85 dB (A) during peak construction phase which will decrease with increase in distance as per the Inverse Square Law. Administrative as well as engineering control of noise will be implemented. Isolation of noise generation sources and temporal differentiation of noise generating activities will ensure minimum noise at receiver's end. To prevent any occupational hazard, ear muff / ear plug shall be given to the workers working around or operating plant and machinery emitting high noise levels. Use of such plant or machinery shall not be allowed during night hour. Careful planning of machinery operation and scheduling of operations shall be done to minimize such impact. It is envisaged that there shall be maximum movement of light motor vehicles like cars and 2-wheelers which will lead to some increase in noise levels. It is proposed to minimize the noise levels by providing plantation as buffer on the on the open spaces and around the periphery of whole complex. Informatory signboards shall be provided to encourage vehicle owners to maintain their vehicle, not to blow horns and follow the emission standards fixed by Government Authorities DG sets will be kept in the acoustic chamber and ambient noise will be within the CPCB standard limits.

- Solid Waste Management: During the construction phase, waste from xvii. labor camp and construction debris will be generated. Approximately at peak construction 1000 laborers will be deployed for the proposed development. It is estimated that 0.15 TPD (@0.25 kg/capita/day for 200 laborers residing in labor colony and @ 0.1kg/capita/day for 1000 local labor) of waste will be generated from the labor camp and project site. Various construction activities to be carried out on project site will be responsible for the generation of Construction debris. The construction debris generated during the construction phase is being handled and managed using good practices. The same shall be followed for expansion area also. The construction debris generated will be reused within the site for various other construction works. Solid waste management during Operation Stage Municipal solid waste: The solid waste generated during operation phase of the project has been estimated to be 4.44 TPD. The majority of waste shall be generated by residential and activities such as street sweepings and drain cleaning. The biodegradable and nonbiodegradable waste shall be collected, segregated, transferred, and treated and disposed off as per the Municipal Solid Waste (Management and Handling) Rules, 2000.
- xviii. E-Waste Management: The e-waste is likely to be generated after the occupancy phase of the project. The e-waste generated stored on site in a designated room. A proper inventory will be maintained for all types of waste. The generated E-waste will be in a worst case scenario and the same will be handed over to authorized recyclers of HSPCB as per prevailing norms.
- 3.9.2 The EAC, after deliberation recommended for grant of scoping clearance to the proposal, with the finalized scope of work/study other than that proposed by the PP. as under:-
  - (i) Public hearing to be conducted while preparation of EIA/EMP report, suitably addressing the concerns therein,

- (ii) Many of the districts/areas in the State of Haryana have been identified as grey areas in respect of ground water withdrawal. As such, a detailed study of the area to be carried out taking into account cumulative water withdrawal and the replenishment/recharging. Such a study necessarily needs to be endorsed by the Central Ground Water Authority,
- (iii) For other sources of water supply (like from HUDA), a firm commitment by the State Agency for sustainable water supply from the identified sources needs to be furnished, giving water balance in view of earlier commitments and water availability,
- (iv) Land use pattern of the project site has to be in accordance with the regional plan approved by NCR Planning Board. A certification in this regard from the competent authority is to be submitted,
- (v) Impact on ambient air quality due to increased traffic density, and the traffic planning to minimize the same,
- (vi) Traffic Management Plans of Sector and arterial roads to be given.

# 3.10 Residential Colony "TDI City" at Sector - 58, 59, 60, 61, 63 & 64, Sonepat, Kundli, Haryana by M/s TDI Infrastructure Ltd – Finalization of ToR - [F.No.21-98/2015-IA.III]

- **3.10.1** The PP made a presentation before the EAC and informed that:
  - i. The project is located at **Latitude** 28° 53'13.30"N and **longitude** 77°7'29.36"E.
  - ii. The project is a new project (Revision in Environmental Clearance)
  - iii. The construction work has been done for the built-up area less than 39,00,000 sqm as per the Environmental Clearance granted & the same has been clarified in the compliance report received from regional office of MoEF. Now, the construction work has been stopped.
  - iv. The total plot area is 4598807.965 sq m. The project will comprise of General plots, EWS plots, Community Centre/Amenities Area, Commercial areas, Dwelling Units, EWS Units, Servant Units. FAR area will be 4239091.258 sq m and total construction/ built up area will be 6514132.528 sqm. Total General plots 7049 EWS plots 17671, Community Centre/Amenities Area- 3, Commercial areas Dwelling Units 6349 EWS Units —1130 Servant Units 680. Maximum height of the building will be 44.95 m.
  - v. During construction phase, total water requirement will be met by tanker water supplier from nearby STP. 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 has been estimated as 28652 KLD and the same will be met by HUDA supply/Ground Water. Wastewater generated (18904 KLD {13569 KLD from plotted, community and amenities; 578 KLD from Commercial areas; 539 KLD from Group Housing-I; 927 KLD from Group Housing-2; 1075 KLD from Group Housing-3; 278 KLD from Group Housing-4; 699 KLD from Independent Group Housing-1; 754 KLD from Independent Group Housing-2 and 485 KLD from Independent Group Housing-3}) will be treated in STP of total capacity 16300 KLD for Plotted Area, Community & Amenities Area, 700 KLD for Commercial areas, 650 KLD for Group

- Housing-I, 1100 KLD for Group Housing-II, 1300 KLD for Group Housing-III, 350 KLD for Group Housing-IV, 850 KLD for Independent Group Housing-II, 600 KLD for Independent Group Housing-III. 8881 KLD of treated wastewater will be recycled (2083 KLD for flushing, 173 KLD for DG Cooling & 6625 KLD for gardening). About 9322 KLD excess treated water will be given to Tanker water supplier for construction purpose.
- vii. About 76733 Kg/ day solid waste will be generated in the project. The biodegradable waste (53713 Kg/ day) will be sent to Municipal Solid waste site and the recyclable waste generated (23020 Kg/ day) will be handed over to authorized local vendor/recycler.
- viii. The total power requirement during construction phase will be met from 2 x 62.5 KVA DG set and total power requirement during operation phase will be 118167 KVA and will be met from Uttar Haryana Bijli Vitran Nigam limited(UHBVN). D.G. sets for power back up is proposed 14 x 1500 KVA, 7 x 1000 KVA & 7x 500 KVA for Group Housings area, 3 x 1000 KVA & 3 x 750 KVA for Commercial area and 2 x 500 KVA & 2 x 750 KVA for Plotted, Community & amenities area).
  - ix. Rainwater of buildings will be collected in 718 RWH pits of dia. 3.8 m & depth 3.5 m for recharging the ground water.
  - x. For plotted area, adequate parking provision shall be provided within the individual plots as NBC norms & for commercial area, group housings and community area, 18476 ECS shall be provided on surface area & basement area.
- xi. Energy saving measures will be provided.
- xii. The project is not located within 10 km of Eco Sensitive areas.
- xiii. There is no court case pending against the project.
- xiv. Investment/Cost of the project 1070 Cr.
- xv. Employment potential 22544
- xvi. Benefits of the project: -
  - It will increase Infrastructure of the area & will provide better living style.
  - It will provide housing facility &job opportunities with all basic amenities to various classes of people.
  - It will provide healthy, green & safe premises for living.
- 3.10.2 The EAC observed that a huge amount of traffic from the project site opens straight way in to already congested National Highway No. 1. There is no access to slip road and there appears to be a lack of perspective traffic planning. The Committee recommended a site visit by Dr. Anuradha Shukla, Member, Expert Appraisal Committee (Infrastructure & CRZ) to work out the access road planning so that traffic from the proposed township does not affect the traffic on National Highway-I. The EAC in view of the above deferred the proposal.
- 3.11 Setting up of Common Effluent Treatment Plant at Village Nonand, District Rohtak (Haryana) by M/s Haryana State Industrial & Infrastructure Development Corporation Limited (HSIIDC) Finalization of ToR [F.No.10-17/2015-IA-III]
- **3.11.1** The PP made a presentation before the EAC and informed that:

- i. M/s HSIIDC has awarded the work of planning, designing, engineering, procurement, construction, installation, testing, commissioning and thereafter operation & maintenance for 120 months of CETP with all allied works of 10.0 MLD capacity based on Physico-Chemical & Extended Aeration Process including Tertiary Treatment on turnkey basis at IMT Rohtak.
- ii. The Proposed project of CETP falls under Category 'B' schedule 7(h) as per the ElAnotification 14th Sep, 2006 and subsequent amendments.
- iii. Due to absence of SEAC/SEIAA in Haryana the case is being applied to MoEF & CC for Environmental Clearance.
- iv. The proposed project is situated at 28o 51' 40.9"N & 76o 41' 41.8"E Rohtak.
- v. The treatment system involves Raw effluent Collection (BY HSIIDC) followed by Primary Treatment (Fine Screening, Grit removal, Oil Removal, and Equalization) followed by Physico Chemical Treatment & Secondary Treatment (Activated Sludge Process -Extended aeration), and finally tertiary treatment in Dual Media filter followed by Chlorination in Chlorine Contact Tank.
- vi. About 1.5 KLD of water will be required for construction and operation. This water will be supplied through tankers from nearby area.
- vii. Total power requirement will be 400 KW which will be supplied from Haryana State Transmission Corporation Limited (HSTC Ltd.) In case of power failure, D.G. set will be used of capacity 250KVA.
- viii. Waste water thus generated by the associated industries will be collected through pipeline network for treatment. The waste water treatment shall meet the discharge standards laid down by MoEF & CC. The treated water will be further used for Horticulture and for agricultural purpose.
- ix. The solid waste generated during operation of the facility will be disposed to authorized TSDF site of GEPIL (Gujarat Enviro Protection and Infrastructure Pvt. Ltd), Faridabad Haryana.
- 3.11.2 The Committee observed that the project would be exempted from public consultation as the proposed activity is coming in a notified industrial area. The EAC after detailed deliberation recommended the proposal for grant of scoping clearance with the finalized scope of work/study other than that proposed by the PP, as under:-
  - I. The project should be consistent with the Hazardous Waste Management Handling and Trans-boundary Movement Rules, 2008.
- 3.12 Proposed construction of residential plotted colony at Sector 22 & 23, village Maheshwari, Dharuhera, Rewari, Haryana by M/s Dwarkadhis Buildwell Pvt Ltd Finalization of ToR [F.No.21-109/2015-IA-III]
- **3.12.1** The PP made a presentation before the EAC and informed that:
  - i. The proposed "Dwarkadhis City" residential plotted colony will be located at sec-22 & 23, village Maheshwari, Dharuhera, Rewari, Haryana.

- ii. The land is granted licenses By DTCP vide license no. 28 to 32 of 2007 dated 8/01/07 renewed upto 7/1/2016 & 107 of 2014 dated 13/8/2014 valid upto 12/8/2019.
- iii. The total plot area is 310157.084 sq m and the Net plot area is 308457.4486 sq m (76.2235 acres) out of which 90513.25818 sq m shall be utilized as Ground Coverage. The built-up area of the project is 196810.8095 sq m hence it falls under the category 8 (b) of the EIA notification, 2006, hence TOR is required.
- iv. The total estimated cost of the project is Rs.102 Crores.
- v. As the tenure of the SEAC/SEIAA Haryana has been completed thus we are applying online under Category A in MoEF. No. of total plots proposed in township will be 647, out of which main residential plots will be 630, EWS plots will be 3 and NPNL plots will be 14. The total population of the residential plotted colony has been estimated to be 23006 persons.
- vi. For proposed residential plotted colony, total water requirement has been estimated as 1707 KLD and will be met by HUDA supply/. Water shall be used mainly for domestic, flushing, D.G. cooling, misc. & gardening purposes.
- vii. Total 1220 KLD waste water shall be generated from the township. The generated sewage will be treated in in-house Sewage Treatment Plant of capacity 1450 KLD based on FAB technology.
- viii. The treated water generation will be 1159 KLD out of which 719 KLD shall be re-utilized for flushing, gardening, cooling & miscellaneous purposes & the rest 440 KLD excess treated water shall be given to tanker supplier.
- ix. 18 no. of Rain water Harvesting structure will be provided within the township to recharge the storm water to ground.
- x. Total 6067 kg/day Municipal solid waste will be generated out of which 4247 Kg/day of Bio- Degradable waste will be sent to Municipal Solid Waste Site & 1820 Kg/day of Recyclable Waste shall be given to Authorized Recycler.
- xi. Among hazardous waste approx. 16 ltr/month of used oil generated from D.G. Set shall be collected in leak proof containers at isolated place and then it will be given to approved vendor of CPCB as per Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 and Amended till date & approx.
- xii. 2 Kg/month of E-Waste generated will be disposed off through approved vendor of SPCB as per Electronic Wastes (Management & Handling) Rules, 2011.
- xiii. STP Sludge generated will be passed through filter press where it will be dewatered/ dried to form a cake and then will be used as manure in green areas. The unused sludge shall be given to farmers or nursery. The estimated quantity of dried sludge will be approx. 76 kg/day.
- xiv. The proposed power requirement is about 3391.24 KW, which will be supplied by Dakshin Haryana Bijli Vitran Nigam. D.G. set of capacity 2 x 750 KVA will be installed for power backup in common area & commercial sites. Hence, proper stack height of 5.5 m above roof level shall be provided to reduce the air emissions meeting all the norms prescribed by CPCB. D.G. sets will be used during Power failure only.
- xv. Total Green area of the residential plotted colony is 92537.23459 sq m

i.e. 30 % of total plot area. It will be an environmentally sustainable project. It will attract people to develop organized Residential Plotted Colony. It will provide direct and indirect employment to local people. The EAC, after deliberation recommended for grant of scoping clearance to the proposal, with the finalized scope of work/study other than that proposed by the PP, as under:-(i) Public hearing to be conducted while preparing the EIA/EMP report, suitably addressing the concerns therein. Many of the districts/areas in the State of Harvana have been identified (ii) as grey areas in respect of ground water withdrawal. As such, a detailed study of the area to be carried out taking into account cumulative water withdrawal and the replenishment/recharging. Such a study necessarily needs to be endorsed by the Central Ground Water Authority. (iii) For other sources of water supply (like from HUDA), a firm commitment by the State Agency for sustainable water supply from the identified sources needs to be furnished, giving water balance in view of earlier commitments and water availability, Land use pattern of the project site has to be in accordance with the (iv) regional plan approved by NCR Planning Board. A certification in this regard from the competent authority is to be submitted. Impact on ambient air quality due to increased traffic density, and the (v) traffic planning to minimize the same, Traffic Management Plans of Sector and arterial roads to be given. (vi) 3.13 Proposed construction of residential building complex at Pocket 2, Dwarka Sector-16B, New Delhi by M/s Delhi Development Authority (DDA) Finalization of ToR [F.No.21-41/2015-IA-III] 3.13.1 As the PP did not attend the meeting, the proposal was deferred. 3.14 Extension and widening of the Jetty at Neil Island, A&N Islands by M/s Andaman Lakshadweep Harbour Works - Finalization of ToR - [F.No.11-16/2015-IA-III] The PP made a presentation before the EAC and informed that: (i) Neil Island is about 40 km from Port Blair, the capital city of Andaman & Nicobar Islands, adjacent to the Havelock Island. Neil Island has a jetty, constructed during eighties, capable of berthing smaller boats having draft of 2.5 m. The existing jetty is in use by smaller ferry vessels ferrying tourists and locals between Port Blair and Neil, however, berthing space is limited due to its small size and single side berthing. (ii) Due to growth of tourism in Havelock and Neil Islands, passenger traffic has increased manifold leading to increased number of boats/ferries visiting the island daily and also brining more cargo in, mainly consisting of items of daily needs. Managing with smaller boats is getting difficult. Due to small jetty and shallow natural depth alongside, berthing of any vessel of more than 2.5 m

- draft is not possible.
- (iii) At two occasions, while berthing, even smaller passenger vessel got grounded during the low tide. To meet the growing demand of higher transportation capacity from Neil, wider and longer jetty with proper space for turning circle to handle bigger boats of 3.5 m is required. Therefore, A&N Administration decided to widen and extend the existing jetty at Neil Island and also undertake minor capital dredging in the immediate vicinity of the jetty to provide required turning space.
- (iv) Following project components shall be completed in 24 months time with an expenditure of Rs.35 cr.:
  - a. solid approach (3.5 m Long and 5.5 wide) for connecting the extended portion of jetty with land;
  - b. construction of RCC piled approach (276 m long and 5.5 m wide) founded on two rows of piles to widen the existing piled approach (280x5.5 m). Extension of RCC jetty (50.5m long and 14.5m wide) founded on RCC piles;
  - c. capital dredging near berthing (from -2.5m to -3m) and turning circle (from -4m to -5m), generating 38000 cu m dredge material, which will be disposed off in deep see (about 1.5 km away from the dredging area).
- (v) The project developmental activities will require the movement and utilization of following amount of the materials:

a. Cement: 1782.05 MT

b. Steel: 962.00 MT

c. Stone aggregate: 6750.00 MT

d. River sand: 15.00 MT

e. Pulverised Stone Sand: 3375.00 MT

f. Fresh water: 5 Cu m/day

- (vi) Environment: No change of land use, as it is an extension of the present activity. The site is well protected from waves and there is no chance of accretion or erosion.
- (vii) Project does not involve any tree felling as entire project is planned below HTL. Sea sand shall not be used for the construction works.
- (viii) The PP further informed that it is proposed to prepare EIA Report for this project as per Standard TOR for Port & Harbours. It is also proposed to undertake assessment of Sensitive Marine Flora and fauna, if any and impact on them, and assessment for heavy metals to confirm suitability of dredged material for sea disposal.
- 3.14.2 The EAC after detailed deliberations recommended granting of TOR as proposed by the PP. The EAC also recommended that while preparing EIA report and implementing EMP, PP should ensure that there is no navigation in the night and there is the round the clock deployment of marine patrol and marine monitoring to check any infiltration or damage to ecology.
- 3.15 Re-routing of Mumbai Manmad Pipeline (MMPL), Mumbai (Maharashtra) by M/s Bharat Petroleum Corporation Ltd. Further consideration CRZ Clearance [F.No.11-11/2014-IA-III]
- 3.15.1 The PP (**Bharat Petroleum Corporation Ltd)** made a presentation and informed that:

- (i) The proposal is for rerouting of pipeline between SV1 to Ch. 51 of Mumbai-Manmad-Pipeline. The new pipeline route will be SV1 (Agarwadi)- Vashi-Turbhe Shilphata-Kalyan CH.51. The new pipeline length will be approx.45kms (3 S.V. Stations). The pipeline diameter will be 18". The project cost will be about Rs. 277.41 Crores. The project duration will be 30 months. The BPCL project evaluation committee has approved the proposal during meeting held on 22<sup>nd</sup> March 2013.
- (ii) The PNGRB clearance was received on 25.04.14. The process design basis has been finalized. The Marine Board approval has been obtained for the 4 Nos. water body crossings, i.e. Vashi creek, Desai, Ulhas River and Gandhari. In principle approvals from NMMC/MSRDC/PWD/DM & TMC have been obtained. The Maharashtra Coastal Zone Management Authority has recommended for rerouting on 05.02.2015.
- (iii) The proposal was considered in 147<sup>th</sup> meeting of EAC held on 23.04.15 wehrein the EAC made certain observations and desired the additional. The PP provided following additional information with regarding these observations of EAC:
  - a) Observation-1: The existing law does not allow encroachment along the notified patch of existing pipeline by roads. The residential colonies, slums and thick population, which has been presented as a ground for proposal for proposed rerouting. The legal position of the same be explained with earlier notification relating to the pipelines.
    - **PP's Submission** As per Petroleum & Minerals Pipeline (Acquisition of Right of User of Land) Act, 1962 (50 of 1962), lands belonging to central or any state government or to any municipality or any other local authority to be excluded while notifying under section 3(1) of the act. So, the BPCL excluded such land from notification and obtained necessary permissions from various local govt. Authorities such as PWD, NHAI, BMC, TMC etc. Hence, BPCL didn't have any legal position to restrict development activities i.e. widening of roads, other infrastructure development being carried out in the larger public interest.
  - b) **Observation-2:** The lifespan of pipeline cannot be 15 years. Once permission is granted. It may become precedent. Therefore EaC deferred the proposal and suggested to PP, i.e. BPCL to submit Justification for rerouting:-
    - PP's Submission—The MMPL pipeline was designed for 25 years as per OISD standard. The pipeline is under operation for 17 years. Pipeline is protected against corrosion with 3 layer PE coating and cathodic protection system. In line inspection by intelligent pigging report indicated corrosion defects at many places in SV-1 to SV-5 section of pipeline primarily due to HVDC (High Voltage Direct Current) effect. These defects have been repaired. However, as long term measures, it is prudent to replace/ reroute this section. Pipeline underground depth has increased to 5-10 meters due to various development activities in Mumbai and Thane area especially along Eastern express highway and NH-3 due to widening of roads, construction of drains, service roads, foundation of flyovers & bridges etc. These developments have come very close to the pipeline. All above factors have made the activities of excavation/ repairs very difficult

in case of any exigencies. Since this pipeline supplies petroleum product to states of Maharashtra, M.P., Rajasthan, U.P., Haryana & Delhi so any interruption in supply through this pipeline may result in crisis situation. Also the Government authorities (PWD, TMC, MMRDA and MCGM) have advised BPCL to reroute the pipeline from the existing route in view of growing city infrastructural requirements i.e. Road developments, widening of highways, construction of flyovers etc. expected in the present pipeline alignment.

c) **Observation-3:** Detail of agreement and Notification relating to pipeline along with relevant maps between BPCL and local authorities for land use for existing and as well as proposed route. Why and how encroachment was allowed.

PP's Submission: BPCL cannot do notification for lands belonging to Central or any State Government or to any Municipality or other local authority which are to be excluded while notifying under section3(1) of the Act. The BPCL did not have any legal position to restrict development activities i.e. widening of roads, other infrastructure development being carried out in the larger public interest. The BPCL would like to reiterate that the most of the pipeline in the affected area was laid after taking permissions from the concerned local authorities such as PWD, NHAI, BMC, MIDC etc. and ROU was not acquired in this area as per the Petroleum & Mineral pipeline (acquisition of right of user in land) Act, 1962.

d) **Observation-4:** Details of measures that the PP proposes to undertake to ensure that proposed pipeline would serve its purpose for expected life cycle of pipeline and would not again be encroached upon.

