

## Minutes

### **144<sup>th</sup> meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held from 28<sup>th</sup> January to 30<sup>th</sup> January, 2015**

#### **1. Opening Remarks of the Chairman.**

The Chairman welcomed the members to the 144<sup>th</sup> meeting of the Expert Appraisal Committee.

#### **2. Confirmation of the Minutes of the 143<sup>rd</sup> Meeting of the EAC held on 6<sup>th</sup> and 7<sup>th</sup> January 2015 at New Delhi.**

The EAC confirmed the minutes of the 143<sup>rd</sup> of the EAC held on 6<sup>th</sup>- 7<sup>th</sup> January, 2015 at New Delhi.

#### **3. Consideration of Proposals**

##### **3.1 Intake and outfall facilities at Sikka, Jamnagar, Gujarat by M/s Reliance Industries Ltd. - CRZ Clearance[F.No.11-63/2013-IA-III] - For correction in Minutes**

###### **3.1.1 PP made a presentation and informed that:**

- i. The EAC had earlier in its meeting held in February, 2014 recommended for grant of CRZ clearance for intake and outfall facilities at Sikka, Jamnagar.
- ii. The project is for CRZ clearance for augmentation of Seawater intake and Desalination facilities, as submitted in Form-I and Marine & Terrestrial EIA reports. The project involves two stilling basins, two desalination facilities and two pump houses.
- iii. The additional discharge was mentioned as 12 KL/hr instead of 20,000 KL/hr. The Clearance was given for 32,000 KL/hr vide Environmental clearance no J-11011/232/2005-IA.II(I) dated 03.08.2005
- iv. The requirement of maintenance desilting of 1,40,000 Cum / 5 years in stilling basins is to be mentioned in the Environmental Clearance as submitted in the EIA/EMP reports.

###### **3.1.2 The EAC after deliberation recommended the following corrections in the Minutes:**

- i. Title shall be read as 'CRZ clearance for augmentation of Seawater intake and Desalination facilities'. The project component involves two stilling basins, two desalination facilities and two pump houses.
- ii. The total discharge from desalination plant shall be 32,000 KL/h.
- iii. The maintenance desilting of 1,40,000 Cum / 5 years to is required in Stilling basins.

- iv. The depth of the stilling basins shall not exceed -12 m. The GMB shall monitor the dredging activity so as to check that the depth of stilling basin does not exceed -12m.
- v. The maintenance dredge material shall be used for low level raising in the plant area.

**3.2 Development sea water intake and outfall system and rail line for coal transportation at Palavalasa, Visakhapatnam, Andhra Pradesh by M/s Hinduja National Power Corporation Limited - Amendment in CRZ Clearance[F.No.11-58/2011-IA.III] - further consideration**

3.2.1 The proposal was considered by the EAC in its meeting held in November, 2014. The EAC after deliberation suggested the PP to submit HTL map in TMZ file format. The Committee requested Shri. S. K. Sinha and Dr. Ramana Murthy, Members of the EAC to provide comments on HTL using Satellite imageries vis –a vis the proposed railway alignment

3.2.2 The Members submitted the report. The report analyzed the time –series of satellite data and found that the proposed alignment is beyond HTL line but approximately 325 m falls under CRZ.

**3.2.3. The EAC after deliberation recommended for grant of amendment to permit the construction of railway line with the following conditions:**

- i. Railway line, in the CRZ, shall be on embankment with clear openings or on stilt so as to ensure free flow water. MoEFCC may like to take an appropriate decision after technical advice, if thought necessary.
- ii. The water bodies present adjacent to the proposed railway alignment shall not be disturbed.