PP's Submission: The BPCL has taken all efforts in discussing the route with all the local authorities such as PWD, MIDC, NMMC, KDMC, TMC & BMC in finalizing the proposed route. The joint site inspections were conducted with the concerned authorities (PWD, CICDO, MIDC, NMMC, KDMC, TMC & BMC) first to get the NOC's. The necessary revisions were made as per their advice for least disturbance to existing & future development plans along with ensuring ease of pipeline lying & their accessibility. M/s. Engineers India Limited, the contractor for the BPCL, has considered following additional design safety measures:

- a. Increased corrosion allowance of pipeline of 3 & 6 MM from earlier 0.5 mm.
- b. Design factor of 0.4 being considered as per clause 11.5.4 of OISD-141 for entire re-routed section as against 0.72 considered earlier as per ASME B 31.4 so that even road widening, future infrastructures will have least impact on the safety of pipeline.
- c. Greater burial depths have been considered as required vide clause 11.5.4 of OISD as below as per high consequence area defined in OISD 141.
- (iv) Proposed Route: The present proposed route has been decided based on the site inspections and discussions with local planning authorities of MIDC,

KDMC, MSRDC etc. to ensure that the route is not falling under future development plans. A pipeline route study was carried out to identify alternate pipeline routes and the same were analyzed to facilities selection of best environment friendly & economically viable pipeline route. While finalizing the route, following options were considered:-

- a. SV (Existing Ch.6)- Vashi Bridge-Shilphata-Dombivali-Kalyan- SV5 (Existing Ch.60)
- b. SV (Existing Ch.6)- Vashi Bridge- Navi Mumbai Nitlas-Ambernath- SV 5(Existing Ch.60)
- c. V (Existing Ch.6)-Govandi rd.- Eastern Express highway/SV2 (Ch.22.5)- Airoli Bridge- Thane Belapur Rd.- SV 5 (Existing Ch.60)

The PP further informed that following factors were considered while selecting optimum route:

- d. Disturbance to least numbers of mangroves
- e. Minimum no of water body crossings
- f. Minimum residential area
- g. Avoiding eco-sensitive area

Accordingly, the route -1 with a small modification to terminate the line at Ch. 51 instead of SV5 (Ch.60) has been selected.

- (v) PP also informed that approx. 0.893 km pipeline section will pass through mangrove area located at Vashi creek. The construction of pipeline will be by using HDD/sub-sea method. The entry & exit point of HDD/sub-sea operation will be on the existing road / away from vegetations / on open space of mangrove. The pipe entry and exit points are to be located well above the maximum tide level. Additionally, as a precautionary measures the entry and exit pits will be provided with earthen bunds to prevent sudden ingress and egress of surface water.
- 3.15.2 The EAC after deliberation recommended granting CRZ clearance with the following specific condition.
  - (i) In all the major water bodies, the horizontal directional drilling method will be used.
  - (ii) The PP shall ensure periodic pigging to check the health of the pipeline.
  - (iii) The PP shall take all measures to provide protection to the pipeline against corrosion, leak and any other possible mechanical damage as committed under the EIA Report.
  - (iv) Signboard and markers will be placed at each Nala/stream or river crossing and turning point as per standard engineering practice.
  - (v) Right of Work (RoW) area shall be restored near to original condition so that normal use of the land can be resumed.
  - (vi) The project proponent needs to prepare the mangrove management plan to conserve the mangrove resource for maximum benefit to humans and to minimize those non-sustainable or conversion activities that lead to destruction of the mangrove resource. Full protection of the mangrove flora and fauna by banning the extraction of mangrove wood. There shall be no permanent damage to mud flats and mangroves in any way.
  - (vii) The project proponent should not undertake any destruction of mangroves during construction of the project. In unavoidable situations, identification of endangered mangrove species along the pipeline Route should be done. Further, there should be restoration and rehabilitation of degraded mangroves on suitable location by planting of suitable species before commissioning of

- the pipeline and in consultation with forest department. Regular monitoring for any changes in mangrove area, floristic and faunal composition and physiographic should also be ensured.
- 3.16 Proposed development of Affordable Group Housing Project at Rect No. 36: Killa nos. 18, 19, 20 Rect No. 37: Killa nos. 16/1, 16/2, 24, 25, Village Dhunela, Sector- 35, Sohna, Gurgaon, Haryana by M/s Tulsiani Construction & Developers Limited Further consideration for Environmental Clearance [F.No.21-82/2015-IA.III]
- 3.16.1 The PP made a presentation before the EAC and informed that the EAC has considered the proposal in its 148<sup>th</sup> meeting. The EAC after detailed deliberation sought the following additional information for further consideration:
  - A detailed clarification from HUDA regarding availability of water in the area and corresponding summation of commitments made so far to be obtained by the PP from HUDA in the concerned/Gurgaon area.
  - ii. Revised map showing adequate parking space both for residents and visitors.
  - iii. Statement regarding Green belt indicating area of Green Belt and *plant species* to be planted.
  - iv. Valid permission from Fire Department to be submitted.
  - v. No ground water extraction. Water balance table.
  - vi. Energy Conservation/ Efficiency measures
- 3.16.2 The EAC noted the information submitted by PP in respect of queries raised during 148<sup>th</sup> EAC meeting. The EAC observed that the proposal involves construction in nearly six isolated unconnected masses of land, contiguous to licensed area. As such, the PP is to reconsider the proposal whether to go for independent ECs for each isolated area, or for expansion of the project for which EC has already been granted, or any other alternative. Considering the same, the proposal was deferred for want of additional information also in r/o the following:-
  - (i) Land use pattern of the project site has to be in accordance with the regional plan approved by NCR Planning Board. A certification in this regard from the competent authority/Town & Country Planning Department is to be submitted.
  - (ii) For water supply from HUDA, a firm commitment by the State Agency for sustainable water supply from the identified sources needs to be furnished, water balance in respect of commitments already made and residual water availability,
  - (iii) Impact on ambient air quality due to increased traffic density, and the traffic planning to minimize the same,
  - (iv) Traffic planning within Sector and impact on arterial roads.
- 3.17 Setting up of Marine facilities at Salaya, Khambhalia, Gujarat by M/s Essar Bulk Terminal Salaya Limited Further consideration Amendment in Environmental and CRZ Clearance [F.No.10-52/2007-IA-III]

3.17.1 The Environmental and CRZ Clearance (EC) for setting up of marine facilities at the Salaya Creek, Khambaliya, Devbhoomi Dwarka District, was granted to Essar Bulk Terminal (Salaya) Limited (EBTSL – subsidiary of Essar Ports Ltd.) vide reference F. No. 10-52/2007-IA.III dated: 17-08-2009 & 25-11-2009 and validity extended on 05-01-2015. This project consists of two Berths for handling dry bulk cargo, crude, petroleum products and water intake & discharge facilities, a Single Point Mooring (SPM) facility with associated 48" crude pipelines (interconnecting the proposed SPM with the existing SPM and to Refinery through the Jetty) for unloading Crude off Vadinar and associated infrastructure.

Since, the proposed SPM location is in Kandla Port Trust (KPT) waters, KPT has mandated that the project be executed by a Special Purpose Vehicle (SPV) where the user of the facility i.e. ESSAR Oil Limited (EOL) must be the member of the consortium/ SPV. Accordingly we have formed the SPV Viz. Vadinar Liquid Terminals Limited (VLTL) with shareholding of EOL and Vadinar Oil Terminal Limited (VOTL subsidiary of Essar Ports Ltd.) to execute the project as per the concession agreement (SPM and other facilities) and operate as per the KPT terms.

As there is no change in location, technology, process, products and impact on environment as approved and appraised by the Ministry earlier. We request you to bifurcate the Environmental & CRZ clearance issued to EBTSL standalone between EBTSL and VLTL as per the details given below:

Facilities to be operated by the ESSAR Bulk Terminal (Salaya) Limited (EBTSL):

- Jetties (2 Nos) one for Bulk cargo and one petroleum & petrochemical products
- Sea water intake (2 x 92") & return pipelines (2 x 92") and associated facilities
- Refinery product & petrochemical pipelines ( 6 x 4"/8") as per the EC granted
- Closed hood type conveyors (2 Nos), Screw unloaders (2 Nos), Loading /Unloading arms & Gantry cranes

Facilities to be operated by Vadinar Liquid Terminals Limited (VLTL):

Single Point Mooring, off Vadinar

Associated 48" Crude Pipelines, off Vadinar

Presentation of the proposal was made in the 149th EAC meeting on 25-06-2015 and the EAC has opined that the proposed taker ie. M/s. Vadinar Liquid Terminal Limited (VLTL) was neither present nor has submitted the proposal in their name.

On 08-07-2015, VLTL has submitted online application with the following documents,

- Form-1, Memorandum & Articles of Association of VLTL & List of Directors
- Undertaking from EBTSL & VLTL for complying with the proposed EC conditions
- No Objection Certificate from EBTSL for this EC bifurcation

VLTL has also received the "No Objection Certificate" from KPT on 28-07-2015 as suggested in the MoM of the 149<sup>th</sup> EAC.

3.17.2 The EAC after deliberations observed that VLTL appeared before the Committee and submitted Form –1 seeking EC/CRZ Clearance along with NOC from KPT of 28.07.2015. Thus, PP has complied with the observation of EAC made in the

- previous meeting. In terms of the minutes of the previous meeting, the EAC suggested that MoEFCC may take appropriate action in this matter.
- 3.18 CRZ Clearance for Tata Power for construction of 220 KV Kalwa Salette Transmission line Maharashtra by M/s Tata Power Co. Ltd. Further consideration CRZ Clearance- [F.No.11-19/2014-IA-III]
- **3.18.1** The PP made a presentation before the EAC and informed that:
  - The Application is for CRZ Clearance Tata Power's proposed Construction of 220kV Kalwa - Salsette Transmission Line (Upgradation of old 110kV Transmission Line) between Airoli of Dist. Thane and Village-Mulund and Nahur of Dist. Mumbai Suburban. Each Transmission Line tower has 4 legs and each leg rests on a pile type foundation of about 1 to 1.2 m diameter. The height of the towers will be approximately 60 meters and the distance between two towers will be approximately 250 m. Each tower accommodates 4 number of power circuits of 220 KV. Each circuit has got 3 power carrying conductors. In addition to that, the top wire is optical fiber guard wire which is essential for data transmission, communication, metering and protection of the power passing through the circuit. The Maharashtra Coastal Zone Management Authority (MCZMA) has recommended the project to MoEFCC on 07<sup>th</sup> April 2014. Transmission Line project passes through CRZ I and II area of Mumbai and Thane. About 477 number of mangrove trees will get affected due to the proposed line. BNHS has suggested compensatory plantation of about 5,000 mangroves. The Mangrove plantation will be carried out on 25 ha. area at Village Sarsole under Tri Partite mode along with Forest Department. The Bombay High Court has passed an interim order on 27<sup>th</sup> January 2010 directing project proponent to approach to the competent authority to seek permission in accordance with the law. The Government of Maharashtra has already recommended our proposal to the Government of India for clearance under Forest Conservation Act, 1980. The Cost of the project is Rs. 217.42 Crores including underground cable costs. The project involves diversion of 3.7496 Ha of forest land. The forest clearance for the same is pending at Regional Office at Nagpur. The project site is at distance of 2.75 km from Sanjay Gandhi National Park. However, as per Supreme Court order it does not require clearance from National Board for Wild Life since project does not require Environment clearance under EIA Notification 2006.
  - ii. The proposal was discussed in 138<sup>th</sup> meeting of EAC for CRZ Clearance on September 29, 2014 wherein EAC suggested having a relook and come up with credible details of the suggested alternative (Underground cable, Use of Bailey Bridge, Use of Helicopter) with views of a specialized agency like Power Grid Corporation of India. (PGCIL) or Central Electricity Authority (CEA). As suggested by EAC-A study report has been submitted on various alternatives to Power Grid Corporation India Limited (PGCIL) for their views. The PGCIL have conveyed their views on the reports submitted by PP and recommended that there will be least damage of mangroves in the

- conventional approach pathways method. However, M/s. Tata Powers should try to reduce damage to mangroves during the construction period using environment friendly materials. Further, M/s. Tata Power should compensate the loss of mangroves through plantation of more numbers of saplings of mangroves as suggested by various Government agencies.
- iii. The Environment Impact Assessment of the Transmission Line Project was carried out by Bombay Natural History Society (BNHS). The BNHS have also prepared the Mangrove Conservation Plan for our project and suggested the following mitigation measures:
  - a. The approach pathways with suggested dimensions and routes (temporary pathway of max 4 m wide including working space), during construction period, as per the EIA reports should be strictly followed.
  - b. Complete prohibition of disposal of waste such as left over construction materials and disposal of such leftover must be done in the pre designated areas outside mangroves.\
  - c. The Right of way as demarcated or any other project activity should not restrict the flow of water to other mangroves and thus, adequate tidal water drainage system to be provided wherever necessary.
  - d. Right of way should not be fully converted into concrete roads. Thus, on completion, dirt roads will be naturally repopulated by the mangroves.
  - e. To compensate the loss of total 477 mature mangroves (394 due to approach path and 83 due to tower foundations), plantation of multi-species mangrove saplings would be undertaken.
  - f. Plantation will be carried out under expert guidance.
  - g. Tata Power has signed Tri-partite Agreement along with Forest Department, Government of Maharashtra and M.S Swaminathan Research Foundation, Chennai for mangrove plantation.
  - h. As per the agreement, mangrove re-plantation on 25 ha. of degraded area in Survey No. 93, 99 and 100 of Sarsole Village in the vicinity of the project site.
  - i. About 3,00,000 mangrove saplings of various species will be planted over a period of 5 years.
  - j. This activity will cover survival, assessment and re-plantation of mangroves.
  - k. The proposed species of mangroves to be planted are Avicennia marina, Avicennia officinalis, Rhizhophora mucronata, Cereops tagal, Sonneratia apatela and Sonneraia alba as suggested by BNHS.
- iv. The proposed site for compensatory plantation will have the following coordinates:-

Latitude (N) Longitude (E) 19<sup>0</sup> 02' 53.25" 73<sup>0</sup> 00' 04.01" 19<sup>0</sup> 02' 46.32" 73<sup>0</sup> 00' 16.76"

	19° 02' 25.26" 73° 00' 15.27" 19° 02' 25.39" 73° 00' 12.62"  The EAC after deliberation recommended granting CRZ clearance subject to the following conditions that:-  I. The PP should try ensuring minimum damage to mangroves during the construction period using environment friendly materials.  II. The PP should compensate the loss of mangroves through plantation of more as per the conservation plan suggested by the BNHS. All conditions			
	The EAC after deliberation recommended granting CRZ clearance subject to the following conditions that:-  I. The PP should try ensuring minimum damage to mangroves during the construction period using environment friendly materials.  II. The PP should compensate the loss of mangroves through plantation of more as per the conservation plan suggested by the BNHS. All conditions			
	<ul> <li>I. The PP should try ensuring minimum damage to mangroves during the construction period using environment friendly materials.</li> <li>II. The PP should compensate the loss of mangroves through plantation of more as per the conservation plan suggested by the BNHS. All conditions</li> </ul>			
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2.10	construction period using environment friendly materials.  II. The PP should compensate the loss of mangroves through plantation of more as per the conservation plan suggested by the BNHS. All conditions			
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S   F   F	Construction of foreshore facilities (cooling water intake and outfall structures) for 2x800 MW Super Critical Coal Based Upper Thermal Power Plant at S.F. No. 146, 149 of Uppur viilage and S.F. Nos. 101 & 103 of Valamavoor and Thiruppalaikudi, in Thiruvadanai Taluk, in District Ramanathapuram (Tamil Nadu) by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) - CRZ Clearance [F.No. 11-23/2015-IA.III]			
3.19.1	The details of the proposal where reported to be as under:			
	i) Cooling water intake and outfall pipelines over supporting structures are			
	permissible activities under the CRZ Notification, 2011,			
	<ul> <li>ii) The public hearing was conducted on 4<sup>th</sup> July,2015,</li> <li>iii) TNCZMA has recommended the proposal vide letter dated 27<sup>th</sup> November,</li> </ul>			
	2014,			
	<ul> <li>iv) The EAC for thermal power projects in their meeting held in June, 2015 directed the PP to approach the EAC for CRZ projects for their recommendations,</li> </ul>			
3.19.2	During discussion the Committee observed that :			
	i) For modeling purpose, effluent temperature has been taken 5 degree C more than ambient condition for the purpose of evaluating worst case scenario. The ambient temperature at site in extreme summer needs to be checked.			
	ii) Temperature and salinity of effluent are the crucial parameters for protection and sustenance of marine life.			
	iii) Jelly fish, the predominant species in the coastal environment, and other			
	marine life are to withstand the impact of effluent discharge,			
	iv) Damage to plant and animal life needs to be looked into as to their distress condition vis-a-vis the temperature gradient.			
0.40.0				
	The EAC desired that a study to be carried out to ascertain the impact of effluent			
	discharge at the desired depth and distance, on the existing marine environment.			
]	Construction of foreshore facilities for 1x800 MW North Chennai Stage-III STTP at Villages Ennore & Puzhudivakkam, Ponneri Taluk, Thiruvallur District (Tamil Nadu) by Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) - CRZ Clearance [F.No. 11-24/2015-IA.III]			

### **3.20.1** The project proponent (TANGEDCO) made a presentation and informed that:

- (i) The PP is proposing expansion of North Chennai Thermal Power Station (NCTPS) by addition of 1x800 MW Supercritical Coal Based Thermal Power Plant Stage III at Villages Ennore & Puzhudivakkam, Ponneri Taluk, Thiruvallur district, Tamilnadu. The proposed project falls under project activity 1 (d) Coal Based Thermal Power Plant and category A. The Terms of Reference (TOR) was obtained from the Ministry of Environment and Forests, Government of India vide their letter no. J-13012/14/2012–IA.II (T), dated 25.05.2012 and extension of validity of TOR vide their letter dated 08.09.2014. The extension of the TOR has been received up to 27.05.2015.
- (ii) **Project Description:** The existing and proposed power plants in NCTPS complex and its adjacent area are as follows:
  - a. North Chennai Thermal Power Station Stage-I (3x210 MW): The North Chennai Thermal power station stage I (3x210 MW) was commissioned during 1995. The cooling water of 90,000 m3 /hr is being drawn from the Ennore Port through a open channel as the cooling water system is a once through system. The coolant water is being discharged through a pre cooling channel in the mouth of Ennore Creek.
  - b. North Chennai Thermal power project Stage II (2x600 MW): The North Chennai TPP stage II (2x600 MW) has been commissioned recently. The cooling water of 2,00,000 m3 /hr is being drawn from Ennore Port through Comprehensive Marine EIA Study for Outfall of the proposed Ennore SEZ and NCTPS Stage III Thermal Power Projects of the NCTPS Complex WAPCOS Limited Page 3 of 6 (A Govt. of India Undertaking) open channel as the cooling system is open cycle. The coolant water is being discharged in the existing pre cooling channel of NCTPS.
  - c. Vallur Thermal power project (3x500 MW): Out of the three units, two units of the Vallur Thermal power plant have been commissioned recently. The 3<sup>rd</sup> unit is under construction. About 20,000 m3 /hr of cooling water is required for the 3 units. The water is being drawn from the existing forebay of NCTPS Stage-I. The cooling water system is a closed cycle one. The coolant water is being/will be discharged into the existing Pr-cooling channel of NCTPS.
  - d. **Ennore SEZ TPP (2x800 MW):** The total water requirement for the proposed 2x800 MW project has been estimated as 13,790 m<sup>3</sup>/hr. The above quantity of water has been proposed to be drawn from the existing forebay of NCTPS Stage –II intake channel. The plant is having closed cycle cooling system. The coolant water will be discharged through the existing pre cooling channel of NCTPS.
  - e. North Chennai Thermal power Project Stage-III (1x800 MW): In order to offset the power demand of Tamil Nadu, PP has proposed to set up a coal based 1 x 800 MW super critical thermal power plant, Stage-III within the NCTPS complex using the existing infrastructure facilities viz., Cooling water channel/ coal conveyors. The total water requirement has been estimated as 6,900 m3 /hr. The cooling water is proposed to be drawn from the forebay of

- NCTPS Stage-II intake channel. The system is closed cycle cooling water system. The coolant water will be discharged through the existing pre cooling channel.
- (iii) Infrastructure:. The seawater for cooling water requirement for the NCTPS Stage-I is drawn from the Ennore Port Basin located adjacent to the NCTPS Complex, through an intake channel. Another channel was constructed to draw cooling water for the requirement of NCTPS Stage-II and PP's proposed Ennore SEZ Thermal Power Project from Ennore Port basin. Both forebays are located inside NCTPS Complex. The drawl capacity of the second channel is 65 cumec. After the drawl of cooling water for NCTPS Stage-II TPP (2x600 MW) and Ennore SEZ TPP (2x800 MW), around 10 cumec is available. This balance quantity is proposed for the cooling water requirement of NCTPS Stage-III TPP adopting Natural Draft Cooling Tower System. Desalination plant will be established to obtain raw water for the plant purposes.
- (iv) The following facilities will be in CRZ area:
  - a. Coal conveyor having length of 3.5km and elevation of 6m for coal transportation form Ennore Port to NCTPS Stage-III TPP.
  - b. Supporting trestles (Steel frames) for coal conveyor at about 6m/8m from ground level.
  - c. Sea water intake from forebay of NCTPS stage-II intake & outlet pipe to pre cooling channel of NCTPS for discharge with intake pipe length of 3km and outlet pipe length of 1.5km.
  - d. GRP (Glass Reinforced Plastic) pipes on the ground level for cooling water inlet and coolant water outlet.
- (v) AAI has accorded approval for the 275 m height chimney of the project vide letter dated 15.05.2013.
- (vi) Public Hearing was conducted on 05.03.2015 at Vallur camp of NCTPS under the chairmanship of District Collector/Thiruvallur.
- (vii) Expert Appraisal Committee/Thermal Projects has considered the project for Environment Clearance during the meeting held on 25.06.2015 and directed to approach CRZ committee for obtaining CRZ clearance for the foreshore facilities of the captioned project.
  - (viii) **Water Requirement:** The total water required for the proposed project is 1,65,600 m³/day which will be taken from the existing fore bay of NCTPS Stage II TPP located within NCTPS Complex. The potable water required (9000 m³/day) will be met by treating seawater in RO based desalination plant.
  - (ix) Fuel requirement: The Coal requirement for the project is 2.09 MTPA based on GCV of coal as 6000 kcal/kg.
  - (x) **Fuel handling:** 100% Imported Coal from Indonesia will be transported through closed conveyor from the proposed Coal Berth 3 of Ennore Port which is located adjacent to NCTPS Complex. Hence there is no land acquisition/Right of Way (ROW) for Coal conveyor.
  - (xi)**Coolant Water / Effluent:** The coolant water of 122873 m<sup>3</sup>/day mainly from cooling tower blow down, DS plant and RO reject will be disposed into sea after meeting sea disposal standards, whereas wastewater coming from domestic activities and service water which is around 706 m<sup>3</sup>/day will be treated in STP and reused for greenbelt development.
  - (xii) **Green Belt Development** About 55 acres (about 30% of project area) will be allotted for developing green belt out of 190 acres. The trees will be

planted with density of 400 trees/ha. Sufficient plantation will be done around coal handling system and storage. Local species of the trees will be planted for better survival of the trees after consultation with DFO/Thiruvallur.

- (xiii) **Mangroves:** The project site is devoid of mangroves. However, mangroves are seen in the black water of Ennore which is minimal. The proposed coal conveyor from Ennore Port and cooling water intake pipe line and coolant water outfall pipeline of NCTPS Stage III are located within the existing NCTPS complex and hence there will be no impact on the Mangroves present in the Back waters. However, PP has proposed to protect the mangroves in backwater area in consultation with forest department.
- (xiv) **Status of CRZ Clearance** The State level CZMA has recommended the project during its meeting held on 19.05.2015.

## Temperature and Salinity Dispersion Modeling study for outfall water:- M/s IIT/Madras

Presently, the coolant waters of NCTPS Stage-I and NCTPS Stage-II (both once through condenser cooling system) and Vallur TPP (closed cycle cooling system) are being let out into the Pre-Cooling Channel of NCTPS. Additionally, it is proposed to let out the cooling water of Ennore SEZ TPP and the now proposed NCTPS Stage-III (both closed cycle cooling systems). The total discharge from all the 5 projects will be 3,20,000 cu.m/hr.

In order to calculate the impact of all the discharges, the Temperature and Salinity Dispersion Modeling study was awarded to M/s.IIT, Madras and the Marine EIA Study was awarded to M/s WAPCOS (A Govt. of India Undertaking) Based on the modeling study carried out by IIT, Madras, the temperature of outfall with 3, 20,000 cu.m/hr discharge will be at about 3.3 °C higher than ambient condition s. This temperature further reduces to about 0.4° C, ie., almost reaches ambient temperature at a distance of 2.0 km from the outfall. Hence, there will be marginal/ insignificant impact.

The average salinity differential of the discharge blow down from closed cycle discharge of 3 plants of NCTPP III, Vallur and Ennor SEZ TPP is 10.39 g/l. However, when all the discharges get mixed, the outfall discharge will have a salinity differential of only 1.53 g/l. Hence, the present outfall which will have highly diluted discharge will have marginal/ insignificant impacts.

#### Marine study report - M/s. WAPCOS / GOI

The marine water quality and ecology in and around the proposed outfall area is that of any normal coastal environment during the study period.

The project area has biological features characteristics of any normal coastal area in the occurrence, abundance and bio diversity of biological community of phytoplankton, zooplankton, benthos and fishes. The area is devoid of Seaweeds and coral reefs. No rare, endangered, threatened marine species were recorded during marine survey.

For the maintenance of quality of the marine ecology of the study area, critical locations and designated monitoring sites are to be carefully selected for periodic monitoring with respect to marine water, sediment, flora and fauna.

The outfall of the NCTPS stage III Thermal Power project would not change the quality of existing natural coastal environment.

### **Environment Management Plan**

Necessary Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP) will be developed to treat the effluent. Treated effluent will be utilized for

developing green belt.

**EMP expenditure:** To comply with the environment protection measures budgetary provision for Environment Protection and Safety measures to the tune of Rs. 480 Crores towards capital coast and Rs. 48 Cr for recurring expenditure has been made.

- **3.20.2** The Committee after due consideration and deliberation recommended the grant of CRZ clearance subject to the condition that:
  - (i) Coal conveyance should take place in closed conveyor and that there could be no open stacking of the coal in the CRZ area.
  - (ii) The Intake water pipeline should be laid as per provisions of CRZ Notification, 2011.
  - (iii) Disposal of hot water shall meet TNSPCB norms.
  - (iv) Water temperature should be monitored at outlets of each of the unit (3 phases) and also at pre-cooling channel joining Ennore creek.
- 3.21 Proposed Oil & Gas Development in Existing Ravva Offshore Field, PKGM-1 Block, off Surasaniyanam in Bay of Bengal, East Godavari District, Andhra Pradesh by M/s Cairn India Limited CRZ Clearance- [F.No.11-20/2015-IA-III]
- **3.21.1** As the PP did not attend the meeting, the proposal was deferred.
- 3.22 Laying of LPG pipeline from Puthuvypin to Kochi refinery including pumping facility at Puthuvypin, Kerala by M/s Kochi Salem Pipeline Private Limited CRZ Clearance [F.No.11-21/2015-IA-III]
- 3.22.1 The PP (Indian Oil Corporation Limited) made a presentation and informed that they are putting up a LPG import Terminal at Puthuvypeen for which Environmental Clearance is granted vide order No. F. No.11-21/2010-IA-III dated 5<sup>th</sup> July 2010. In order to transport the LPG so received at the Import Terminal, a 12"dia 42 Kms long cross country pipeline is envisaged from Import Terminal to Kochi Refinery, where it will join with the pipeline proposed from Kochi Refinery to Kerala Border for which Environmental clearance was received vide order No.J-11011/396/2012-IA II (1) dated 3<sup>rd</sup> July 2015.

The subject pipeline from Puthuvypeen to Kochi Refinery will be executed by KSPPL (Kochi Salem Pipeline Private limited), a joint venture formed between Bharat Petroleum Corporation Limited and Indian Oil Corporation Limited with 50-50 participation from each. The estimated cost of the project is Rs.124.85 Crores and has to be completed in synchronization with Puthuvypeen Import Terminal. The State Committee has examined the proposal during its expert committee meeting held on 15.12.2014 and given their recommendation vide letter No. 4006/A2/14/KCZMA/S&TD Dated 16.1.2015.

The pipeline is proposed to be laid along the NH ROU in the CRZ regulated zone and the water streams along the route are proposed to be crossed by HDD.

Laying of LPG Cross country pipeline 12"dia, 42 Km long from Puthuvypin Import Terminal to Kochi Refinery with dispatch facility at Puthuvypin and receipt facility

at Kochi refinery. Three number of Sectionalising Valve stations will be constructed along the pipeline route. Out of the three only one station will be falling within the CRZ Zone.

This is a cross country pipeline starting from Puthuvyping import terminal and terminating at Kochi refinery. The pipeline will be laid along NH47C and road under CPT, ROU of 10 meter wide ROU from Kalamassery to Kochi refinery. The pipeline passes through CRZ-IA (2244M). CRZ IB (464M), crz-III (8488M) & crz-IVA (1400), in small stretches.

No land use change is envisaged at import facility or along the pipeline route. The land use change along the pipeline will be temporary and will be brought back to its normal state after laying of the pipeline.

CRZ – IA - 2244 Meters
CRZ – IB - 0464 Meters
CRZ – III - 8488 Meters
CRZ – IVA - 1400 Meters

Pipeline passing through CRZ-I area in 6 patches in puthuvypin, mulavucadu and eloor villages for a total length of 2244 Meters.

The dispatch facility for the pipeline is planned in IOC import terminal which has CRZ Clearance. In case of pipeline, alignment selection is passing primarily along road and balance length passing through existing pipeline ROU of GAIL. Therefore no tree felling is required.

Solid will be excavated for making trenches and the same will be replaced after lowering the pipes. Topsoil and subsoil will be stored separately during excavation. Construction materials will be procured from approved and licensed quarries only. Water bodies will be crossed by way of HDD without affecting flow of water and flora fauna. One number of sectionalising valve station will be constructed each at Ch 10.7km, 21.3 Km & 32.00 Km. in a plot size of 50mx50m after acquiring the land.

Pipes will be transported from the place of availability to stock/lining yard and from the stock/lining yard to suitable places along the route of the pipeline via existing roads.

No additional transport infrastructure will be required at the existing LPG import facility. LPG pipeline mostly will run along the existing SHs and NHs and rest through existing ROU.

Gas pipeline will cross streams and rivers falling en-route be way of HDD with out disturbing water flow and aquatic flora and fauna.

Acquisition of land is required for three number of SV Stations of 50m size each. Only ROU will be acquired for laying pipeline.

Major quantity of water to the tune of 4000 KL is required for testing & commissioning which will be arranged from Kochi Refinery.

Laying of pipeline does not involve construction material. Construction material is required for two number of SV stations which will be mobilised from approved quarry.

Power required at dispatch and receipt terminal will be taken from IOC import terminal and Kochi refinery respectively. The requirement of operating power is:-

- 1. Import Terminal 1000KVA @ 11KV
- 2. Kochi Refinery RT- 2500KVA @6.6KV.

For construction of pipeline generators will be used.

Pipeline is laid for transportation of LPG from Import Terminal to Kochi Refinery through a closed system. There will not be any impact on human health or environment on account of this during normal operation.

Project will enhance the availability of LPG in the region, thus improve the living conditions of the people. Project will reduce the traffic load on roads in the region. Reduce the movement and risk of transportation of LPG by road.

Some amount of air emissions will be generated from the movement of vehicles during construction period for procurement of construction material and transport of construction manpower.

Noise will be generated during construction phase, due to movement of vehicles, and operation of light and heavy construction machineries Noise generated will be mostly during daytime. Villages/settlement being mostly away from the route, no significant impact on local people is apprehended. However, the workers are likely to be exposed to high noise levels, protective gadgets will be provided to the working people.

Noise shall be generated from the construction activities and running of the construction equipments. This will be in the range of about 65-80 dB(A). Working hours shall be maintained regularly which will help in reducing these noise levels.

LPG is transported through a closed system with all safety features given below:-

- i) SCADA and PLC based instrumentation & control system.
- ii) Suitable leak detection and APPS System for the pipeline.
- iii) Facilities like cathodic protection system, telecommunication system, CCTV System and video conferencing etc.

In the receipt and dispatch stations the following facilities are provided:-

- i) Various types of fire protection systems vz. Fire Water Storage & Fire Water Pump, Fire hydrant and Monitor System.
- ii) Automatic Medium Velocity Water Spray System.
- iii) Automatic Fire Detection-cum-Alarm System.
- iv) Portable Fire Extinguishers.

The design of the pipeline takes care of earthquakes. Pipeline and associated facilities shall be constructed in accordance with ASME B 31.4 and other applicable AP1 standards. Therefore the chances of the pipeline getting affected through natural calamities are very remote.

The project proposal is transportation and storage of LPG which is a step in the direction to meet challenge of increased demand of LPG, which is basic necessity of society. Use of LPG in domestic and commercial sector, is basic necessity of life, and therefore it requires to be meet reliably. Making it available is beneficial to the society. By substituting road transport of LPG in the present situation to transportation by Pipelines, it is a step towards reducing pollution and traffic load on Highways which is beneficial to local population apart from saving Diesel fuel, which is in national interest too. By using existing land, power and water of IOCL's LPG import facility and BPCL's Kochi Refinery for the dispatch terminal it is a step in conservation of resources.

There are no ecological landscapes, cultural or other related sensitive areas around the project site. There are no national parks sanctuaries in the near vicinity of proposed project site. There are no protected or sensitive species of flora and fauna along the pipeline route. Existing LPG import facility of IOCL at Puthuvypin which is covered under separate CRZ Clearance is on the sea coast.

The pipeline crosses NAD approach road for which separate approval is being obtained from Ministry of Defence. Special care is taken to freeze the pipeline route away from populated areas to the extent possible. This is a cross country pipeline and the construction the pipeline will not affect such facilities. This is not a listed or critically polluted area.

Sectionalizing valve stations (As per OISD & BIS) – total 3 number of SV stations, 1 in CRZ regulated area (Zone III), 2 are outside CRZ area.

#### Puthuvypin dispatch facilities:-

- 1. Tap off facility from MSV at CLIT Puthuvypin of IOCL CLIT already have CRZ Clearance (2126/A2/08/S&TD).
- 2. 2LPG Pump House.
- 3. Substation cum Control room (OISD 173,163)

CRZ regulated length of pipeline – 12596 m

#### 1. ZONE IA

- Total length is 2244 meters in 6 different patches.
- Cutting of mangroves is not envisaged as the line is passing through the 50 meter buffer zone beside existing road constructed on reclaimed soil only.
- The pipeline will be installed in trenches of width 0.7 m & minimum 1.2m cover.
- Pipeline passes through the NH 47 C Corridor.

## 2. ZONE IB

- 464 meter of the line passes through salt marsh area.
- Pipeline will be on the NH 47C corridor and the line will be installed by way of HDD in these areas.

#### 3. ZONE III

- 8488 meter of the line passes through the inter tidal zone.
- The line again passes on the NH47C corridor.
- The pipeline will be installed by way of open trenching method.

#### 4. ZONE IV

- 1400 meter of the line passes through the back waters.
- Installation of pipeline in these area is by HDD.
- The land will be restored to its original condition after laying pipeline and backfilling where ever pipeline is installed in open trenches.

Installation of pipeline in trenches.

•	Trench size -	750 mm
•	Trench depth-	1600 mm
•	Pipeline soil cover	1200 mm (min)
•	Impact on flora & fauna	Not affected.
•	No of HDD planned in CR	Z area – 15
•	Pipeline Length	42 Km
•	Railway Crossing	4
•	NH Crossing	3
•	SH Crossing	1
•	Major River Crossing	4
•	Minor River Crossing	12
•	Forest Length	Nil
•	CRZ	1

Application for the permission for the crossing submitted to all the concerned departments and follow up is in progress.

- The Committee after deliberation recommended the grant of CRZ clearance for the project subject to the condition that PP taking all the precautions committed under the Environment Management Plan and clearances. While laying pipeline, there shall be no disturbance of any mangrove area. There shall be only Horizontal Directional Drilling (HDD) to lay the pipeline. Also, there shall be regular pigging to monitor the health of pipeline and to keep it clean.
- 3.23 Laying of Onshore Treated Waste Water Disposal Pipeline for 25 MLD capacity upto Landfall Point near Nakti Creek, Gulf of Kutch, Gujarat by M/s Welspun India Ltd. CRZ Clearance [F.No.11-22/2015-IA-III]
- Welspun City is a diversified manufacturing base located at Anjar, Kutch for manufacturing textiles, pipes and steel.
  Welspun India proposes to expand this industrial complex.
  - The current water requirement is16.4 MLD and the proposed water

- requirement will be 42.4 MLD for catering this expansion plan. Out of 42.4 MLD, 8.4 MLD is met from fresh water and rest 34 MLD will be recycled treated waste water (sewage) from Anjar and Gandhidham.
- Currently the untreated sewage water from the city of Anjar and Gandhidham-Adipur is being discharged into Nakti Creek via Sakar drainage.
- WIL proposed to set up a 45 MLD (30+15) STP in two phases to treat city sewage and utilize it for the increased water requirement.
- The capacity of the existing ETP will be augmented from 10 MLD to 15 MLD.
- Welspun has entered into a Concession agreement for a period of 35 years with both the Nagarpalikas viz., Anjar Nagar Palika (ANP) and Gandhidam- Adipur Nagar Palika (GNP), for setting up of facilities and allied works in order to recycle the sewage by suitable treatment that can be optimally used by the industry.
- Treated waste water from industrial complex (15 MLD) including R.O reject (10 MLD) discharged to sea through 30 km long pipeline into Gulf of Kutch through diffuser after initial dilution.
- WIL intends to lay a pipeline conveyance system (onshore + offshore) in order to convey and dispose their surplus treated waste water plus RO rejects from STP (10+15 MLD) into deep sea off Nakti creek in Gulf of Kutch as identified by NIO based on hydrodynamic study.
- NOC from GPCB contained vide letter No. PC/CCA-KUTCH-243(4)/ID:18108 dated 30<sup>th</sup> May, 2015 and NOC from Kandla Port obtained vide letter No. MR/GN dated 7<sup>th</sup> May, 2015 for discharge of the treated water.
- Recommendation from Gujarat Coastal Zone Management Authority (GCZMA) accorded for this project in their 26<sup>th</sup> Meeting held on 15<sup>th</sup> May, 2015 (vide letter No. ENV-10-2015-172-E dated 10<sup>th</sup> June, 2015).
- Marine EIA Study has been done by NIO, Mumbai.
- The landfall point has been selected based on:
  - a. No national parks or wildlife sanctuaries.
  - b. No navigational channel.
  - c. No coral zone.
- Pipeline will be buried along with concrete blocks in an excavated trench to around 1.8 m below sea bed.

# Gravity line from Welspun premises to Pumping station & Pumping station:-

• Non CRZ - 15.3

# Pipeline from Pumping station to Land Fall point:-

Non CRZ - 5.286
 CRZ - 0.574
 Total length - 5.86
 CRZ IB (0.473 Km)
 CRZ III (0.101 Km)

## **Pipeline from Land Fall point to Final Disposl Point**

• CRZ 8.92

• CRZIA (0.458 Km)

CRZIB (0.2800 Km)CRZIVA (1.45 Km)

• CRZIA (0.458 Km)

• CRZIVB (6.73 Km)

#### List of Activities in CRZ Area:-

- Excavation of trench.
- Laying and jointing of HDPE Pipeline- Onshore + offshore portion- DWC Pipes with socket joints and HDPE Pipes having Butt Fusion Welding monolithic jointing.
- Provision of Landfall Chamber.`
- Laying of Precast Concrete encasing supports for countering buoyancy.
- WIL asked NIO to study the northern coast of the Gulf at Nakti and suggest suitable location for release of effluents.
- The study was conducted in October, 2014 for physical, water quality and biological characteristics of sea water. The outfall location has been selected based on model study.
- Disposal site was identified based on hydrodynamic study conducted at Nakti.
- NIO recommended diffuser with multiple ports having diameter of 0.19 m for discharge of 25 MD treated effluent at disposal point. Each port will be separated by 5 m with initial jet velocity of 2 m/s.

## Physical characteristics, Water Quality & Biological Characteristics:-

- The maximum surface currents are moderate (0.7-1.2 m/s)but increase considerably (2.0 – 2.5 m/s) in the central portion of Gulf. Tidal excursion length of 6 – 11 km has been observed.
- Water temperature ranges from 23 to 30°C. Suspended solids highly variable ranging from 5-700 mg/1.
- Average pH is remarkably constant (8.0-8.3). Average DO is fairly high (4.3-7.1 mg/1) and the BOD IS LOW (<0.1-4.0 MG/1) indicating good oxidizing conditions.
- The study concluded that the disposal site is far away from coral habitat.
- Fishing activities were not noticed during the field study.
- Reptiles and mammals such as dolphins and whales were not sighted during the period of field studies.
- Proposed pipeline alignment is limited to 400 m of mangrove stretch (approximately 0.2 ha).
- S a navigational safeguard, indicator buoys should be placed at outfall location.
- The water quality and mangroves will be periodically monitored (6 months after commencement of the project and next once in 2 y).
- WIL has proposed to carry out mangrove plantation in 100 ha land in

consultation with Gujarat Ecology Commission/Forest Department.

## 4. Overall Project Benefits

The benefits accrued due to the proposed project are summarized below:

- ➤ Elimination of pollution of estuary waters due to disposal of untreated sewage. This improving the environment at large in the estuary portion of Nakti creek.
- > Treated waste water along with the rejects from RO will be disposed of into sea meeting the sea disposal norms.
- Treated waters will be diffused through a scientifically designed diffuser system into deep marine waters as per NIO recommendations and not disposed in the estuary / creek portion.
- ➤ Fresh Water Conservation Additional requirement will be fulfilled by recycling treated sewage waters.
- Conservation of fresh water sources will provide sustainable water infrastructure to surrounding villages and locals, other industries of the region.
- ➤ Development of new Industries in the area, creating indirect employment and overall economic growth in the surrounding areas of Anjar and Gandhidham.
- ➤ The Proposed project will also generate indirect employment in the surrounding area due to requirement of workers in the site preparation activities, supply of materials, auxiliary and ancillary works, which would improve the economic status of the people.
- ➤ The activities would result in an increase local skill levels though exposure to site activities and technology.

## 5. Project Location and Area. The project is located in Kutch region near Anjar.

The project broadly consists of Gravity Pipeline upto pumping station in areas fo Gandhidham – Adipur Nagarpalika (Length of Gravity Pipeline ~ 15.3 Kms) and further by means of Pumping upto LFP Locatin (Length ~ 5.86 Kms) extending upto diffuser outfall point into deep seas identified by NIO (Length ~ 8.92 Kms) via Nakti Creek in Gulf of Kutch.

#### 6. Connectivity to the site

WIL is a part of welspun City located near Varsamedi village, east of Anjar Town. The nearest railway station is Anjar parallel to Anjar Bypass Road in south direction. Pipeline Crosses Railway Line near Adipur. Nearest road connection to the alignment route is the National Highway 8A – Gandhidham Bhuj. The nearest operative Airport is Bhuj Airport which is around 50 km away from the project site in North West direction.

#### 7. Land Use

Existing land use of the study area is elaborated in EIA report.

Short term temporary change in existing land uses along pipeline route to built up land (pipeline will be laid). Once the pipeline is laid the land will be reversed to its original condition.