**3.3 Bulk Drugs & Intermediates Unit (2431 TPA) and Captive Power Plant (3MW) with Treated Effluent Disposal to marine outfall project at Maruvada Village, Ranasthalam, Mandal, Srikakulam Dist. Andhra Pradesh by M/s Covalent Laboratories Private Ltd. - CRZ Clearance[F.No.11-18/2014-IA-III] - further consideration**

3.3.1 The proposal was considered by the EAC in its meeting held in May, 2014. It was observed by the Committee that the proponent has applied for obtaining EC for the component of the bulk drug and captive power plant from the Ministry with a proposal of zero discharge. The proposal is yet to be appraised by the concerned EAC and the clearance is yet to be provided by MoEF.

3.3.2 The PP made a presentation and informed that:

- i. Consent Order for Marine Outfall has been issued by APPCB vide No.329/PCB/CFE/Ro-VZM/HO/2014 dated 01-03-2014.
- ii. APSCZMA conducted meeting on 15-03-2014 for recommendation of marine outfall for the treated effluents. Marine EIA studies have been conducted by M/s INDOMER Coastal Hydraulics (P) Ltd, and CSIR.

- iii. NIO has demarcated LTL, HTL and CRZ boundaries of the proposed marine disposal. The location of LFP, HTL, LTL and CRZ boundaries are demarcated on a map of 1:25000 and 1:4000 scales. The plant boundary is approximately 6.5 km (aerial 5.0 km) from HTL.
- iv. Along the coastal stretch, small sand dunes (<2m) height between HTL and 200 m line were observed. According to CZMP of Andhra Pradesh, sand dunes are classified as CRZ – I. The proposed pipeline route area does not fall into any environmentally sensitive areas.
- v. Public Hearing was conducted by APPCB on 18-09-2013. Final EIA report incorporating the ToR compliances including minutes of Public hearing and response to the issues raised by the stake holders is submitted to MoEF on 18-03-2014 for appraisal (Industry) and CRZ Clearance on 24-04-2014.
- vi. EAC (Industry) considered the EC for the bulk drug and captive power plant in its 21<sup>st</sup> meeting held on 21-7-2014 and recommended grant of EC with conditions including obtaining CRZ clearance for marine disposal of the treated effluents.
- vii. Total quantity of effluent estimated to be 884 KLD. The effluent will be segregated based on TDS & COD concentrations like HTDS/HCOD (from process), HTDS (from Scrubber), HTDS from utilities and LTDS / LCOD (from other sections like washing, R&D, Q.C etc.). 505 KLD of treated effluent is recycled. Total Marine disposal (from HTDS & R.O rejects from LTDS/LCOD) is 375KLD with TDS concentration of 12,000 mg/l which is much less than Sea water concentration.
- viii. The outfall with 4 ports of x 100 mm dia is proposed. 600 times of dilution is expected. Initial dilution has been modelled using 'Cormix' and secondary dispersion done using 'Mike 21'. The mixing Zone will 50 m x 50 m.
- ix. Based on the modelling, the point of discharge at a distance of about ~1.5 km from the Land Fall Point with a 10.4 m sea depth was selected. The pipeline from shore to the diffuser point will be routed under the seabed through appropriate buried pipeline system.

### **3.3.3 The EAC after deliberation recommended for grant of CRZ clearance with the following conditions:**

- i. Bio-assay test should be provided for monitoring the toxicity levels.
- ii. PP shall explore enhancement of recycling of effluent.
- iii. On-line monitoring sensors shall be provided at outlet in the industry and at the marine outfall.
- iv. The outfall shall meet the norms stipulated by the SPCB.

### **3.4 Expansion of Srikurmam Heavy Mineral Sand Project at Vatsavalasa & Tonangi Villages in Gara Mandal in Srikakulam District, Andhra Pradesh by M/s Trimex Sands Pvt. Ltd - CRZ Clearance[F.No.11-67/2013-IA.III] - further consideration**

3.4.1 The proposal was considered by the EAC in its meeting held in June, 2014. It was observed by the Committee that the block has a long patch of forest between the proposed mining area and the HTL. The project proponent has proposed a depth of mining to a depth of nine meters based on the international and also some practices being followed at the project in Orissa.