#### 8. Project Components

- 1. Sewage conveyance Network D.I. pipeline Design capacity 60 MLD
- 2. Sewage treatment plant 30 MLD + 15 MLD (two phases)
- 3. Treated waste water + RO rejects conveyance pipeline upto deep sea 25 MLD capacity
- 4. Augmentation of existing ETP at WIL (Textile Unit)- 10 to 15 MLD
- 5. Augmentation of UF and RO for recycling 10 MLD + 5 MLD + 30 MLD capacity (Three phases.)
- 9. Salient Features of Marine Disposal Pipeline System
  The salient features of the Onshore + Offshore Pipeline system is presented in Table 2 as below:

Table 2: Salient Features of the Proposed Project

S. no.	Description	Starting /End point Location	Length of Conveyance System	Treated Waste Water	Mode of Disposal Remarks
			(km)	Disposal	Remarks
				Quantity (MLD)	
1	Segment 1: Onshore Pipeline -800 OD DWC Pipe	From Treated water premises upto pumping station Location lat long of N 23° 07' 07.73" E 70° 07' 42.15"	15.3	25	Gravity conveyance Pipeline upto pumping station Location.
2	Pumping station	Pumping Station located at lat. Long of N 23 <sup>0</sup> 01' 23.7" E 70 <sup>0</sup> 07' 9.89"		25	Gravity line discharge treated waste waters into storage lagoons followed by pumping station.
3	Segment 2: Onshore Pipeline -500 mm	From pumping station to landfall point – lat long of	5.86	25	Pumping main line from pump house upto landfall point

Treated waste water characteristics will be as per CPCB standards for discharge to Marine Coastal Waters

1. flow(cu.m per day) 25000

2. pH 5.5-9.0

3. Temperature (deg c) <30 4. Colour (pt. Co. Units) <100

5. BOD (5 days at 20 deg. C) <100

6. COD <250 7. Suspended Solids <100

8. Total Dissolved solids

9. Oil & Grease 20

On the basis of Marine EIA report prepared by National Institute of Oceanography (NIO) effluent disposal point is recommended in Gulf of Kutch as a predetermined location coordinates of N22<sup>0</sup> 54'52.0"& E 70<sup>0</sup> 09'18.0"

Marine EIA report describes the outfall point and diffuser system as under:

On the basis of detail study of physical processes on tide, current, circulation, stratification etc., the site for disposal of effluent to the tune of 25000cu.m/day is proposed at  $22^0$  54'52"N; & E  $70^0$  09'18."E where depth of 7 m below CD is available.

Near –field dilution was studied using buoyant jet model and far-field dilutions were estimated by 2D numerical model. The model study suggests that near-field dilutions of 60-130 times can be achieved at the release location with 5 prt diffuser. The port diameter should be 0.19 m and each port should be separately 5 m distance. The jet velocity and port angle should be 2 m/s and 150 respectively.

The Far-field dilution studies indicate that the plume would move along the Gulf coastal axis and possibility of plume reaching the bank is not expected. Far-field model results show that the maximum concentration 3.4mg/l would be found at release location at nearly 10 m from the discharge location. Near ambient condition would prevail at the distance of 100 m downstream or upstream depending on the total condition. Hence the effluent generated by the WIL to the tune of 25 MLD can be released at 70° 09'18.00" E and 22° 54'52.00 N using 5 port diffuser.

- **3.23.2** The EAC after deliberations, recommended the project for grant of CRZ Clearance subject to the following conditions:
  - (i) All the recommendations and conditions stipulated by GCZMA vide letter dated 15.05.2015, shall be complied with.
  - (ii) Pipeline work shall be limited to the demarcated area only.
  - (iii) Once the pipeline is laid, the *Right of Work (RoW)* shall be cleared of all waste and restored to its original condition.
  - (iv) In all the major water bodies, the horizontal directional drilling method will be used.
  - (viii) The PP shall take all measures to provide protection to the pipeline against corrosion, leak and any other possible mechanical damage as committed under the EIA Report.
  - (ix) Signboard and markers will be placed at each Nala/stream or river crossing and turning point as per standard engineering practice.
  - (x) The project proponent needs to prepare the mangrove management plan to conserve the mangrove resource for maximum benefit to humans and to minimize those non-sustainable or conversion activities that lead to destruction of the mangrove resource. Full protection of the mangrove flora and fauna by banning the extraction of mangrove wood. There shall be no permanent damage to mud flats and mangroves in any way.

- (xi) The project proponent should not undertake any destruction of mangroves during construction of the project. In unavoidable situations, identification of endangered mangrove species along the pipeline Route should be done. Further, there should be restoration and rehabilitation of degraded mangroves on suitable location by planting of suitable species before commissioning of the pipeline and in consultation with forest department. Regular monitoring for any changes in mangrove area, floristic and faunal composition and physiographic should also be ensured.
- (xii) The project proponent shall ensure real time monitoring of effluent quality by installing online effluent quality monitoring system at the outlet of pipeline carrying effluent for marine disposal for the measurement of the parameters prescribed by the Gujarat State Pollution Control Board (GSPCB) and data gathered so submitted to.
- (xiii) The Project Proponent shall ensure that there is no misuse of intertidal area by the work force employed during the construction phase. This should be avoided by establishing the temporary colonies of workers away from CRZ area and proper sanitation should be provided in such colonies.
- (xiv) There should be no construction in the mud flat/mangrove area except laying of pipelines by the way of Horizontal Directional Drilling (HDD).
- 3.24 Erection of Transmission Line Towers a) Trombay Back Bay & b) Trombay Salsette in Sewri area, Mumbai by M/s Tata Power, Mumbai Amendment in the CRZ Clearance [F.No.11-107/2010-IA-III]
- 1. The Tata Power Company Ltd. is generating 1430 MW power at Trombay Thermal Power Station and evacuating the same power to Mumbai city. The Power demand of the Mumbai city growing very rapidly due to development activities such as Construction of residential complexes, commercial complex, Hospitals and Malls, etc. To meet the power demand of Mumbai city reliably, Company is implementing 220 KV Trombay-Backbay and 220 KV Trombay-Salsette transmission lines. These transmission line are passing through Mahul Sewri mangroves area. PP has obtained CRZ Clearance, Forest Clearance and High Court permission for this project.
  - 2. Ministry of Environment, Forest and Climate Change have accorded our proposal for construction of 220 KV Trombay-Backbay and Trombay-Salsette transmission lines with CRZ clearance on May 19, 2011.
  - 3. The PP approached Bombay Natural History Society (BNHS) for assisting us in mangrove plantation on land at Trombay. After site visit and considering the site conditions of the identified location, BNHS has conveyed that, "The identified 13.83 ha. Land at Trombay is not suitable for the mangroves plantation as there is no constant flow of tidal sea water to the site. This will increase the mortality rate and chances of survival of mangroves are very less."As per CRZ clearance letter, page 2, item no. 4, "Mangrove Plantation will be carried out on 13.8 Ha. Area at Trombay." The identified land at Trombay is not suitable for the mangroves plantation as there is no constant flow of tidal seawater to the site. This will increase the mortality rate and chances of survival of mangroves are very less. Subsequently, PP decided to create a state of the art Mangroves Park that will serve the purpose of compensatory forestation of 25,000 mangrove saplings for this project and for their upcoming project also.
  - 4. BNHS therefore did not recommend PP's proposed site for the mangrove

- plantation and suggested PP to look for any other alternative land, which is closer to the seashore, or creek, has regular tidal inflow of seawater and has a better survival rate for mangroves. The PP was advised to approach the State Forest Department for the availability of suitable land.
- 5. In order to comply to the condition of compensatory afforestation of 25,000 mangrove saplings for this project and for thier upcoming projects also, PP planned to create state of art Mangrove Park with the help of Maharashtra State Forest Department. PP applied and received approval from Government of Maharashtra for Tri-Partite agreement for mangrove plantation between Tata Power, M S Swaminathan Research Foundation, Chennai and State Forest Department.
- 6. As per this tri-partite agreement, the degraded area of 25 ha. Of Survey No. 93,99 and 100 of Sarsole Village (Navi Mumbai), Dist. Thane will be covered with plantation of mangroves in three phases.
- 7. This activity will cover survival, assessment and re-plantation of mangroves.
- 8. As per the tri-partite agreement, mangrove plantation work has been commenced and in Phases. The plantation of about 1, 00,000-mangrove saplings is under progress. The total plantation will be carried out in 3 phases where the area of 25 ha will be covered with plantation of more than 3, 00,000 mangroves saplings. In view of the above, PP has requested MoEF&CC to change the mangrove plantation location in CRZ clearance from Trombay to Sarsole, Navi Mumbai, and Dist. Thane and issue an amendment accordingly.

Mangrove Plantation under tri-partite agreement

The species of mangroves proposed to be planted at this location are Avicennia marine, Avicennia officinalis, Rhizhophora mucronata, Cereops tagal, Sonneratia apatela and Sonneratia alba as suggested by BNHS.

Presently, activities like bio-physical survey, awareness development, orientation to Forest Dept. staff and nursery development have been completed. Land preparation of 5 ha. For mangrove saplings plantation has been taken up.

Post monsoon season of 2015, plantation on 5 ha of degraded land (about 1 lakhs mangrove saplings) will be carried out.

This mangrove plantation project will cover the requirement of compliance to the condition of compensatory afforestation as per CRZ clearance for TATA Power's various projects like 220 kV Trombay-Backbay & Trombay-Salsette transmission lines, 400 kV Multicircuit transmission lines, 220 kV Kalwa-Salsette transmission line and future project also.

**3.24.2** The PP requested EAC to recommend in CRZ clearance, item no. 4 (page 2) as under:-

"Mangrove Plantation will be carried out of identified land at village Sarsole (Navi Mumbai), Dist. Thane".

EAC recommended for the proposed amendment in CRZ Clearance.

3.25 Development of Krishnapatnam Port Phase-II at Krishnapatnam, Potti Sriramulu District Nellore (Andhra Pradesh) by M/s Krishnapatnam Port Company Ltd. - Amendment in the Environment and CRZ Clearance - [F.No.11-62/2009-IA-III]

3.25.1 The PP could not explain the need for amendment in the existing Environment and CRZ Clearance. The EAC decided to defer the proposal. 3.26 Development of building on plot bearing CTS No. 5, 6-A/1, A/2 & B,7-A & B, 8-A&B, 9-A&B, 10, 11-A/1, A/2, & B, 12-A/1, A/2 &B, C-13B & 13C, 17-A & B, 18-A&B, & 25B of village Charkop at Kandivali (West), Mumbai by M/s Dhaval Developers, Mumbai - Amendment & Revalidation of CRZ Clearance - [F.No.11-101/2010-IA-III] The PP made a presentation before the EAC and informed that: 3.26.1 Dhaval Developers is developing residential project at Charkop, Kandivali, Mumbai. ii. The proposed project received CRZ clearance vide letter No. F-11-101/2010-IA.III dared 2.08.2011. As per the clearance, work was constructed in area of 8,780 m<sup>2</sup>. The proposal is for revalidation and amendment in the CRZ clearance. However the non CRZ plot is added hence the project is under the purview of EIA notification 2006. Proposed project is a residential project. The plot area of proposed site is iii. 14,178.78 m<sup>2</sup>, FSI area is 22,323.43 m<sup>2</sup>, non FSI area 23,676.57 m<sup>2</sup> and Total Construction Area is 46,000 m<sup>2</sup>. Total 298 nos. of tenements shall be developed. The layout comprises one building with three wings A, B & C with İ۷. configuration Wing A: Stilt+2P+20 Upper Floors, Wing B: Stilt+2P+20 Upper Floors and Wing C: Stilt+2P+36(part) Upper Floors. The project cost is Rs. 241 Crore. ٧. Total water requirement is 201 KLD. Sewage generation is 188 KLD. vi. Sewage Treatment Plant of total capacity 200 KLD will be provided. The Solid waste generation is 745 kg/day. vii. viii. Parking provisions of four wheelers 449 nos. are made. 3.26.2 The EAC was of the view that the project involves construction on additional area reported to be within the CRZ area. That requires appraisal of the proposal first by SCZMA and then approval by the concerned regulatory authority. 3.27 Construction of passenger Ropeway between Dhapper and Bhaleydhunga in South Sikkim District of Sikkim by Tourism & Civil Aviation Department, Govt of Sikkim, Gangtok - Environmental Clearance [F.No. 10-51/2013-IA.III] 3.27.1 The PP made a presentation before the EAC and informed that: The project is located at Dhapar in Ravangla sub-division of south sikkim district. It is about 13 km from Ravangla sub-division town. Ravangla is 125 kms away from Siliguri and 107 Kms from Gangtok. The proposed Ropeway project will provide facility to the tourist/devotees to reach the hilltop. The project is located in Maenam Wildlife Sanctuary hence the project is in ii. Category 'A' as EIA Notification. National Board for Wildlife (NBWL) has recommended the project for

iii.

- denotification of area required for the project in 27<sup>th</sup> meeting of NBWL and The Honorable Supreme Court of India permits the use of 2.1 ha land of Maenam Wildlife Sanctuary land for the construction of Skywalk and Ropeway.
- iv. The land requirement for the project is 2.9 ha out of which 1.2 ha in Maenam Wildlife Sanctuary and 1.7 ha in Reserved Forest.
- v. The project proposes Detachable grip 8 seat Monocable Gondola Ropeway System for a maximum design capacity of 400 PPH.
- vi. The horizontal length and vertical rise of proposed ropeway is 2960 m and 1327 m respectively.
- vii. Line speed of the ropeway varies from 0-5 m/sec and travel time approximately 648 sec. Main Drive Motor is of capacity 800 KW and Diesel Engine for rescue is of capacity 160 KW.
- viii. Two Diesel Generators having capacity 635 KVA are proposed. The power requirement is 850 KW. The proposed ropeway is crossing one stream.
- ix. The hauling rope is of 58mm diameter, having strength 1770N/mm<sup>2</sup>. The estimated completion time is 36 months.
- x. The total estimated project and annual operation & maintenance cost is Rs. 7333.44 lakhs and 149.37 lakhs respectively.
- **3.27.2** The EAC observed that EIA study is devoid of adequate details of parameters critical for project implementation. In view of eco-sensitivity of the terrain, the EIA studies in Chapter 5 do not provide enough material for impact assessment of the project. The EAC decided to defer the proposal.
- 3.28 Development of Dholera Greenfield International Airport at Navagam (Gujarat) by M/s Airport Authority of India Environmental Clearance [F.No.10-85/2011-IA-III]
- **3.28.1** The PP made a presentation before the EAC and informed that:
  - i. Terms of Reference issued by MOEF&CC, New Delhi, MOEF vide F. No. 10-85/2011-IA.III dated 1<sup>st</sup> October 2014.
  - ii. Public hearing for Development of Dholera Greenfield International Airport was held on 10.04.2015 at 11.00 hrs at the site of the proposed airport near Navagam village by Gujarat State Pollution Control Board (GSPCB). During public hearing, local people welcomed the proposed airport project. The following issues were raised during the public hearing:
    - A. Issues raised by Mr. Shaileshbhai Khodabhai Bariya, Vill: Kamatalav, Tal: Dholera, Dist: Ahmedabad: We, the Ganotiya of village Kamatalav and member of Ganotiya Seva Sahekari Mandli Ganotiya request you that we are doing agricultural activities in S.No: 100 & 101 of Village Dholera, Ahmedabad since last 25 years and every year we are sowing crops like Jeeru, Wheat, Cotton, Juwar, Suvadana, Isabgul, Rai. This land is very fertile & productive and since there is a back waters of Sabarmati River we can also sow potato & sweet potato crops. If you are going to develop, airport in this area then we would lose our employment and we would be unemployed and we don't have any other source of income except this agriculture income. Hence we request you to kindly not procure this fertile land for your airport project.

**B.** Repy PP: Shri Vinod Kumar Gautam from ABC Techno Labs India Pvt. Ltd stated that this project of airport is coming only on Government waste land and to protect the interest of farmers, due care has been already taken at planning stage itself to ensure that there is no need for private land to be procured. Hence no agriculture fertile land would be procured for this proposed project and so there is no question of farmers becoming unemployed. In this proposed project there is no provision to obstruct the natural flow of any river, hence there is no question of any flood waters entering the agriculture farms of the farmers.

Issues raised by Shri Manubha Vanar, Vill: Kaniyara, Tal: Dholera, Dist: Ahmedabad: In east direction of village Kamatalav village & Navagam there flows Bhogava river and on west direction there flows river and so whether due care has been taken to see that flow of this river is not obstructed any time, which can result in flooding of our agricultural farms.

Reply by PP: In this proposed project there is no provision to obstruct the natural flow of any river and hence, there is no question of any flood waters entering the agriculture farms of the farmers.

C. Issues raised by Shri Rajdeepsinh Digvijaysinh Chudasama, Vill: Pipli, Tal Dholera, Dist: Ahmedabad: How can we know that at what distance is the greenbelt area from the propose airport and whether any of our land is covered under this greenbelt area.

Reply by PP: Proposed Dholera Airport is to be located in 3525 Acres and green belt area is 81,180sqm and hence there is no need to procure any additional land for development of this greenbelt. In this project except the area required for 2 runways, terminals, apron, the remaining area would be developed as greenbelt.

- D. Isues raised by Shri Navubha Chudasama, Vill: Pipli Tal: Dholera Dist: Ahmadabad: Whether the local people would be able to avail benefits of the Schools, Health Centers to be constructed in this airport area and since, due to development of this airport, there would be economic upliftment of this area and so we urge you to give top priority to these 22 villages at the time of giving employment.
  Reply by PP: Locals would be able to avail the benefits of the Schools &
  - Health Centers and local people would be given preference at the time of giving employment. Further, as per CSR (Corporate Social Responsibility) rule, we will spend two percent of our profit for various development activities as per requirement of the people.
- **E.** Issues raised by Shri Navubha Chudasama, Vill: Pipli Tal: Dholera Dist: Ahmadabad: All the roads connecting to the airport should be made on government land only so that no private land will be required.

Reply given by PP: Our first priority would be to use government land only and in case there is requirements of private land then only it would be

- procured by the rules of State Government.
- iii. The proposed project is development of new Dholera Greenfield International Airport at Village Navagam in District-Ahmadabad in Gujarat State.
- iv. The proposed airport will be constructed, operated and maintained on Public Private Partnership (PPP) basis by the Developer.
- v. The site of proposed airport is located on Khasra No. 100, Paiki in Navagam Village, Tehsil Dhanduka in Ahmadabad District.
- vi. Airport Reference Point for the proposed airport is 72°18'27" E Longitude 22°21'35" N Latitude.
- vii. The proposed Dholera Greenfield International Airport covers an area of 3525 Acres (1426.523 ha) which is State Govt. land.
- viii. No forest land or private land is involved in the proposed airport.
- ix. There is no sensitivity area like Wildlife Sanctuary, National Park, Biosphere within 15km distance from the proposed Airport.
- x. Coastal Regulation Zone (high tide line) is minimum 500m away from the boundary of proposed airport as per study carried by Institute of Remote Sensing, Anna University, Chennai.
- xi. The proposed airport will have 2 Runways, 06L/24R, Length of 2910 m in Phase-I, and 06R/24L, Length of 4000m in Phase-II.
- xii. The proposed airport will have 2 Parallel Taxiways of length of 2910m in Phase-I and 4000m in Phase-II.
- xiii. Terminal building will have capacity for 600 domestic and 600 International passengers. The area of terminal building will be 25200sqm in Phase-I, additional areas of 12600sqm in Phase-II and 37800sqm in Phase-III respectively.
- xiv. Parking Area at the proposed airport will be 14400sqm (for 140 Cars) and green belt/ landscaping area will be 81180sqm.
- xv. For operation phase of the proposed airport, power requirement will be 6 MW in Phase-I, 2 MW in Phase-II, and 2 MW in Phase-III.
- xvi. Air conditioning requirement will be 1700 tons in Phase-I, 650 tons in Phase-II. 2350 tons in Phase-III.
- xvii. ATF Storage will be 3500 KL at the airport for refueling of Aircraft.
- xviii. Total water requirement will be 198m³/day and to be met by Narmada water supply available in the area/ deep bore well. Necessary water connection and permission will be obtained prior to start the construction.
- xix. Waste water generated from the proposed airport, will be treated in well designed Sewage Treatment Plant (STP). Treated waste water will be reused in HVAC (66 kl/d), flushing of toilets (70 kl/d) and greenery & landscaping (40 kl/d). Treated water will not be discharged out side of the proposed airport.
- xx. In air-conditioning system, lightings and building construction materials energy conservation measures will be adopted at the proposed airport. Approx. 35% energy saving is estimated by adopting energy conservation measures. Two nos. 250kW capacity solar power generation units (500kW) are also proposed at proposed Dholera Airport.
- xxi. Greenery and landscaping will be developed on 81180sqm area within the proposed airport. About 1500 indigenous plants, shrubs and grasses will be planted on the open area of the proposed airport.
- xxii. The proposed Dholera International Airport will follow Corporate Social

- Responsibility (CSR) guidelines as applicable.
- xxiii. Municipal waste generated from the proposed airport will be 950Kg/day, which will be collected, segregated and disposed as per Municipal Solid Wastes (Management and Handling) Rules, 2000.
- **3.28.2** The EAC after detailed deliberations recommended the project for grant of Environment Clearance subject to following specific conditions:
  - i. 'Consent to Establish' shall be obtained from State Pollution Control Board under Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974.
  - ii. The PP would submit the site clearance certificate from Directorate General of Civil Aviation (DGCA).
  - iii. The Project Proponent shall pump out water at lower side of the diverted drain, if required for maintaining free flow, and shall ensure proper drainage at all times, to the satisfaction of the StateIrrigation Department.
  - iv. Sewage and other liquid effluent generated from the airport including from the existing terminal should be treated according to the norms laid down by the State Pollution Control Board. The treated sewage shall be recycled for flushing/ gardening. Proper Dual plumbing shall be provided.
  - v. The solid waste generated shall be properly collected, segregated and disposed according to the provisions of Solid Waste (Management and Handling) Rules, 2000. The project proponent shall make provisions for drinking water at convenient places for passengers and also at the cafeterias as to reduce generation of solid wastes including PET bottles.
  - vi. Installation and operation of DG sets shall comply with the guidelines of CPCB.
  - vii. Parking provision shall be provided according to the National Building Code of India. 2005.
  - viii. Water conservation fixtures shall be provided and water balance shall be maintained through verifiable metering for fresh raw water, recycled as well as rain water harvesting.
  - ix. Necessary permission shall be obtained for drawing of ground water from competent authority prior to construction / operation of the project.
  - x. The landuse around the Airport complex shall be regulated through a plan to control unauthorized development which may create problems in the operation of Airport.
  - xi. The wastewater from hangers shall be tested for presence of heavy metals, if any, and shall be treated in STP. The treated waste water shall be used for gardening/flushing.
  - xii. Rain water harvesting shall be provided to recharge the ground water.
  - xiii. Energy conservation to the extent of at least 20% shall be incorporated including water conservation (reuse/recycle, rain water harvesting and water efficient fixtures] and other green building practices for various buildings proposed within the airport complex. The PP shall consider ECBC Guidelines 2009 to achieve energy -efficiency. The energy conservation measures shall be subject to periodic verification by the competent Energy Conservation/ Efficiency authority in the State.
  - xiv. The project proponent shall prepare a detailed traffic management plan to take care of increased vehicular traffic which should also cover/ clearly delineate widening/ increasing the existing roads and associated road

- infrastructure approving/ installation of road safety features/ pedestrian facility/FOB/under passes etc (that can be done by carrying out road safety audits). Measures shall be taken to prevent encroachment along/within the ROWs on connecting/ main arterial roads.
- xv. All the recommendations of the EMP shall be complied with in letter and spirit. 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 RO, MoEF&CC along with half yearly compliance report.
- xvi. The responses/commitments made during public hearing shall be complied with in letter and spirit.
- xvii. Project Proponent shall install noise level display system. Noise level shall be monitored regularly in all seasons (different meteorological conditions) within the compound as well as nearby habitations and it should be ensured that the noise level is within the prescribed limits. During night time the noise levels measured at the boundary shall be restricted to the permissible levels to comply with the prevalent regulations.
- xviii. The location of monitoring stations and monitoring of noise level during day and night shall be in accordance with the CPCB guidance document "Requirement and procedure for monitoring Ambient Noise Level due to aircraft" published on 25th June, 2008.
- xix. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- xx. Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the SPCB.
- xxi. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance. The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.

## xxii. Corporate Environment Responsibility:

- a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
- b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
- xxiii. To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/ or shareholders or

	stakeholders
3.29	Proposed Prefab CAT-II & EWS Housing For Delhi Development Authority At pocket-1 B ,Sector A1,A4 Narela, New Delhi by Delhi Development Authority - Environmental Clearance - Further Consideration - [F.No.21-180/2014-IA-III]
3.29.1	The PP made a presentation before the EAC and informed that the proposal was considered by the EAC in its 148 <sup>th</sup> meeting held on 19-21 May, 2015. The committee observed that there are two other projects by the PP in the same locality. The EAC, keeping in view the future influx of the population in the locality during construction and operation of the project, asked the PP to submit the cumulative impact assessment report, studying factors related to requirement of road, public transport, use of natural resources etc, for all the three projects coming in the area.
	The EAC further observed that there is no consonance between the estimated huge commuter population and arrangements for traffic movements in the immediate vicinity of inter-state border of Delhi-Haryana namely, the already crowded NH-1 at that location. The Committee advised the PP to prepare a comprehensive traffic circulation plan in consultation with Ministry of Road Transport & Highways, Government of India to meet the requirement of smooth traffic flow in order to avoid traffic congestion and pollution in the vicinity.
3.29.2	The EAC decided to defer the proposal for want of additional information in respect of traffic and vehicular air pollution management plan. The Committee also desired that its traffic expert member Dr. Anuradha Shukla may visit the site urgently and give report to the EAC on the likely adverse Traffic Impact at the already congested NH-1 particularly close to the inter-state boundary and need, if any, to redesign the NH-1 approach from the proposed large urban development.
3.30	Environmental Clearance for Prefab CAT-II & EWS Housing for at Pocket-IA, Sector A1A4 Narela New Delhi by M/s Delhi Development Authority-Environmental Clearance – Further Consideration – [F.No.21-6/2015-IA-III]
3.30.1	The PP made a presentation before the EAC and informed that the proposal was considered by the EAC in its 148 <sup>th</sup> meeting held on 19-21 May, 2015. The committee observed that there are two other projects by the PP in the same locality. The EAC, keeping in view the future influx of the population in the locality during construction and operation of the project, asked the PP to submit the cumulative impact assessment report, studying factors related to requirement of road, public transport, use of natural resources etc, for all the three projects coming in the area.
	The EAC further observed that there is no consonance between the estimated huge commuter population and arrangements for traffic movements in the immediate vicinity of inter-state border of Delhi-Haryana namely, the already crowded NH-1 at that location. The Committee advised the PP to prepare a comprehensive traffic circulation plan in consultation with Ministry of Road Transport & Highways, Government of India to meet the requirement of smooth

	traffic flow in order to avoid traffic congestion and pollution in the vicinity.
3.30.2	The EAC decided to defer the proposal for want of additional information in respect of Traffic and Vehicular Air Pollution Management Plan. The Committee also desired that its traffic expert member Dr. Anuradha Shukla may visit the site urgently and give her report to the EAC on the likely adverse Traffic Impact at the already congested NH-1 particularly close to the inter-state boundary and need, if any, to redesign the NH-1 approach from the proposed large urban development.
3.31	Environmental Clearance proposed construction of EWS and CAT-II Housing Project located at Pocket 1-C, Sector A-1 to A-4, Narela, New Delhi by M/s Delhi Development Authority- Environmental Clearance— Further Consideration – [F.No.21-65/2015-IA-III]
3.31.1	The PP made a presentation before the EAC and informed that the proposal was considered by the EAC in its 148 <sup>th</sup> meeting held on 19-21 May, 2015. The committee observed that there are two other projects by the PP in the same locality. The EAC, keeping in view the future influx of the population in the locality during construction and operation of the project, asked the PP to submit the cumulative impact assessment report, studying factors related to requirement of road, public transport, use of natural resources etc, for all the three projects coming in the area.
	The EAC further observed that there is no consonance between the estimated huge commuter population and arrangements for traffic movements in the immediate vicinity of inter-state border of Delhi-Haryana namely, the already crowded NH-1 at that location. The Committee advised the PP to prepare a comprehensive traffic circulation plan in consultation with Ministry of Road Transport & Highways, Government of India to meet the requirement of smooth traffic flow in order to avoid traffic congestion and pollution in the vicinity.
3.31.2	The EAC decided to defer the proposal for want of additional information in respect of Traffic and Vehicular Air Pollution Management Plan. The Committee also desired that its traffic expert member Dr. Anuradha Shukla may visit the site urgently and give her report to the EAC on the likely adverse Traffic Impact at the already congested NH-1 particularly close to the inter-state boundary and need, if any, to redesign the NH-1 approach from the proposed large urban development.
3.32	Additions & Alteration of Central Hospital, Northern Railway, Chelmsford Road at New Delhi by M/s Northern Railway, New Delhi - Environmental Clearance - [F.No.21-62/2015-IA-III]
3.32.1	The PP made a presentation before the EAC and informed that:
	i. The application for the environmental clearance of above said project was submitted to the SEAC, Delhi on 10.03.2014. The case was considered by SEAC, Delhi in its 65 <sup>th</sup> meeting on 30th April 2014 and some queries were raised by the SEAC in that meeting. The reply to the queries was also submitted to SEAC, Delhi in July 2014. However, due to expiry of the tenure of the SEAC, the final processing of the application could not be

- completed and finally, we approached MoEF for consideration of the case towards grant of environmental clearance.
- ii. The proposed project involves addition of two new blocks [Cancer & Cardiac Block having one level basement + G + Service + 7 Floors & Residential Block with maximum S+8 Floors] and separate Basement (three levels) for parking within the existing premises of Central Hospital, Northern Railway located at Chelmsford Road, New Delhi.
- iii. Total built up area of proposed construction including basements is 30,626.6 sq m. New addition of the hospital block will have a total number of 150 beds.
- iv. A total of 9381.88 sq m area will be developed as landscape area with dedicated green and tree plantation [28.34% of total plot area].
- v. Estimated project cost is Rs.34 crores.
- vi. The construction of three level basements has been planned to provide dedicated parking area for visitors and staff. A total of 716 ECS parking area will be provided within the premises. Total population as estimated in the post expansion period is 6000 which includes patients, visitors, residential population and hospital staff.
- vii. Fresh water requirement during the operational phase will be met through Delhi Jal Board supply. The total water requirement for the expansion project during operation stage has been estimated as 239 KLD. This includes domestic water requirement, flushing, landscaping and DG cooling/HVAC make up water.
- viii. The total fresh water requirement is 134 KLD which is sourced through Delhi Jal Board. The remaining water demand of 105 KLD for flushing, landscaping and DG cooling/HVAC make up will be met through reuse of treated wastewater from onsite proposed STP [capacity-85 KLD] and ETP [capacity 75 KLD].
- ix. Only rooftop runoff will be collected from the new proposed expansion area and recharged into ground aquifer through 4 nos. RWH pits.
- x. The additional electrical power load has been estimated as 2700 KW to be 6500 KW for the proposed expansion area. A total of six (6) DG sets of total capacity of 2500 KVA (4@500 KVA + 2@250 KVA) will be provided as back-up during power failure.
- xi. Estimated municipal solid waste generation from the expansion blocks is 481 kg/day. As planned, a small biogas plant utilizing the canteen/food waste will be installed. Bio-medical wastes will be disposed through authorized agency.
- **3.32.2** The EAC after detailed deliberations recommended the project for grant of Environment Clearance subject to following specific conditions:

## **Construction Phase**

- i. The PP shall make parking arrangements for emergency vehicles.
- ii. The Project Proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work.
- iii. 'Consent to Establish' shall be obtained from State Pollution Control Board/Committee under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

- iv. Authorization from concerned CPCB shall be obtained as applicable under Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.
- v. The project proponent shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- vi. All the construction shall be in accordance with the local building byelaws. The Project Proponent shall obtain all necessary clearances.
- vii. Suitable toilet fixtures for water conservation shall be provided.
- viii. The rainwater harvesting plan should be incorporated by the CGWA.
- ix. 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.
- x. A First Aid Room will be provided in the project both during construction and operation of the project.
- xi. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- xii. Disposal of muck during construction phase should 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.
- xiii. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- xiv. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- xv. Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board/ Committee.
- xvi. The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- xvii. The diesel required for operating DG sets shall be stored in underground tanks and clearance from Chief Controller of Explosives shall be taken, as applicable.
- xviii. 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 and should be operated only during non-peak hours.
- xix. Ambient noise levels should conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ DPCC.
- xx. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003.
- xxi. Ready mixed concrete must be used in building construction.

- xxii. Storm water control and its re-use as per CGWB and BIS standards for various applications.
- xxiii. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xxiv. Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- xxv. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xxvi. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- kxvii. Use of glass may be reduced by up-to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- xviii. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- xxix. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

## **Operation Phase:**

- i. The bio-Medical wastes shall be managed in accordance with the Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.
- ii. 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.
- iii. Solid waste management shall be collected, treated disposed in accordance with the Municipal Solid Waste (Management & Handling) Rules, 2000. No municipal waste should be disposed off outside the premises.
- iv. The Operation and Maintenance of STP shall be made in the MoU with STP supplier. Project Proponent shall ensure regular operation and maintenance of the STP.
- v. Total parking facility shall be provided for 253 ECS. Parking facility for taxi and three wheelers shall be provided within the premises taking care for movement of patients and elderly. Parking facility with 6 m clear driveway shall be provided as committed.
- vi. The project proponent shall take measures to ensure 20% power/energy conservation in perpetuity with regular monitoring report to competent energy management authority.
- vii. The project proponent shall take all precaution to ensure that there is no adverse impact from the nearby Waste to Energy facility. Delhi Pollution Control Committee to monitor the same.
- viii. The Project Proponent shall explore the possibilities of reusing the treated wastewater from nearby projects.
- ix. The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted

- to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the State Pollution Control Board/ Committee. Necessary measures should be made to mitigate the odour problem from STP.
- x. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/ inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- xi. Diesel power generating sets proposed as source of back-up power for elevators and common area illumination during operation phase 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 low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board/ Committee.
- xii. 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.
- xiii. The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- xiv. Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
- xv. Energy conservation measures like installation of 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. Use 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. Use of solar panels may be done to the extent possible. Energy conservation of 20% to be monitored in perpetuity by the designated energy management agency.
- 3.33 Proposed Mall, club house and Residential development at SF No.199/1, 200, 201, 206, 205 part, Saravanampatti Village, Coimbatore (Tamil Nadu) by M/s Alliance Mall Developers Co Pvt. Ltd Environmental Clearance [F.No.21-79/2015-IA-III]
- **3.33.1** The PP made a presentation before the EAC and informed that:
  - i. The proposal is for addition of residential development by Alliance Mall Developers Pvt. Ltd. to the already obtained Environmental Clearance for Mall and Guest house located along 11° 3'23.87"NLatitude and 76°59'34.91"E Longitude, at S.NO. 199/1A, 200 part, 201, 206 205/2 Part Saravanampatti Village, Coimbatore North Taluk, Coimbatore District.

- ii. The project is for expansion of existing Environmental Clearance obtained vide Letter no. SEIAA/TN/F 459/EC/8 (a)/163/2012 dated 03.05.2013.
- iii. Presently construction has started in the Mall area for which Environmental Clearance and Consent to Establish has been obtained.
- iv. The total Plot area for development is 9952.65 Sq.m. The residential project will comprise of 3 towers each of Basement +Stilt + 18 floors + terrace, proposed Built-up area is 63232.14 sq. m(Residential), total built up area of mall and residential building is 119954.02Sq.m, green belt area is 5251.61 Sq.m, Ground Coverage area is 33703.1sq.m, Road & pavements area is 48615.48 sq.m, OSR area is 9955.26 Sq.m. Total no. of flats proposed is 540. The building height is 59.8 m.
- v. During Construction phase, total water requirement is expected to be 50KLD and this will be met from ground water. During construction phase, soak pits and septic tanks will be provided for disposal of waste water.
- vi. During operation phase, total water demand for the project is expected to be 579.5 (364.5 KLD for Residential and 215 KLD for Mall). Fresh water demand is 380 KLD(243 KLD for residential and 147 for mall) & recycled water is 199.5KLD(121.5 KLD for residential and 78 KLD for mall). Sewage generated will be 316 KLD for residential and 188 KLD for mall, which will be treated in STP of 373 KLD for residential and 207 KLD for Mall. Treated sewage of 478 KLD will be generate (300 KLD for residential and 178 KLD for mall), which will be reused for toilet flushing (199.5 KLD), HVAC (96 KLD) and green belt development (18 KLD). About 160 KLD of treated sewage will be disposed to Municipal Sewer. Water supply will be met from ground water / TWAD. Clearance obtained from CGWB for ground water extraction.
- vii. About 1215 kg per day of solid waste will be generated due to the project. The Organic waste of 547 kg/day, will be processed in OWC and inorganic waste of 668 kg/day, sludge 10kg/day.
- viii. Total power requirement during construction phase will be approximately 110 kVA, which will be met from TNEB. DG sets of 125 KVA will be used as back up. Power requirement for operation phase is 9390 kVA and will be met from TNEB. 1x 400 kVA DGs will be provided for power backup in case of power failure for residential units. DGs will be placed in the DG yard away from building.
- ix. Rain water from roof top will be collected in sump of 247 KL and reused after filtration.
- x. Parking facility for 329 four wheelers and 354 two wheelers are proposed to be provided against the requirement of 324 four wheelers and 216 two wheelers for residential units and 1452 four wheelers and 52 two wheelers are proposed to be provided against the requirement of 1134 four wheelers for mall as per DTCP norms.
- xi. Proposed Energy saving measures would save about 12.2% of power.
- xii. There is no notified eco-sensitive region within 10 Km radius
- xiii. There is no court case pending against the project.
- xiv. Investment for the project is Rs.87Crores for expansion.
- xv. The proposal is mall and residential building for 2700 permanent and 11000 temporary population. Due to the proposed development, employment potential will be generated in the nearby locality.
- xvi. The proposal is residential and commercial building to be developed by having sewage treatment, recycling facility, internal roads and allied

### infrastructure facility.

3.33.2 The EAC noted the submissions made by the PP and observed that project details in Form -1 are not in consonance with details in Form - 1A. The EAC advised the PP to submit the certificate from concerned State Government department to the effect that the present proposal is in conformity with the existing norms, to allow construction of commercial and residential complex in commercial area.

The EAC decided to defer the proposal.

- 3.34 Expansion of "Divya Sree Point IT Park" at Sy.NO. 449/1A, 450/1,450/2A and 450/2B, Village Sholinganallur, Kancheepuram, Tamil Nadu by M/s Divyasree Infrastructure Developers Pvt. Ltd– Environmental Clearance [F.No.21-76/2015-IA-III]
- **3.34.1** The PP made a presentation before the EAC and informed that:
  - i. The proposed IT Park by Divyasree Infrastructure Developers Pvt. Ltd. is located along 12°54'25.11" N Latitude and 80°13'44.86"E- Longitude at S.NO. 449/1A, 450/1,450/2A and 450/2B Sholinganallur Village Sholinganallur Taluk, Kancheepuram District.
  - ii. The request is for revalidation of Environmental Clearance obtained vide Letter no. 21-486/2007-IA. III dated 3<sup>rd</sup> September, 2008 since only FSI area is mentioned as built up area for the development.
  - iii. The entire building has been constructed.
  - iv. The total Plot area for development is 15060 sq.m. The project will comprise of office building of Double Basements + Stilt floor part +Ground floor part+ 1st floor (parking) +2nd to 10th floor. FSI area is 50247.53 Sq.m, total construction area is 75, 282.21 Sq.m. Maximum height of the building is 53 m.
  - v. Construction is completed for the project.
  - vi. During operation phase, total water demand for the project is expected to be 340 KLD. Fresh water demand is 227 KLD & recycled water is 113 KLD. Sewage generated will be 272 KLD, which will be treated in STP of 340 KLD. 256 KLD of treated sewage will be generated, which will be reused for toilet flushing (113KLD), HVAC (135 KLD) and green belt development (6 KLD). Water supply will be met from CMWSSB. Presently water is obtained from CMWSSB tankers.
  - vii. About 5020 kg per day of solid waste will be generated due to the project. The biodegradable waste of 2286 kg/day, will be processed in OWC and non biodegradable waste of 2734 kg/day, will be handed over to authorised local vendor.
  - viii. Power requirement during operation phase is 7115 kVA and will be met from TNEB. Backup power of 6x 1500 kVA DGs are proposed during operation phase.
    - ix. Roof top rainwater of the buildings will be collected in rain water harvesting tanks of 150 KL capacity for harvesting after filtration.
    - X. Parking facility for 453 four wheelers and 761 two wheelers are proposed

- to be provided against the requirement of 453 four wheelers and 754 two wheelers as per CMDA norms.
- xi. Proposed Energy saving measures would save about 20.2 % of power.
- xii. The site is located within 2 Km from Pallikaranai Marsh Reserve Forest and 10 Km from Guindy National Park.
- xiii. There is no court case pending against the project.
- xiv. Investment for the project is Rs. 4930 Lakhs
- XV. The proposal is an office building for 7890 permanent population. Due to the proposed development, employment potential will generate in the nearby locality.
- XVi. The proposal is an IT Park to be developed by Divyasree Infrastructure Developers Pvt. Ltd. having sewage treatment, recycling facility. The proposal will generate employment in the nearby areas.
- 3.34.2 The EAC noted the submissions made by the PP and asked the PP for submission of the records/documents in respect of mixed land use pattern of the area, which would permit construction of Mall, Hotel and apartments therein. The EAC advised the PP to submit the certificate from concerned State Government department saying that the present proposal is as per existing norms, which allows construction of commercial complex in residential area.

The EAC decided to defer the proposal.

- 3.35 'Shopping mall, Hotel & Hotel Apartment' "The Marina" (Expansion) A Mixed Development of Mall, Hotel, Multiplex and Serviced Apartments at Sy. No. 13/1A, Village Egattur, Kancheepuram, Tamil Nadu by M/s Allied Majestic Promoters and OMR Mall Developers Pvt. Ltd. Environmental Clearance [F.No.21-75/2015-IA-III]
- **3.35.1** The PP made a presentation before the EAC and informed that:
  - i. The proposal is for mixed development of mall, hotel, Multiplex and Hotel Apartments by Allied Majestic Promoters and OMR Mall Developers Pvt. Ltd. is located along12°50'8.83"N Latitude and 80°13'45.88"E Longitude at Survey No, 13/1A at Egattur Village, Thiruporur Taluk, Kancheepuram District.
  - ii. The project is a Change of concept plan from Shopping Mall cum Hotel for which Environmental Clearance was already obtained vide F.No. 21/562/2007 –IA.III dated 1<sup>st</sup> October, 2008 to Mixed Development of Mall, Hotel, Multiplex and Hotel Apartments.
  - iii. Presently construction has started and reached upto basement level as vide earlier EC.
  - iv. The total Plot area for development is 25131.08 sq.m. The project will comprise of Two Blocks with combined basement Mall + Hotel and Hotel Apartment. The builtup area of 110835.03 sq. m. Maximum height of the building is 45 m.
  - v. During Construction phase, total water requirement is expected to be 50 KLDand this will be met from Panchayat Supply. The sewage generated from domestic use will be 6 KLD which will be disposed through tankers.
  - vi. During operation phase, total water demand for the project is expected to be 445.5 KLD(368.5 KLD for Mall and Hotel apartments, 77 KLD for

- Hotel). Fresh water demand is 352.5 KLD (296.5 KLD for Mall and service apartments, 56KLD for Hotel) & recycle water is 93 KLD (72 KLD for Mall and Hotel apartments, 21 KLD for Hotel). 205 KLD of sewage will be generated from Mall and Hotel apartments, 69 KLD of wastewater will be generated from Hotel, which will betreated in the Sewage treatment plant of 290 KLD and 78 KLD respectively. After treatment of wastewater, treated water will be reused for flushing 93KLD, HVAC 130.5 KLD and green belt 37.5 KLD. The source of water is from Panchayat.
- vii. About 4114 kg/ day of solid wastes are likely to be generated due to the proposed project. The Organic waste of 1833 Kg/day, Inorganic Waste of2241kg/day and Sludge of 40 Kg/day. The organic biodegradable wastes (waste vegetables, foods etc.) will be sent to local body for processing. The inorganic wastes will be sold to authorised recyclers. The STP sludge will be Composted and used as manure.
- viii. Power requirement during construction phase is 100 KVA and will be met from TNEB, 2 nos 125 Kva DGs available as stand by. The total power requirement during operation phase is 6248 kVA for proposed expansion facility. The local electricity board will supply the required power. For back-up support, 2 x 380 kVA +3 x 1500 kVA+ 1 x1000kVA + 2 x 125 kVA will be provided by DG sets.
- ix. The run-off from the Terraces (521 m³) shall be separately piped to a underground rain water collection tank, after duly filtering the same.
- x. Parking facility for 1107four wheelers and 1511 two wheelers are proposed against the requirement of 1088 four wheelers and 1097 two wheelers.
- xi. Proposed Energy saving measures would save about 43.7 % of power in mall and Multiplex and Hotel HVAC system and 20% of power saving in Mall and Hotel lighting system.
- xii. The site is located within 9.31km Pallikaranai Marsh.
- xiii. There is no court case against the project.
- xiv. Investment for the project is Rs.147.9Crores.
- xv. The proposal is a mixed development of Mall, Hotel, Multiplex and Hotel Apartments for 6466 persons per day. Employment potential will generate from the proposed development.
- xvi. The proposal is a mixed development of Mall, Hotel, Multiplex and Hotel Apartments to be developed by Allied Majestic Promoters and OMR Mall Developers Pvt. Ltd. having sewage treatment, recycling facility. The proposal will generate employment in the nearby areas.
- 3.35.2 The EAC noted the submissions made by the PP and observed that proposal is for construction of mixed development of mall, hotel, multiplex and serviced apartments. It is informed that the designated land use is commercial. The PP was asked to produce the relevant provisions in the local development control rules which would permit the mixed development as recorded in Form-1. The PP would be required to make the Form-1 in conformity with the local development control rules. Further, the PP could not clarify if the serviced apartments are to be treated as hotel or residence.