The PP indicated that he has an approved mining plan from the Mining Dept while the approval from IBM is under process. The CRZ EAC being a Committee for protection of coastline of the country is really concerned about mining practices which involve excavation, whether manual or mechanical with such depth upto 9 meter, and its impact on the GW and coastline. Even though the activity is beyond the 100 HTL, the PP has indicated that the excavated areas will be backfilled and there will be buffer of 15 m between the excavation area and the forest area. The Committee was of the view that it should get the clear guideline from the MOEFCC who may like to consult with the IBM and Atomic Minerals Division. whether such proposals with depth of excavation of such range are to be recommended. While examining this case the MOEFCC may also like to go through the SCZMA recommendations imposed on the proponent regarding the proposal.

#### 3.4.2 PP made a presentation and informed that:

- i. Mining Plan Approval obtained from Competent Authorities such as AMD vide letter No. AMD/MRG/TSPL/SM/720 Ha/2014 dated 15.05.2014 and Indian Bureau of Mines (IBM) vide letter No. AP/SR/MP/Gar-7/Hyd dated 23.09.2014. The depth up to 9 m has been permitted by AMD, IBM.
- ii. There are no sand dunes and forest area in the project site
- iii. There is no wildlife sanctuary/tiger reserve/national park, etc within the 10 km radius area around the mine lease. Further Andhra University is carrying out monitoring studies every year since 2009. The report from 2009 to 2012 submitted establish that the beaches have little potential for Schedule I species i.e. Olive Ridley Turtle. The AU report and detailed conservation & intervention plan is prepared and submitted along with final EIA & EMP Report.
- iv. It is noted that in similar mining in Kerala. IBM vide letter No. M.11013/34/MoEF(SZ)/2014-CCOM dated 02.12.2014 communicated that Heavy Minerals availability has been proved up to depth of 8m and dredge mining is permitted up to this depth below the MSL in the approved mining Plan.

#### **3.4.3 The EAC after deliberation recommended for grant of CRZ clearance with the following conditions, after the MOEFCC has obtained any necessary guidelines if any from concerned ministries related to mining, in the large national interests:**

- i. The PP should obtain the NOC/ Clearance from the Competent Authority, as applicable, with regard to conservation and management plan on Ridley Turtle.
- ii. Soil conservation measures shall be prepared and implemented.
- iii. The mined out pits shall be refilled with the sand only. The GWA shall ensure that all the mined out pits are refilled concurrently.
- iv. All conditions of CZMA shall be complied with.
- v. The Mining shall be in accordance with the Mining plan approved by AMD and IBM.
- vi. PP shall co-ordinate with the Directorate of Fisheries in respect of providing access to Beach for fishermen.
- vii. Ground water on landward side of the mining area shall be carried out before, during and after mining so as to check the possible impact/ sea water intrusion
- viii. Plantation shall be carried out on the mined out area, as committed.

### **3.5 Enhancing coal handling capacity, installation of coal conveyor, stack yard and FDG disposal at Trombay Thermal Power Station, Maharashtra by M/s Tata Power Co. Ltd. - CRZ Clearance[F.No.11-26/2014-IA-III] - further consideration**

3.5.1 The proposal was considered by the EAC in its meeting held in September, 2014. After deliberation the EAC sought the following:

- i. Details of FGD system, quantity, quality of disposal along with modeling studies regarding the impact on marine life
- ii. NOC from SPCB for marine disposal.
- iii. The coal stock yard shall have double containment on all the sides with clear driveway between two containments and the boundary fence. The height of wind screen shall be 3 meters above the height of coal stack. Water sprinkling shall be carried out for settling dust as this coal stock yard is close to inhabited areas.
- iv. Three layers of green belt shall be provided on all sides