The EAC decided to defer the proposal.

3.36 Information Technology Park at S.No. 281/1, 4 & 54/293, Kottivakkam

Village, Saidapet Taluk, Rajiv Gandhi Salai, Kandanchavadi, Chennai, Tamil Nadu by M/s Easyaccess Financial Services Limited – Environmental Clearance [F.No.21-71/2015-IA-III]

# **3.36.1** The PP made a presentation before the EAC and informed that:

- i. The existing Information Technology building owned by Easyaccess Financial Services Limited is located along 12°58'13.29" N Latitude and 80°14'59.02"E- Longitude at S.No.281/1, 4 & 54/293, Rajiv Gandhi salai, Kandanchavadi, Kottivakkam Village, Kancheepuram District.
- ii. The project is a existing Information Technology building.
- iii. Presently the construction is completed and occupied.
- iv. The total Plot area for development is 8417sq .m. The project comprise a block of Stilt + 8 floors. FSI area is18807.52 Sqm, total construction area is 20649.49 Sqm. Maximum height of the building is 36 m.
- v. Construction is completed and hence water requirement during construction phase is not envisaged.
- vi. During operation phase, total water demand for the project is expected to be 60 KLD. Fresh water demand is 24 KLD & recycled water is 43 KLD. Sewage generated will be 53.92 KLD, which will be treated in STP of 75 KLD. 51 KLD of treated sewage will be generated, which will be reused for toilet flushing (36 KLD), Floor washing (12KLD) and green belt development (7 KLD). Water supply is met by purchasing water from outside through tankers.
- vii. About 3 kg per day of solid waste will be generated due to the project. The biodegradable waste of 1.35 kg/day, will be processed in OWC and non biodegradable waste of 1.65 kg/day, will be handed over to authorised local vendor. Food waste of 800 kg/day is generated and it is taken away by the catering person themselves.
- viii. Total power requirement during operation phase is 3000 kVA and will be met from TNEB. Backup power of 5 x 625 kVA DGs are available for operation phase.
- ix. Roof top rainwater of the buildings will be collected in 4 no of rain water harvesting tanks of 4 KL capacity each (16 KL total) for harvesting after filtration.
- x. Parking facility for 73 four wheelers and 93 two wheelers are provided against the requirement of 73 four wheelers and 93 two wheelers as per CMDA norms.
- xi. Proposed Energy saving measures would save about 14% of power.
- xii. The site is located within 3.89 Km of Pallikaranai Marsh Reserve Forest and 3.75 Km from Guindy National Park.
- xiii. There is no court case pending against the project.
- xiv. Investment for the project is Rs.36 Crores.
- xv. The proposal is a Information Technology building 2300 permanent population. Due to the development, employment potential was generated in the nearby locality.
- xvi. The proposal is an Information Technology building owned by Easyaccess Financial Services Limited having sewage treatment with recycling facility. The proposal has generated employment in the nearby areas.

3.36.2 The EAC after deliberations, and also in view of recent orders of NGT in OA

No.37/2015 in the matter of Shri S.P. Muthuraman Vs Uol & othrs, desired confirmation from the concerned State Authorities in respect of the following:-

- Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
- Water availability (ground/surface)
- Present status of the site
- Requirement of CRZ clearance, if any

- 3.37 'Fomra Lights-A Residential Development' at Sy. No, 552/2D1, 552/2G, 560/5C, 772/3A 1, 772/3C, 772/3B, 772/3D, 772/32, 773/1, 773/2, 773/3, 775/1A 1B, 774/2A, 774/ 2B, Kuthambakkam Village, Thiruvallur, Tamil Nadu by M/s Fomra Housing And Infrastructure Private Limited— Environmental Clearance [F.No.21-78/2015-IA-III]
- **3.37.1** The proposal was not taken up for discussion by the EAC, as the PP did not attend the meeting.
- 3.38 Proposed development of Industrial Park at Plot/Survey/Khasra No. 46/1, 46/3, 46/4, 47/3, 478B, 48/1, 48/2, 48/3a, 483b, 48/3c1, 48/3c2a, 48/3c2b, 48/4, 48/5, 49/1, 49/2, 49/3, 49/4, 50/3a, 50/3b, 50/4, 50/7, 50/8, 54/1, 54/3, 54/4, 54/5, 58/1 & 58/5, Vallam A village, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu by M/s Indo Space AS Industrial Park Pvt Ltd Environmental Clearance [F.No.21-96/2015-IA-III]
- **3.38.1** The PP made a presentation before the EAC and informed that:
  - The proposed IT Park by INDOSPACE AS INDUSTRIAL PARK PVT LTD. is located along 12°50'37.63"N Latitude and 80°13'32.25"E- Longitude at S.NO. 46/1, 46/3, 46/4, 47/3, 478B, 48/1, 48/2, 48/3a, 483b, 48/3c1, 48/3c2a, 48/3c2b, 48/4, 48/5, 49/1, 49/2, 49/3, 49/4, 50/3a, 50/3b, 50/4, 50/7, 50/8, 54/1, 54/3, 54/4, 54/5, 58/1 & 58/5 Vallam Village, Sriperumbudur Taluk, Kancheepuram District.
  - ii. The instant proposal is for expansion of the project for which EC was obtained vide letter no. SEIAA /TN/EC/8(a)/107/F- 383/2010 dated 16/12/2010.
  - iii. The part of building for which environmental clearance and consent for establishment has been obtained is constructed.
  - iv. The total Plot area for development is **1,42,772 Sq.m**. The existing built up area is **52010.99 Sq.m**. The proposed built up area **27463.44 Sq.m** Maximum height of the building is 14.9 m.
  - v. During operation phase, total water demand for the project is expected to be 329 KLD. Fresh water demand is 229 KLD and sewage generation of about 188 KLD is treated through 225 KLD capacity STP. The treated water 188KLD will be used for gardening (114 KLD) and flushing (74 KLD). The effluent generate from the industrial process will be 100 KLD. The effluent generate from the industrial waste will be treated through ETP with ZLD technology.

- vi. About **2668** kg/day of solid waste will be generated due to the project. The biodegradable waste of **1189** kg/day will treated in OWC and used as manure. Non biodegradable waste of **1454** kg/day will be handed over to authorised local vendor.
- vii. Power requirement during operation phase is **4600 kVA** and will be met from TANGEDCO. Backup power for the existing facility **2X 1010 KVA**, **1X 750 KVA**, **2 X 500 KVA**, **2X 300 KVA and 1x 120KVA** DGs are proposed during operation phase. The additional power back up for proposed expansion is **1x 250 KVA**.
- viii. Roof top rainwater of the buildings will be collected in rain water harvesting tanks of **1446 KL** capacity for harvesting after filtration.
- ix. Parking facility for Big truck 83 no's, small truck 81 no's and car 40 no's are proposed to be provided.
- x. Proposed Energy saving measures would save about 20.5% of power
- xi. The site is located within 7.21 Km from Mahanyam Reserve Forest and Vallam lake adjacent to site.
- xii. There is no court case pending against the project.
- xiii. Investment for the project is Rs. 1300 Lakhs
- xiv. The proposal is an industrial park for 4065 no's temporary influx. Due to the proposed development, employment potential will generate in the nearby locality.
- xv. The proposal is an Industrial Park to be developed by Indospace As Industrial Park Pvt Ltd having sewage treatment, recycling facility. The proposal will generate employment in the nearby areas.
- 3.38.2 The EAC noted the submissions made by the PP that the proposed industrial park was not housing any Category A or B industry. The Committee recommended that the Ministry may examine the issue of applicability of EIA Notification, 2006 to the proposal.
- 'Residential Development-WOW' at S.Nos:429/1D1&1D1 and 1E1,1E2 (old s.no 429/1D.& 1E) Sowmiya nagar, Perumbakkam Village, Kancheepuram (Tamil Nadu) by M/s Urban Tree Infrastructures Pvt. Ltd— Environmental Clearance [F.No.21-72/2015-IA-III]
- **3.39.1** The PP made a presentation before the EAC and informed that:
  - i. The proposed residential development by Urban Tree Infrastructures Pvt. Ltd is located along 12°54'26.88" Latitude and 80°11'30.90" Longitude, at S.NO. 429/1D1&1D1and 1E1, 1E2, (old S.No 429/1D&1E) Perumbakkam Village, Sholinganallur Taluk, Kancheepuram District.
  - ii. The project is a proposed residential development
  - iii. Presently there is no construction activity at site. The site is a barren land.
  - iv. The total Plot area for development is 7805.36Sq .m. The project will comprise of Stilt + 4 floors, total Built-up area is 22761.1sq. m, green belt area is 1362 Sq.m, Ground Coverage area is 4861sq.m, Road & pavements area is 1438 sq.m, OSR area is OSR 430Sq.m. Total no. of flats proposed is 174. The building height is 15 m.
  - v. During Construction phase, total water requirement is expected to be 50KLD and this will be met from CMWSSB. During construction phase, soak pits and septic tanks will be provided for disposal of waste water.

- vi. During operation phase, total water demand for the project is expected to be 131 KLD. Fresh water demand is 87 KLD & recycled water is 44KLD. Sewage generated will be 114 KLD, which will be treated in STP of 120 KLD. Treated sewage of 108 KLD will be generated, which will be reused for toilet flushing (44 KLD) and green belt development (6 KLD). About 58 KLD of treated sewage will be disposed to CMWSSB Sewer. Water supply will be met from CMWSSB.
- vii. About 575kg per day of solid waste will be generated due to the project. The Organic waste of 254 kg/day, will be processed in OWC and inorganic waste of 311 kg/day, sludge 10kg/day.
- viii. Total power requirement during construction phase will be approximately 500 kVA, which will be met from TNEB. DG sets of 125KVA will be used as back up. operation phase is 1101 kVA and will be met from TNEB. 2x 250 kVA DGs will be provided for power backup in case of power failure. DGs will be placed in the DG yard away from building.
- ix. Total volume of rainwater run off will be 319 Cu.m/hr. The run-off from the Terraces (100 m³) shall be separately piped to 4 nos. of underground rain water collection tank, each of 25 KL capacity. (Total 100KL capacity)
- x. Parking facility for 104 four wheelers and 208 two wheelers are proposed to be provided against the requirement of 71 four wheelers and 179 two wheelers as per CMDA norms.
- xi. Proposed Energy saving measures would save about 21.77% of power.
- xii. Pallikaranai Marsh is 3.98 Km from the site, which falls within 10km radius
- xiii. There is no court case pending against the project.
- xiv. Investment for the project is Rs.20.6 Crores.
- xv. The proposal is a residential building for 1044 estimated population. Due to the proposed development, employment potential will generate in the nearby locality.
- xvi. The proposal is a residential building to be developed by Urban Tree Infrastructures Pvt Ltd., for 174 flats having sewage treatment, recycling facility.
- **3.39.2** The EAC noted the submission made by the EAC and after detailed deliberations the EAC asked the PP to submit the following additional information for further consideration of the project:
  - i. Modified building lay out plan to ascertain the 20 feet driveways.
  - ii. Adequate green belt around the boundary of the project.
  - iii. Star rated electrical appliances.
- 3.40 'SIS Queenstown A Residential Development' at Sy.No. 354/9A, 355/8, 356/1,356/2, 356/3A, 357/1, 357/2, 357/3A1, 359/1A, 359/2A, 44/4, 44/5Cpt and 44/6, Kayarambedu Village, Kanchipuram, Tamil Nadu by M/s South Indian Shelters Pvt. Ltd. Environmental Clearance [F.No.21-77/2015-IA-III]
- **3.40.1** Since the PP did not attend the meeting, the proposal was deferred.
- 3.41 Proposed expansion of Residential Project Oxygen at 260/4A, 260/4B1, 260/4B2, 262/1, 262/2, 263/2A, 263/2B, 264, 265/1B, 296/1, 3, 4, 6, 7, 8A, 8B, 297, 298, 299/1, 3, New S.No. 301/5 (Old S. No. 301/2), 360/2, Village Perumbakkam, Perumbakkam (Tamil Nadu) by M/s Urban Tree

## Infrastructures Pvt. Lt. – Environmental Clearance [F.No.21-74/2015-IA-III]

- 3.41.1 The EAC took note that the constitution of SEIAA in the State of Tamil Nadu was under finalization. Further, in view of recent orders of NGT in OA No.37/2015 in the matter of Shri S.P. Muthuraman Vs UoI & othrs, the committee desired confirmation from the concerned State Authorities in respect of the following:-
  - Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
  - Water availability (ground/surface)
  - Present status of the site
  - Requirement of CRZ clearance, if any

- 3.42 Construction of Residential Development "URAPAKAM" at Survey No.119/1B& 16B, Village lyyancheri, Kancheepuram (Tamil Nadu) by M/s Urban Tree Infrastructures Pvt. Ltd Environmental Clearance [F.No.21-73/2015-IA-III]
- **3.42.1** The PP made a presentation before the EAC and informed that:
  - i. The proposed residential development by Urban Tree Infrastructures Pvt. Ltd. Superb is located along 12°52'14.04" N Latitude and 80°5'3.40"E-Longitude at S.NO.119/1B & 16B, lyyancheri Village, Urapakam Panchayat, Chengalpet Taluk, Kancheepuram District.
  - ii. The project is a new residential development.
  - iii. Presently there is no construction activity at site. The site is a barren land.
  - iv. The total Plot area for development is 12040 sq.m. The project will comprise of 7 Residential blocks of Stilt + 4 floors. FSI area is 20125.38Sq.m, total construction area is 25258.95Sq.m. Total 284 Flats are proposed. Maximum height of the building is 15 m
  - v. During Construction phase, total water requirement is expected to be 50KLD and this will be met from CMWSSB. During construction phase, soak pits and septic tanks will be provided for disposal of waste water.
  - vi. During operation phase, total water demand for the project is expected to be 210KLD. Fresh water demand is 138 KLD & recycled water is 71KLD. Sewage generated will be 182 KLD, which will be treated in STP of 200 KLD. 173 KLD of treated sewage will be generated, which will be reused for toilet flushing (71 KLD) and green belt development (11.27 KLD). About 90.73 KLD of treated sewage will be disposed to municipal Sewer. Water supply will be met from CMWSSB.
  - vii. About 922 kg per day of solid waste will be generated due to the project. The biodegradable waste of 414 kg/day, will be processed in OWC and non biodegradable waste of 507 kg/day, will be handed over to authorised local vendor.
  - viii. Total power requirement during construction phase is 500 kVA and will be met from TNEB/ DGs. And power requirement during operation phase is 1596.5 kVA and will be met from TNEB. Backup power of 2 x160 kVA DGs are proposed during operation phase.

- ix. Roof top rainwater of the buildings will be collected in 8 no of rain water harvesting tanks of 25 KL capacity each (200 KL total) for harvesting after filtration.
- x. Parking facility for 114 four wheelers and 302 two wheelers are proposed to be provided against the requirement of 70 four wheelers and 251 two wheelers as per CMDA norms.
- xi. Proposed Energy saving measures would save about 18.24% of power.
- xii. The site is located within 0.85 Km of Aringnar Anna Zoological Park.
- xiii. There is no court case pending against the project.
- xiv. Investment for the project is Rs.27 Crores.
- xv. The proposal is a residential building for 1420 permanent population. Due to the proposed development, employment potential will generate in the nearby locality.
- xvi. The proposal is a residential building to be developed by Urban Tree Infrastructures Superb for 284 flats having sewage treatment, recycling facility. The proposal will generate employment in the nearby areas.
- 3.42.2 The EAC took note that the constitution of SEIAA in the State of Tamil Nadu was under finalization. Further, in view of recent orders of NGT in OA No.37/2015 in the matter of Shri S.P. Muthuraman Vs Uol & othrs, the committee desired confirmation from the concerned State Authorities in respect of the following:-
  - Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
  - Water availability (ground/surface)
  - Present status of the site
  - Requirement of CRZ clearance, if any

- 3.43 Proposed construction of Group Housing Project "Ansal Grace" at Village Chowadi, Tehsil Jammu, Jammu M/s Hamid Infrastructure Environmental Clearance [F.No.21-112/2015-IA-III]
- 3.43.1 During discussion, the PP accepted that they have committed violation of the provisions of the EIA Notification, 2006. The EAC recommended to the Ministry to take further necessary action in this regard.
- 3.44 Proposed expansion/ addition of missed out land of 725 m2 in the plot area and increase of built-up area in the Environmental Clearance issued to IT Park "SP INFOCITY" at S.F. Nos. 36/17A, 227/1A, 227/1B, 227/2A1, 227/2A2, 228/1A1C, Perungudi Village, Kancheepuram (Tamil Nadu) by M/s Faery Estates Private Limited Environmental Clearance [F.No. 21-495/2006-IA.III]
- 3.44.1 The PP made a presentation before the EAC and informed that Ministry of Environment and Forests vide letter No.21-495/2006-IA-III dated 23.07.2007 had issued EC for Construction of IT Park with built-up area 2,89,769 Sq.m. in plot area 4.9352 ha. The project comprises of 3 towers Common 3 Basements + Ground + Mezzanine + 13 floors. While construction was in progress, M/s Faery Estate added land of 725 m² in the existing plot of 4.9352 ha; now, to avail

benefit of FSI, it is proposed to increase the built-up area by 8,240.63 m<sup>2</sup> (2.8%) from the existing approved built-up area of 2,89,769 Sq.m. Total built-up area after expansion will be 2,98,009.63 Sq.m. This is proposed to be achieved through covering of open terrace areas. Even though built-up area will be more, there will not be any increase in workforce (22500), water requirement (1125 KLD), sewage generation (STP 2 x 600 KLD already constructed) as stipulated in EC letter dated 23 July 2007. The total cost of the expansion project is about Rs. 24.0 Crores.

**3.44.2** The Committee observed that the Terms of Reference was issued to the project on 19<sup>th</sup> June, 2015 for inclusion of missed out land of 725 sqm and increase in built up area by 2.8%. The present proposal for grant of EC for the said expansion is not commensurate with the TOR granted in June, 2015.

The EAC also desired to further examine the proposal for any discrepancy vis-à-vis the terms and conditions of the EC dated July, 2007 and TOR issued, and thus deferred. EAC also insisted for consideration of the proposal by the SEIAA in the State.

- 3.45 'Expansion of E Lights IT Park' at No- 23, Rajiv Gandhi Salai, OMR, Navalur, Chennai (Tamil Nadu) by M/s E Lights Techno Park Pvt Ltd- Environmental Clearance [F.No. 21-113/2015-IA.III]
- **3.45.1** The PP made a presentation before the EAC and informed that:
  - i. The project is located at 13° 2'24.90"N Latitude and 80° 3'10.06"E Longitude.
  - ii. The project is new development project.
  - iii. Earlier Clearance details, Constructions status, if any- The project is a new project and the land is a vacant land.
  - iv. The total plot area is 27,541.69 sq.m. The project will comprise of 9 Residential Apartments with B + S + 14 upper floors, LIG Apartment and a Clubhouse Buildings. FSI area is 42,138.94 sqm and total construction area of 48,687.09 sqm. Total 560 Nos. flats shall be developed. Maximum height of the building is 44.9 m.
  - v. During construction phase, total water requirement is expected to be 25 KLD which will be met by Private 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 labor force.
  - vi. During operational phase, total water demand of the project is expected to be 419 KLD and the same will be met by the 160 KLD Recycled Water. Wastewater generated (342 KLD) uses will be treated in one STPs of total 380 KLD capacity. 325 KLD of treated wastewater will be recycled (140 KLD for flushing, 20KLD for gardening). About 165 KLD will be disposed in to municipal drain.
  - vii. About 1.5 TPD solid waste will be generated in the project. The biodegradable waste (0.9 TPD) will be processed in OWC and the non-biodegradable waste generated (0.6 TPD) will be handed over to authorized local vendor.
  - viii. The total power requirement during construction phase is 10 KVA and

- will be met from TNEB and total power requirement during cooperation phase is 3477 KVA and will be met from TNEB.
- ix. Rooftop rainwater of buildings will be collected in 2 nos. RWH tanks of total 45 cum and 30 cum capacity for harvesting after filtration.
  - x. Parking facility for 359 nos. four wheelers and 477 nos. two wheelers is proposed to be provided against the requirement of 77 nos. and 469 nos. respectively (according to local norms).
- xi. Proposed energy saving measures would save about 30 % of power.
- xii. It is located within 10 km of Chembarambakkam lake (2 km) and Coovum river (5.5 km) Eco Sensitive areas.
- xiii. There is no-court case pending against the project.
- xiv. Investment/Cost of the project is Rs..88(in crore).
- xv. Employment potential- This is residential project with expected occupancy of 3367 nos. of persons.
- xvi. Benefits of the project- Project will provide employment opportunities to the local people in terms of labour during construction and service personnel (guards, securities, gardeners etc) during operations and also provide quality integrated infrastructure etc.
- 3.45.2 The EAC took note that the constitution of SEIAA in the State of Tamil Nadu was under finalization. Further, in view of recent orders of NGT in OA No.37/2015 in the matter of Shri S.P. Muthuraman Vs Uol & othrs, the committee desired confirmation from the concerned State Authorities in respect of the following:-
  - Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
  - Water availability (ground/surface)
  - Present status of the site
  - Requirement of CRZ clearance, if any

- 3.46 Proposed Residential Apartment at Survey No. 123/1B, 2, 3, 5 & 124/1B, 3, 4, Chembarambakkam Village Poonamalle Taluk, Thiruvallur District, Tamil Nadu by M/s. Developer Group India Pvt. Ltd. Environmental Clearance [F.No. 21-114/2015-IA.III]
- **3.46.1** The PP made a presentation before the EAC and informed that---
  - i. The project is located at 12°51'33.86"N latitude and 80° 9'18.53"E longitude.
  - ii. The project is new development
  - iii. The total plot area is 17825sq.m. FSI area is 25634.56 **sqm** and total construction area of 33858 **sqm**. Total 358 flats shall be developed. Maximum height of the building is 14.5 **m**.
  - iv. During construction phase, total water requirement is expected to be 25-30 KLD which will be met by private 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.
  - v. During operational phase, total water demand of the project is expected to

- be 163 KLD and the same will be met through Ground water. Wastewater generated (215 KLD) uses will be treated in one STPs of total 250 KLD capacity. 204 KLD of treated wastewater will be recycled (85 KLD for flushing, 20 for gardening). About 99 KLD will be disposed in to Local body for avenue plantation and public parks.
- vi. About 0.95 TPD solid waste will be generated in the project. The biodegradable waste (0.472 TPD) will be processed in OWC and the non-biodegradable waste generated (0.37TPD) will be handed over to authorized local vendor.
- vii. The total power requirement during construction phase is 10 KVA and will be met from TNEB and total power requirement during cooperation phase is 2490 KVA and will be met from TNEB.
- viii. Rooftop rainwater of buildings will be collected in RWH tanks of total KLD capacity for harvesting after filtration.
- ix. Parking facility for 223 four wheelers and 335 two wheelers is proposed to be provided against the requirement of 36 and 356 respectively (according to local norms).
- x. Proposed energy saving measures would save about 25 % of power.
- xi. It is located within 10 km of Eco Sensitive areas Arignar Anna Zoological Park (7.5 Km, NW)
- xii. There is no court case pending against the project.
- xiii. Investment/Cost of the project is Rs 38.07 (in crore).
- xiv. Employment potential The proposed project is residential project with the expected occupancy of 358 units
- xv. Benefits of the project Our proposed development will improve socioeconomic standard of people due to increased employment opportunities, better living facility & commercial services provided by this project. This will lead to better quality of life and will also set a standard for future developments in the area. The project may also trigger the development of supporting and ancillary facilities, and further may lead to other urban developments.
- 3.46.2 The EAC took note that the constitution of SEIAA in the State of Tamil Nadu was under finalization. Further, in view of recent orders of NGT in OA No.37/2015 in the matter of Shri S.P. Muthuraman Vs UoI & othrs, the committee desired confirmation from the concerned State Authorities in respect of the following:-
  - Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
  - Water availability (ground/surface)
  - · Present status of the site
  - Requirement of CRZ clearance, if any

Pending clarification and convincing replies on the above issues, the EAC deferred the proposal.

3.47 Proposed Residential Development at S.No: 33/2C1, 2C2, 2C3, 2C4, 2C5, 2C6 & plot nos. 118, 119, 120, 121, 122, 123, Arulmozhi Nagar of Vengadamangalam village, Chengalpet Taluk, Kanchipuram District (Tamil Nadu) by M/s PNB Realty Limited - Environmental Clearance [F.No. 21-115/2015-IA.III]

# **3.47.1** The PP made a presentation and informed that:

- i. The project is locatedat12° 53' 21.41" NLatitudeand80° 10' 25.09" E Longitude
- ii. The project is new/ redevelopment New Construction Project.
- iii. Earlier Clearance details, Constructions status, if any Not Applicable
- iv. Thetotalplotareais22014.72sq.m.Theprojectwillcompriseof9 Blocks. FSI area is 32960.57 sqm and total construction area of 43209.41sqm.Total 437 flats shall be developed. Maximum height of the building is 15m.
- v. During construction phase, total water requirement is expected to be <u>25</u> KLD which will be met by private tanker source 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.
- vi. During operational phase, total water demand of the project is expected to be 328(FW 204 + RW 127) KLD and the same will be met by the 127 KLD Recycled Water and fresh water of 204 KLD from ground water source. Waste water generated (264 KLD) uses will be treated in STPs of total 275 (200 + 75) KLD capacity. 127 KLD of treated waste water will be recycled(103 KLD for flushing, 24 KLD for Gardening). About 123 KLD will be disposed in to local body for avenue plantation on road side trees.
- vii. About 1.158TPD solid waste will be generated in the project. The biodegradable waste(0.694TPD)will be processed in OWC and the non-biodegradable waste generated (0.347TPD)will be handed over to authorized local vendor. (Inert waste -0.117 TPD will be sent for land filling through authorized recyclers).
- viii. The total power requirement during construction phase is 50 KVA and will be met from DG set and total power requirement during cooperation phase is 3250 KVA and will be met from TNEB.
- ix. Roof top rainwater of buildings will be collected in 5 RWHtanksoftotal152.17 Cu.m/hr capacity for harvesting after filtration.
- x. Parking facility for 271 four wheelers and 440 two wheelers is proposed to be provided against the total ECS requirementof491.(according to local norms).
- xi. Proposed energy saving measures would save about 30% of power.
- xii. It is not located within 10 km of Eco Sensitive areas.
- xiii. There is no court case pending against the project.
- xiv. Investment/Cost of the project is Rs..68 Crores.
- xv. Employment potential: The project will provide direct and indirect employment. About 50 persons during construction phase and about 109 persons will be employed during the operation stage for the purpose of day-to-day maintenance works.
- xvi. Benefits of the project: The well designed infrastructure will provide better living environment to the people.

3.47.2 The EAC observed mismatch in the project details in respect of width of all around drive way mentioned in documents circulated to the Committee members and facts presented before the EAC. Also, there was no proper documentation of the project details. The Committee advised the PP to re-check the project documents and submit again with proper page numbering of index/annexure etc.

- 3.48 Proposed Residential Development at 78,79/1,81/1A,81/3,82/1,81/4,82/2A, Madambakkam village, Tambaram Taluk, Kancheepuram District (Tamil Nadu) by Mr.K.Veluchamy- Environmental Clearance [F.No. 21-116/2015-IA.III]
- 3.48.1 i. The project is located at 13° 2'24.90"N Latitude and 80° 3'10.06"E Longitude
  - ii. The project is new Construction Project. The project site is a vacant land area.
  - iii. This project has already obtained Environmental Clearance on 06.05.2014 vide letter No. SEIAA-TN/F- 2111/EC (8a)/303/2013 and CRZ Clearance vide Letter No. Proc. No. P1/1869/2013 dated 09.01.2014. Now, according to amendment in the Notification from Ministry of Environment & Forest dated 16.06.2015 and minor changes in the design of the project, the proponent is now going for amendment in the environmental clearance.
  - iv. The total plot area is 8932.50 sq.m. The project will comprise of residential block with combined basement + S + 16 upper floors, which includes LIG wing and a Clubhouse on the 16th floor. FSI area is 32,127.07 **sqm** and total construction area of 52,396.36 **sqm**. Total 104 Nos. flats shall be developed. Maximum height of the building is 65 **m**.
  - v. During construction phase, total water requirement is expected to be 25 KLD which will be met by Private 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 labor force.
  - vi. During operational phase, total water demand of the project is expected to be 83 KLD and the same will be met by the 33KLD Recycled Water. Wastewater generated (63 KLD) uses will be treated in one STPs of total 70 KLD capacity. 34 KLD of treated wastewater will be recycled (25 KLD for flushing,9KLD for gardening). About 26 KLD will be disposed in to municipal drain.
  - vii. About 0.27 TPD solid waste will be generated in the project. The biodegradable waste (0.16 TPD) will be processed in OWC and the non-biodegradable waste generated (0.08 TPD) will be handed over to authorized local vendor.
  - viii. The total power requirement during construction phase is 10 KVA and will be met from TNEB and total power requirement during cooperation phase is 1250 KW and will be met from TNEB.
  - ix. Rooftop rainwater of buildings will be collected in 2 nos. RWH tanks of total 200 KLD capacity for harvesting after filtration.
  - x. Parking facility for 390 nos. four wheelers and 25 nos. two wheelers is proposed to be provided against the requirement of 376 nos. and 20 nos. respectively (according to local norms).
  - xi. Proposed energy saving measures would save about 30% of power.
  - xii. It is located within 10 km of Adyar Estuary (1.2km) and Eco Sensitive areas.
  - xiii. There is no court case pending against the project.
  - xiv. Investment/Cost of the project is Rs. 55.33 (in crore).
  - xv. Employment potential- This is residential project with expected occupancy of 598 nos. of persons.
  - xvi. Benefits of the project Project will provide employment opportunities to the local people in terms of labour during construction and service

personnel (guards, securities, gardeners etc) during operations and also provide quality integrated infrastructure etc.

- 3.48.2 The EAC took note that the constitution of SEIAA in the State of Tamil Nadu was under finalization. Further, in view of recent orders of NGT in OA No.37/2015 in the matter of Shri S.P. Muthuraman Vs Uol & othrs, the committee desired confirmation from the concerned State Authorities in respect of the following:-
  - Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
  - Water availability (ground/surface)
  - Present status of the site
  - Requirement of CRZ clearance, if any

Pending clarification and convincing replies on the above issues, the EAC deferred the proposal.

- Proposed Residential Development at Sy. No. 4310/5, 4569/34,35 of Block 96 & 100, Santhome village, Mylapore Triplicane Taluk, Chennai (Tamil Nadu) by Mr. T. V. Sathia Narayana Environmental Clearance [F.No. 21-117/2015-IA.III]
- **3.49.1** The PP made a presentation before the EAC and informed that:
  - i. Proposed Residential Development at S.No. 85/1 part, 3A2, 11, 13B, 13C,13D, 13E, 13F, 505/2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12,13,14,15,16,17, Pondur village, Sriperumbudur Taluk, Kanchipuram District, Tamilnadu.(Total built-up area is 48915.59 Sqm).
  - ii. M/s Sterling Estates and Properties limited proposes to construct its residential complex "Sterling Gateway" in Pondur village, Sriperumbudur Taluk, Kanchipuram District, Tamilnadu.
  - iii. The project site is located 12°55'15.93"N latitude and 79°56'13.07"E longitude.
  - iv. Total land area available is 20647.62 Sqm. The total built-up area is 48915.59 Sqm. The project consists of the project consists of 5 blocks; Block 1 to 5 with Stilt + four floor.
  - v. As per EIA notification, 2006, any new or modernization building and construction project with built-up area more than 20,000 sq m falls under activity 8 a and category B and thus requires to obtain environment clearance from concerned authority prior start of the construction.
  - vi. As SEIAA Tamil Nadu is not formed till date after completion of tenure of last SEIAA, we are herewith applying in MoEF for obtaining environment clearance for the project.
  - vii. Nearest Highway SH 57 connecting Singaperumal Koil on GST Road with Thiruvallur via Oragadam and Sriperumbudur on NH 4
  - viii. Nearest Water Bodies: Vellarai lake lies at 3.5 km in South Eastern Direction, Sriperumbudur Lake lies at a distance 4.5 km in Northern direction.
  - ix. There is no eco sensitive areas / protected areas as per Wildlife Protection Act, 1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and

- conservation reserves).
- x. The total project cost estimate of the project is 42.54 crores.
- xi. The power requirement during operation is about 2590 KVA and it will be sourced from the nearby TNEB grid. DG sets of capacity 300 kVA (100 X 1 and 200 X 1 KVA) will be provided to cater essential load requirement during power failure. Proposed energy saving measures would save about 27% of total power consumption.
- xii. Daily fresh water requirement for the project will be 217 KLD, which will be me through Ground water.
- xiii. The sewage generated (287 KLD) will be treated in proposed Sewage Treatment Plant of capacity 300 KLD and will be recycled for flushing, gardening and the remaining excess treated sewage will be disposed to local body for avenue plantations and Public parks.
- xiv. Solid waste generation from the proposed project is 1270.40 kg/day out of which 753 kg/day of compostable waste will be treated in organic waste convertor within the project site. Manure generated will be used for landscaping purpose within project site.
- xv. 377 kg/day of Recyclable waste will be sold to authorized recyclers, 126 kg/day of Inert Waste will be sent for land filling through authorized vendor, 15 kg/day of STP Sludge will be used as a Manure for greenbelt development.
- xvi. Benefits of the Project: Our proposed development will improve socioeconomic standard of people due to increased employment opportunities, better living facility & commercial services provided by this project. This will lead to better quality of life and will also set a standard for future developments in the area. The project may trigger the development of supporting and ancillary facilities, and further may lead to other urban developments.
- 3.49.2 The EAC took note that the constitution of SEIAA in the State of Tamil Nadu was under finalization. Further, in view of recent orders of NGT in OA No.37/2015 in the matter of Shri S.P. Muthuraman Vs UoI & othrs, the committee desired confirmation from the concerned State Authorities in respect of the following:-
  - Conformity of the project site vis-a-vis the land use pattern as per the approved developmental plan of the area.
  - Water availability (ground/surface)
  - Present status of the site
  - Requirement of CRZ clearance, if any

Pending clarification and convincing replies on the above issues, the EAC deferred the proposal.

- 3.50 Proposed Residential Development at S.No: 85/1 part, 3A2, 11, 13B, 13C,13D, 13E, 13F, 505/2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12,13,14,15,16,17, Pondur village, Sriperumbudur Taluk, Kanchipuram District (Tamil Nadu) by M/s Sterling Estates and Properties Ltd. Environmental Clearance [F.No. 21-118/2015-IA.III]
- **3.50.1** The PP made a presentation before the EAC and informed that:

- i. Proposed Residential Development at S.No. 85/1 part, 3A2, 11, 13B, 13C,13D, 13E, 13F, 505/2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12,13,14,15,16,17, Pondur village, Sriperumbudur Taluk, Kanchipuram District, Tamilnadu.(Total built-up area is 48915.59 Sqm).
- ii. M/s. Sterling Estates and Properties limited proposes to construct its residential complex "Sterling Gateway" in Pondur village, Sriperumbudur Taluk, Kanchipuram District, Tamilnadu. The project site is located 12°55'15.93"N latitude and 79°56'13.07"E longitude. No eco-sensitive zone is present within 2 km area of the project site. Total land area available is 20647.62 Sqm. The total built-up area is 48915.59 Sqm. The project consists of the project consists of 5 blocks; Block 1 to 5 with Stilt + four floor.
- iii. As per EIA notification, 2006, any new or modernization building and construction project with built-up area more than 20,000 sq m falls under activity 8 a and category B and thus requires to obtain environment clearance from concerned authority prior start of the construction.
- iv. As SEIAA Tamil Nadu is not formed till date after completion of tenure of last SEIAA, we are herewith applying in MoEF for obtaining environment clearance for the project.
- v. Nearest Highway SH 57 connecting Singaperumal Koil on GST Road with Thiruvallur via Oragadam and Sriperumbudur on NH 4
- vi. Nearest Water Bodies: Vellarai lake lies at 3.5 km in South Eastern Direction, Sriperumbudur Lake lies at a distance 4.5 km in Northern direction.
- vii. There is no eco sensitive areas / protected areas as per Wildlife Protection Act, 1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves).
- viii. The project proposal involves construction of a residential complex at S.No. 85/1 part, 3A2, 11, 13B, 13C,13D, 13E, 13F, 505/2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12,13,14,15,16,17, Pondur village, Sriperumbudur Taluk, Kanchipuram District, Tamilnadu comprising of 5 blocks; Block 1 to 5 with Stilt + four floor with a total built up area of 48915.59 Sqm. Total number of dwelling units 476 units and expected occupancies 2737.
- ix. Total land area is  $20647.62~\text{m}^2$ , of which ground coverage will be  $9237.74~\text{m}^2$ , Utility area  $-247.77\text{m}^2$ , Roads and pavement area  $-5799.08\text{m}^2$  and green belt  $6194.28\text{m}^2$  (i.e. 25-30% of open area), Area Under Stilt (covered parking)  $9238.24~\text{m}^2$
- x. The total project cost estimate of the project is 42.54 crores.
- xi. The power requirement during operation is about 2590 KVA and it will be sourced from the nearby TNEB grid. DG sets of capacity 300 kVA (100 X 1 and 200 X 1 KVA) will be provided to cater essential load requirement during power failure. Proposed energy saving measures would save about 27% of total power consumption.
- xii. Daily fresh water requirement for the project will be 217 KLD, which will be me through Ground water. The sewage generated (287 KLD) will be treated in proposed Sewage Treatment Plant of capacity 300 KLD and will be recycled for flushing, gardening and the remaining

- excess treated sewage will be disposed to local body for avenue plantations and Public parks.
- xiii. Solid waste generation from the proposed project is 1270.40 kg/day out of which 753 kg/day of compostable waste will be treated in organic waste convertor within the project site. Manure generated will be used for landscaping purpose within project site. 377 kg/day of Recyclable waste will be sold to authorized recyclers, 126 kg/day of Inert Waste will be sent for land filling through authorized vendor, 15 kg/day of STP Sludge will be used as a Manure for greenbelt development.
- xiv. Benefits of the Project: Our proposed development will improve socioeconomic standard of people due to increased employment opportunities, better living facility & commercial services provided by this project. This will lead to better quality of life and will also set a standard for future developments in the area. The project may trigger the development of supporting and ancillary facilities, and further may lead to other urban developments.
- 3.50.2 The EAC observed that PP has not documented the project details correctly. It was observed that there were discrepancies in the details provided to the Committee during the EAC meeting and documents circulated to the Committee members. There is no clear demarcation of the area for all around drive ways of the required width and green belt around the boundary wall of the project.

The EAC advised the PP to re-check the project documents and resubmit after revising the lay out plan with clear demarcation of adequate space for all around driveways and green belt around boundary wall of the project.

- 3.51 Development of alternate Sea route to Baratang island from Port Blair, North & Middle Andaman District by Andaman Lakshdweep Harbour Works Further Consideration CRZ Clearance [F. No. 11-9/2013-IA-III]
- 3.51.1 The PP made a presentation and informed that the proposal was examined by the EAC in the previous meeting wherein the EAC enquired about the environmental impact assessment report and environment management plans, details of the alternate sites considered, construction plan and impact on marine life due to the proposed activity. The EAC deferred discussion on the item for want of aforesaid documents/information and suggested to include this proposal in the agenda for the next meeting of EAC. In this backdrop, the PP informed the following about anticipated environment impacts and mitigation measures:
  - a) The existing Vehicle Ferry Jetty is in-between the Coordinates 12o 10'12.22"-12o 10'12.87" N Latitude and 92o 45'44.16"- 92o 45'45.23" E Longitude. The proposed RCC Jetty with Approach Jetty will be inbetween the Coordinates 12°10'08.50"-12°10'12.39" N Latitude and 92° 45'42.15"- 92°45'44.69" E Longitude. The Dredging area will fall within the Coordinates 12°03'23"-12o 03'45" N Latitude and 92°45'50"- 92°47'08" E Longitude. There is no environmental issue about the site.
  - b) The construction site is devoid of mangroves and corals. The site is completely protected from waves and thus no significant sand movement in the Creek and no sand dune.

- c) There are no eco sensitive areas like National Parks, Wildlife Sanctuaries, Biosphere Reserves, Elephant Corridor, etc. except the South Andaman Reserved Forest and Jarawa Tribal Reserve within 10 km from the proposed site. The Rani Jhansi Marine National Park is at about 40 km from Baratang.
- d) The only live volcano Barren Island is at a distance of 120 km in eastnortheast.
- e) The project would create impact on the environment in two distinct phases namely during the construction phase which may be regarded as temporary and short term and during the operation phase.
- f) The impacts during construction Phase:
  - i. The project does not involve any land and thus, there is no acquisition. No reclamation is also proposed. The Berthing Jetty is proposed in the side of existing Vehicle Ferry Jetty. Thus, there will not be any adverse impact on the land use and soil quality during the construction period.
  - ii. The impacts of construction activities on air quality are due to fugitive dust emanating during construction activities. The main sources of emission will be due to the transportation, movement and operation of construction equipments at site and fugitive dusts from handling of cement, sand and stone chips, etc. Movements and operations of construction machineries, diesel driven pumps, boats, barges, etc. would also cause emissions of SO<sub>2</sub> and NOx. However, the impact will be for short duration, confined locally and is expected to be negligible outside the site area. The monitored ambient air pollutants values at the site were found to be in lower levels with respect to the respective National Ambient Air Quality Norms and there is adequate buffer level in the ambient air pollutants' levels in the vicinity. Thus, the net impact will be limited and insignificant.
  - iii. The proposed construction activities would increase the equivalent (Leq) noise levels by another 2-3 dB(A). As the site is proposed in the Vehicle Ferry Jetty area, there will be very less impact to the nearby local settlements.
  - iv. The construction water requirement is about 5 m³ /day which will be tapped from existing water supply network. Impact on water quality during construction phase may be due to non-point discharges of solids and sewage generated from the construction workforce. As the local work force will be pooled and used, the water requirements and wastewater generation during the construction period would be minimum. There will be a wastewater generation to the tune of 100 lits./day due to the construction activities which may reach the Creek and its water quality may be marginally affected. However, as there is much dilution available, its impact would also be insignificant.
  - v. The Jetty construction site is devoid of Corals and Mangroves. Also, there is no cutting of trees is involved. Thus, the construction of Jetty will not have any significant impact on terrestrial flora and fauna. The dredging and disposal of 0.34 million m³ will have definite impacts at the mouth of Middle Strait Creek and the disposable area. However, the impact will be temporary and

- equilibrium will be restored due to available dilution in Andaman Sea.
- vi. As the construction is proposed in the Vehicle Ferry Jetty area and no transit/temporary camps are envisaged, no adverse impact is anticipated to nearby local settlements.
- g) Impacts during Operation Phase
  - Traffic Impact: The Andaman Trunk Road (ATR) is the main road connecting Chidivatapu in South Andaman and Aerial Bay in North Andaman. This road traverses through islands of South Andaman, Baratang, Middle Andaman and North Andaman. There are two disconnections, one at Middle Strait and the other at Humphray Strait. Vehicles from Port Blair first reach Jirkatang and from there daily 300-350 vehicles in 6-8 convoys (only in day time) are reaching Middle Strait VF Jetty and then transported through Vehicle Ferries to Baratang VF Jetty and from there to other places in Middle & North Andaman Islands. Simultaneously, vehicles from North & Middle Andaman Islands that proceeding to Port Blair reach Baratang VF Jetty, transported through Vehicle Ferries to Middle Strait VF Jetty and from there in convoys to Jirkatang on the way to Port Blair. The Tourist Cabs/vehicles, after alighting the Tourists to Baratang, are mostly parked at the Jarawa Protection Police Camp itself at Middle Strait VF Jetty. Likewise, the vehicles missed the last convoy are directed to park at Baratang over night to continue the journey in next day convoy. Thus, significant vehicular movements exist at both VF Jetties during day times. Usual night time vehicular movements exist on the ATR from Baratang to Middle Andaman Islands. ATR is having an average width of 3.6 m which is lesser than the specified width of single lane road of 3.75 m. Initial objective of this road was to provide connectivity between the localities of these islands and adequate attention was not given to requirement of different components of the road structure. As per the recent High Court Judgment, no construction activity can be taken up in 71 km of ATR. In balance 262 km, improvement is needed which includes widening to intermediate lane width of 5.50 m as suggested by CRRI. The existing traffic volume in the vicinity was found to be 360 PCU/day. In the Post-Project Scenario, the restricted traffic in the ATR, will reduce the traffic volume at Baratang barring the regular traffic from Barartang to Middle & North Andaman Islands. The Development of Alternate Sea Route to Baratang will reduce the No. of Vehicles plying through ATR and thus, reducing the vehicular emissions significantly in the study
  - ii. As no solid/hazardous wastes disposal is envisaged from the Jetty, there is no impact on the land environment during the Operation Phase
  - iii. During Operational Phase of the Project, the visiting ships/boats, etc. would cause emissions of SO<sub>2</sub> and NOx. It is to be mentioned that the monitored pollutants' levels in the Jetty areas were found to be very well below the permissible NAAQ Norms and the net impact for changed scenario (implementation of project) will be limited and insignificant. The Development of Sea Route to Baratang will

- reduce the No. of Vehicles plying through ATR and thus, reducing the vehicular emissions significantly in the study area.
- The existing movements of Vehicle Ferries did not cause any iv. significant noise to the environment viz. 40.4-41.4 dB(A) during day times and 33.3-38.3 dB(A) during night times at the Jetties against the permissible Leg Norms of 55 dB(A) during day times and 45 niaht respectively. dB(A) durina times The visitina ships/boats/ferries may result in increase in the equivalent noise levels by 2-3 dB(A) till their departure from the Jetty. However, the noise levels will be well within the permissible limit for residential areas and as such no impact is envisaged.
- v. No effluent is anticipated during Operation of the Jetty. However, oil sleeks (if any) from the visiting ships/boats might cause some negligible impact on the receiving sea. The impact will be negligible as adequate dilution exists in the Creek (as experienced now also due to the Vehicle Ferries movements in the Creek). Domestic sewage to the tune of 1.8 cum/day will be generated from Port Control Tower which will be biologically treated in a septic tank followed by dispersion trench of adequate size and thus, no impact is anticipated from the facility on Water Environment
- vi. The construction of concrete piers/pillars to support the Berthing Jetty would encourage the settlement of sedentary organisms to settle upon it. Thus, implementation of the project will enhance the positive impacts on the aquatic environment. The Middle Strait Creek is now being used for navigation of small boats and dongies from both side i.e. from Bay of Bengal and Andaman Sea. The tidal influence to about 14 km either way will maintain the marine water quality during the Operation Phase i.e. during Navigation as an Alternate Sea Route to Baratang Island. Thus, the Navigation of 1 or 2 100 Pax Boat Services will not have any impact on the mangroves or forest covers in the Middle Strait.
- h) The total cost of this project works out to be Rs. 52.15 crores including the EMP Budget of Rs.50.00 Lakhs Adequate budget provision has been made for implementing the EMP measures and Post-project Monitoring.
- 3.51.2 On environmental aspects of the project and its utility for Jharawa Tribes, the EAC desired that protection of Jharwa by creating the alternate sea route would not be achieved unless proper plan for diversion of road traffic to sea route is done, whereas as per the policy of the A&N Administration, both routes (road as well as sea) shall be available to the public including tourist between Port Blair & Baratang.

After detailed deliberations, the EAC recommended granting CRZ Clearance to the project subject to the following conditions:

- (i) PP shall ensure that no change in the hydrology and natural drainage system of the area.
- (ii) No drilling/blasting shall be undertaken for the dredging work.
- (iii) Dredged materials shall be disposed off safely at the identified location with adequate depth.
- (iv) No reclamation shall be undertaken with the dredged materials.

- (v) No disturbance to mangroves while establishing the Navigational Aids.
- (vi) PP shall undertake periodical monitoring of water quality, turbidity levels, bottom conditions, ambient air quality, noise levels, etc. as per norms during the construction and operational period.
- (vii) PP shall make adequate arrangement at the project site for containment of large oil spills/ oil sleeks.
- (viii) On completion of construction, all debris and extraneous materials shall be cleared off and no residuals should be left at the site.
- (ix) An effective monitoring mechanism shall be evolved to ensure that the environmental safeguard measures have been implemented properly.
- (x) Periodical monitoring of environmental parameters shall be carried out as per CPCB Norms to have a cross check and a data base.

The EAC further desired that a commitment of A&N Administration along with plan of regulating the traffic between these two routes need to be submitted to the Ministry before putting up the case for approval of the competent authority.

- 3.52 Development of Cryogenic LPG import, Storage and Distribution Facility along with allied infrastructure, M/s Aegis Logistics Limited Environmental and CRZ Clearance [F.No. 11-44/2014-IA-III]
- 3.52.1 The PP made a presentation before the EAC and informed that:
  - i. Project proposal relates to install:
    - LPG/Propane/Butane Cryogenic Storage Tanks (2x12500 MT)
    - Pressurized Tanks for Condensate Collection (2x50 MT)
    - 2x12 inch LPG Pipelines & Marine Loading Arms for import and receipt of LPG
    - 8 Bay LPG loading gantry
    - Associated facilities & utilities
    - Base line capacity 600000MTPA
    - Achievable Capacity 1200000MTPA
    - Parcel size 20000MT 25000MT
    - No Of parcels per annum 40-50
    - No of parcels per month 3-5
  - ii. Aegis Logistics Limited, as part of theirexpansion program in port facilities for handling petroleum products, proposes to develop the storage and handling facility for Propane/Butane/LPG within the Haldia Dock Complex, Haldia, West Bengal. The facility proposed shall be developed on land allotted by Haldia Dock Complex on long lease, on its premises.
  - iii. Existing Haldia Dock Complex infrastructure including oil Jetties for the foreshore and waterfront operations will be used. The jetty is equipped to handle LPG Vessels and is a LPG import location. No new construction on water front or foreshore facilities is planned, except erection of unloading arms, transfer pipelines on the existing jetties for receipt of product by ship tanker.
  - iv. The estimated project cost is Rs.150 crore and completion period of 24 months. The project will usher immense benefit to the Eastern Sector

- due its huge supply-demand gap and large unmet potential demand in domestic and commercial sectors. The estimated achievable capacity of the project is 1.2 MTPA.
- v. The facilities will comprise of marine unloading arms, pipeline transfer facilities(12km) ,storage tanks, , Loading Bays, compressors and pumphouse along with utilities services.
- vi. The process consists of receipt of propane / butane / LPG under refrigerated conditions from ship tankers berthed at HOJ-1, 2,3 through jetty connectivity pipe lineswhich will be stored in 2 x 12,500 MT capacity double wall cryogenic tanks in refrigerated conditions at storage terminal.Statutory standards ,applicable codes and good engineering practices will be followed in construction , operation , maintenance of the facilities.
- vii. M/S PDIL has prepared, Environmental Impact Assessment, Rapid Risk Analysis, Disaster Management Plan. The project is approved by the Chief Controller of Explosives, Petroleum & Explosives Safety Organisation (PESO), Nagpur. M/S PDIL is also consultant for the project for design, process parameters and detail engineering.
- viii. The significant features of the project are given below:
  - No acquisition of new land but located within the existing Port Complex of HDC.
  - No Change of Land Use is proposed
  - The proposal is planned as per the approved and allotted land use and as per the T&C of EC Granted to HDC.
  - Aegis Will use the existing Haldia Dock Complex infrastructure i.e. Oil Jetties for the foreshore and waterfront operations. No new construction on water front or foreshore facilities.
  - No Processing or manufacturing involved.
  - No trade effluents.
- **3.52.2** The EAC observed that the project involves only storage and distribution, and no processing. The Committee recommended the project for grant of EC subject to providing adequate safeguards, and compliance of MD Lal Committee Report.
- 3.53 Construction of Group Housing Project "Safa Valley" At Kh. No. 49, 50, 51, 52, 41, Sunjwan Tehsil & District Jammu (J&K) by M/s 8 Boundaries Builders Pvt Ltd Environmental Clearance [F.No.21-124/2015-IA-III]
- **3.53.1** The PP made a presentation before the EAC and informed that:
  - i. The project site is located at Khasara No. 49, 50, 51, 52, 41 Sunjawan Tehsil & District Jammu.
  - ii. The project site has good connectivity. Nearest highway is NH-1 A which is 2.23 km (WSW) from project site. Nearest railway station is Jammu Tawi Railway Station which is about 3.55 km (WSW) from the project site. Nearest airport is Jammu Airport, at 7.89 km (SW) from the project site.
  - iii. Plot Area is 14686.98, Permissible Ground Coverage (@ 20% of plot area) is 2,937.396 3, Proposed ground coverage (@ 18.13% of plot area) is 2663.01 4, Permissible FAR (@ 2.40) is 35235.96, Proposed FAR (@ is 2.36) 34766.27, Stilt area is 2,935.36 7, Basement area 1,017.66 8,

- Balcony and lift 3,661.779, Built Up Area is 42,381.06 10, Landscape Area (@20 % of plot area) 2,938 \*FAR = Floor Area Ratio.
- iv. Water Requirement: During construction phase water will be supplied by private water tankers, whereas during operation phase water supply will be provided through municipal supply and borewells. Total water requirement is approx. 370 KLD, out of which domestic water requirement is 352 KLD. Fresh water requirement is approx. 246 KLD which is 70% of the domestic water demand.
- v. **Power Requirement:** The power supply shall be supplied by State Electricity Board Jammu. The connected load for the project will be approx. 5060 KW. **Power Back Up** There is provision of DG sets of total capacity 1000 KW for power back up in the project. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.
- vi. **Parking Facilities:** Adequate parking (563 ECS) provision will be kept for vehicles parking in the project. Besides this, wide internal road within the project will facilitate smooth traffic movement.
- vii. Therefore, it has been calculated to provide 10 rainwater harvesting pits at selected locations, which will catch the maximum run-off from the area.
- viii. Vehicle Parking Facilities: Parking Required: As per MoEF: For Residential facilities = 1 ECS/100m2 FAR area =34766.26/100 = 348ECS As per Jammu Municipal Corporation (Building) Bye-laws: 1.5 ECS for flats with area more than 1000 sq.ft. = 91 x 1.5 = 137 ECS 1 ECS for flats with area less than 1000 sq.ft. = 416 x 1 = 416 ECS Total required ECS = 553 ECS Total Parking Proposed: Total Parking proposed =563ECS Power Requirement
- ix. Solid Waste Generation: During the operation phase, waste will comprise domestic as well as horticulture waste. The solid waste generated from the project shall be mainly domestic waste and estimated quantity of the waste shall be approx. 1368 kg per day (@ 0.50 kg per capita per day for residents, @0.15 kg per capita per day for the visitor, 0.25 kg per capita per day for the staff members and horticulture wastes @ 0.2 kg/acre/day). Following arrangements will be made at the site in accordance to Municipal Solid Wastes (Management and Handling) Rules, 2000. Treatment of waste: Bio-Degradable wastes Bio-degradable waste will be subjected to composting by the use of organic waste converter and the compost will be used as manure. STP sludge is proposed to be used for horticultural purposes as manure. Horticultural Waste is proposed to be composted and will be used for gardening purposes. Recyclable wastes Grass Recycling The cropped grass will be spread on the green area.
- x. **Sludge calculation:** 30.75 Kg/day.
- xi. **Green Area:** Total green area measures 2,938 premises and along the roads. Name of Species to be planted 1. Acacia catechu 2. Acacia dealbata 3. Bauhinia acuminate 4. Celtisaustralis 5. Coriarianepalensis.
- xii. No forest land is involved in the project.
- xiii. No court case is pending against the project.
- **3.53.2** The EAC after detailed deliberations recommended the project for grant of Environment Clearance subject to all routine specific/general conditions, as applicable and being stipulated for building/construction projects.

- 3.54 Proposed Greenfield Airport at Holongi, Itanagar, Arunachal Pradesh by Airports Authority of India Further Consideration-Finalization of TOR [F.No. 10-20/2014-IA.III]
- 3.54.1 The Member Secretary informed the Committee that the said proposal was earlier considered by the EAC during the meeting held on 25<sup>th</sup> August 2014. During the EAC meeting, the Committee sought some additional information on site selection and flood plain of rivers passing in the vicinity of proposed site. The additional information was submitted vide letter dated 28.10.2014, and the proposal was reconsidered during the 143<sup>rd</sup> EAC meeting held on 06<sup>th</sup> Jan 2015. During the meeting, EAC noted that in the eastern direction, more than one third area falls in the flood plain of River Kokila and in western direction the entire approach area falls in Holongi river plain. In the given situation, MoEF&CC may take the opinion of M/o Water Resources on the issue of compromising the flood plain of two rivers which are on either side of proposed runway. Also, opinion of M/o Civil Aviation on the issue whether it is prudent to provide an airport within 250 m of the State boundary with Assam where an airport is already available within 40 km aerial distance from Lilabari, Assam.

The Member Secretary apprised the EAC about the comments provided by the Ministry of Water Resources & Ministry of Civil Aviation, Govt. of India, which were supportive of the project.

- 3.54.2 The EAC noted the comments received from Ministry of Water Resources and Ministry of Civil Aviation and after detailed deliberations recommended the project for grant of Terms of Reference subject to following specific conditions:
  - i. The PP would submit the site clearance certificate from Directorate General of Civil Aviation (DGCA).
  - ii. The Project Proponent shall pump out water at lower side of the diverted drain, if required for maintaining free flow, and shall ensure proper drainage at all times, to the satisfaction of the State Irrigation Department.
  - iii. Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.
  - iv. Details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site. Examine and submit detail of land use around 10 km radius of the project site and map of the project area and 10 km area from boundary of the proposed/existing project area, delineating project areas notified under the wild life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/inter state boundaries and international boundaries.. Analysis should be made based on latest satellite imagery for land use with raw images.
  - v. Submit the present land use and permission required for any conversion such as forest, agriculture etc. land acquisition status, rehabilitation of communities/ villages and present status of such activities.

- vi. Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
- vii. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area.
- viii. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- ix. Examine the impact of proposed project on the nearest settlements.
- x. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
- xi. Examine and submit details of levels, quantity required for filling, source of filling material and transportation details etc. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disaster integrating with existing airport.
- xii. Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- xiii. Submit details regarding R&R involved in the project.
- xiv. Examine the details of water requirement, use of treated waste water and prepare a water balance chart. Source of water vis-à-vis waste water to be generated along with treatment facilities to be proposed.
- xv. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.
- xvi. Examine details of Solid waste generation treatment and its disposal.
- xvii. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- xviii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xix. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- xx. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
- xxi. The air quality monitoring should be carried out as per the Notification issued on 16th November, 2009.
- xxii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xxiii. Submit details of corporate social responsibilities (CSR).
- xxiv. Submit details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation. Explore the possibilities of relocating the existing trees.
- xxv. Examine the details of afforestation measures indicating land and financial outlay. Landscape plan, green belts and open spaces may be described. A thick green belt should be planned all around the nearest settlement to mitigate noise and vibrations. The identification of species/ plants should

- be made based on the botanical studies.
- xxvi. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Airport".
- 3.55 'Residential Area development' at Village-Sheojipura, Bid Dadri & Dadri Toe, Jhajjar (Haryana) by M/s Model Economic Township Limited (Formerly known as Reliance Haryana SEZ Limited) Finalization of ToR [F.No.21-125/2015-IA-III]
- **3.55.1** The PP made a presentation before the EAC and informed that:
  - i. The proposed residential area development project is located at village Sheojipura, Bid Dadri & Dadri Toe, Jhajjar (Haryana).
  - ii. The proposed project is being developed by Model Economic Township Limited (Formerly Known as Reliance Haryana SEZ Limited) as a residential area and has plot area 8,81,494 sqm i.e. 88.15 ha (217.82 acres) with total builtup area 12,37,224 sqm.
  - iii. As the built-up area of the project is more than 1,50,000 sqm, it falls in 8(b) under Category B of EIA Notification, 2006, hence TOR is required.
  - iv. The total estimated cost of the project is Rs.267 crore.
  - v. As the tenure of the SEAC/SEIAA Haryana was over, PP applied online under Category A in MoEF. No. of total residential plots in are 935, 4 commercial plots, 18 Group Housing consisting-Dwelling Units 3641 and amenities has been proposed at the site.
  - vi. The total population of the residential colony has been estimated to be 41950 persons.
  - vii. The proposed township includes residential/commercial plots, Group Housing, Nursery/Primary School, Crèche, Dispensary, Nursing Home, etc.
  - viii. For proposed residential area development project, total water requirement has been estimated as 5156 KLD and will be met by NCR Water supply. Water shall be used mainly for domestic, flushing, D.G. and HVAC cooling, gardening and misc. purposes.
  - ix. Total quantity of wastewater generation will be 3964 KLD. The generated sewage will be treated in in-house Modular Sewage Treatment Plants of total capacity 4760 KLD. The treated water shall be used for Flushing, D.G. cooling, gardening and misc. purposes. The STP will be design with FAB technology.
  - x. Total 15681 kg/day Municipal solid waste will be generated. Out of which, 10977 kg/day of Bio-degradable waste would be converted to compost. The compost shall be used in green area & unused manure shall be given to farmers/ nursery, 4704 Kg/day of Recyclable Waste shall be given to Authorized Recycler.
  - xi. Among hazardous waste approx. 240 ltrs/month of used oil generated from D.G. Set shall be collected in leak proof containers at isolated place and be given to approved vendor of CPCB /SPCB as per Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 and Amended till date & approx
  - xii. 4-5 Kg/day of E Waste generated will be disposed off through approved

- vendor of CPCB as per Electronic Wastes (Management & Handling) Rules, 2011. And STP Sludge generated will be passed through filter press where it will be dewatered/ dried to form a cake and then will be used as manure in green areas. The unused sludge shall be given to farmers or nursery.
- xiii. The estimated quantity of dried sludge from STP will be approx. 248 kg/day.
- xiv. The proposed power requirement is about 82,071 KVA, which will be supplied by Uttar Haryana Bijli Vitran Nigam Limited. For Power back-up D.G. set of capacity 15x 2000 KVA. Hence, to avoid the emissions stack height of 6 m above roof level shall be provided to reduce the air emissions meeting all the norms prescribed by CPCB. D.G. sets will be used during Power failure only.
- xv. Total Green area of the residential area is 281011 sqm i.e. approximately 32 % of total plot area.
- xvi. It will be an environmentally sustainable project. It will attract people to develop organized Residential area. It will provide direct and indirect employment to local people.

# 3.55.2 The EAC after detailed deliberation recommended that:

- i. The PP should submit separate application for each contiguous or nearly contiguous land parcel.
- ii. The PP would submit State Government approval for development of model economic township.
- iii. The PP would submit the supporting documents showing land use of proposed project cover area.
- iv. The PP should submit balance of water availability from the agency assuring the same.
- v. Traffic management plan within the area and for arterial roads.

Accordingly, the EAC decided to defer the proposal.

# 3.56 Sea water intake & outfall system and rail line for coal transportation at Palavalasa, Vishakhapatnam, Andhra Pradesh by M/s Hinduja National Power Corporation Limited-Amendment in CRZ Clearance - [11-58/2011-IA.III]

#### **3.56.1** The PP made a presentation before the EAC and informed that:

- i. The proposal seeks amendment in CRZ clearance granted by this Ministry vide letter dated 3<sup>rd</sup> January, 2014 to the project/activity '**Sea water outfall system for 2x520 MW Coal based Thermal Power Plant**' in Pedagantyada Mandal, District Vishakhapatnam (Andhra Pradesh) being promoted by M/s Hinduja National Power Corporation Ltd (HNPCL).
- ii. The said EC stipulates that the outfall system is to be located at a distance of 900 m from the shoreline for effective dispersion of used hot water, and thus to reduce the adverse impact on marine environment. The planned outfall system while under construction was damaged due to Hud Hud cyclone, resulting depletion in structural integrity of outfall jetty piles

- beyond 444 m. As a result, the revised proposal was submitted by the project proponent (PP) seeking amendment in CRZ clearance.
- iii. The revised proposal envisages 6 submarine HDPE pipelines of 1.60 m dia, to be laid 400 m in NE direction. The discharge pipelines are connected to the diffusers to ensure effective discharge of used hot water.
- iv. APCZMA has examined the proposal on 1<sup>st</sup> June, 2015 and recommended the revised planning of the outfall system to this Ministry for grant of CRZ clearance under the provisions of CRZ Notification, 2011 subject to fulfillment of certain safety conditions.
- v. During the EAC meeting held in June, 2015, the Committee observed and recommended as under:-

'The Committee observed that the PP should explore the possibility of using originally proposed corridor by doing piling in parallel/adjacent to existing piles or changing the span of the pile foot prints. The Committee sought an analysis of possible options/ alternatives of design for the outfall, and any new alternative in the given conditions. It deferred discussion on the proposal till the next meeting EAC'.

- **3.56.2** While appraising the proposal, the observations and deliberations of the Committee are as under:
  - i. The project proponent has not given the details of the desired analysis of possible options for the outfall, as sought by EAC in its last meeting.
  - ii. The PP requested the Committee for considering amendment in CRZ Clearance to the temporary system to discharge from the outfall chamber directly into the sea through suitable mechanism up to 31<sup>st</sup> December, 2015 to enable them testing of the first unit of 520 MW. However, there being no formal request in this regard from the PP, the temporary arrangement was not considered by the EAC.

Accordingly, EAC decided to defer the proposal.

Minutes of the 150<sup>th</sup> meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held on 29<sup>th</sup> – 31<sup>st</sup> July, 2015 at Conference Hall (Narmada), Jal Wing, Ground Floor, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3

# **List of Participants**

## **Expert Committee**

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- 4. Dr. M.V. Ramana Murthy, Project Director, (Scientist 'G'), Offshore Structures and Island desalination, NIOT Campus, Pallikarai, Chennai 600 100.
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- 6. Dr. Anuradha Shukla, Central Road Research Institute (CRRI), CRRI, Mathura Road, New Delhi-25
- 7. Ms Mita Sharma, Scientist É', Central Pollution Control Board, PariveshBhawan, CBD-Cum Office Complex, East Arjun Nagar, Delhi -110 032
- 8. Sh. S. K. Srivastava, Scientist E (IA-III), Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, 3<sup>rd</sup> Floor, Vayu Wing, Jor Bagh Road, Aliganj, New Delhi-3.