#### **3.5.2 PP made a presentation and informed that:**

- i. The sea water from the outlet of Unit # 6 Condenser will be sourced and supplied to the FGD scrubber through the FGD sea water supply pumps.
- ii. The sea water, after scrubbing the flue gas within the scrubber tower, will flow back to the FGD aeration basin by gravity wherein, additional air, by aeration fans will be mixed with the scrubber effluent to convert the dissolved Sulphur dioxide in the form of Sulphite to Sulphate.
- iii. After the aeration basin, the effluent will be mixed with additional sea water from the condenser outlet in the dilution basin to dilute the Sulphate content and to further increase the overall dissolved oxygen (DO) in the effluent to meet the parameters laid down in the Consent to Establish accorded by MPCB.
- iv. After conforming the standards, the effluent will be discharged into the existing cooling water outlet channel through an outfall structure of boulders. This will ensure additional surface area for further cooling and provide aeration surface to the sea water before passing in to the main cooling channel.
- v. Main outfall channel ensures additional temperature drop before it is discharged to the receiving water body (Thane Creek). Additional sea water from condenser cooling system of units 5,7 and 8 will also be getting mixed with the unit 6 discharge.
- vi. The net estimated increase in the Sulphate concentration of condenser cooling sea water on dilution by total quantity of 60,000 m<sup>3</sup>/hr will be 1 % of baseline sea water concentration of Sulphates (2000 –3500 ppm). This process is already proven to be effective and environment friendly as the sulphate is already present in sea water.
- vii. This minor increase in Sulphate concentration will be effectively diluted and dispersed within a short distance after it meets the receiving water body. Considering the very low relative increase in the sulphate concentration there will not be any impact on the marine environment.

- viii. The temperature measurement at the surface from the discharge point shows that the ambient temperature is achieved at a distance of 700m towards west side and 100m in east direction and about 1100m in south direction. Similar results were obtained for temperature at 1m depth during low and high tide. Similarly, the pH variation is found to be minimal in the sea water owing to its high buffer capacity.
- ix. The total effluent discharge to sea is approx. 7,22,000 KLD. Consent of PCB obtained vide letter dated 07.03.2014.

**3.5.3 The EAC after deliberation recommended for grant of CRZ clearance with the following conditions:**

- i. The coal stock yard shall have double containment on all the sides with clear driveway between two containments and the boundary fence. The height of wind screen shall be 3 meters above the height of coal stack. Water sprinkling shall be carried out for settling dust as this coal stock yard is close to inhabited areas.
- ii. Three layers of green belt shall be provided on all sides including the ash pond
- iii. The marine outfall shall be through the existing outfall. All the conditions stipulated by MPCB shall be complied with.
- iv. On line monitoring sensors at outlet in the industry and at the marine outfall shall be provided.
- v. All the recommendations and conditions specified by State Coastal Zone Management Authority shall be complied with.
- vi. The outlet quality as well as the sea water near the outfall shall be monitored especially for temperature and sulphate regularly. If the parameters are found significant in the future, necessary remediation measures shall be taken. A report in this regard shall be submitted to Regional Officer, MoEFCC along with six monthly monitoring report.
- vii. Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

**3.6 Development of Greenfield Beach Resort at Mandvi, Dist: Kutch, Gujarat by M/s Tourism Corporation of Gujarat Limited - CRZ Clearance[F.No.11-4/2014-IA-III]- further consideration**

3.6.1 The proposal was discussed by the EAC in its meeting held in September, 2014. The EAC noted that the coordinates of the site provided are wrong, the documents submitted by the PP are substandard, replete with spelling mistakes and inadequate data. The EAC suggested to the PP to rectify the mistakes and submit all the required data, namely, location, proposed construction, parking, energy conservation etc in the correct format.

3.6.2 PP made the presentation and informed that :

- i. The correct Latitude and Longitude are 22 49 18.77 N and 69 21 52.87 E respectively.

- ii. Total land owned by Gujarat Tourism is tune around 121240 sqm, out of which 1,20,000 sqm will be utilized for this project.
- iii. The project involves construction of a reception Block, Cottages, Beach Restaurants, Spa & Gym, Security cabin , Staff Quarters . Total Built up area will be 7,500 sqm,
- iv. Parking for 209 ECS based on NBC norms are proposed.
- v. Water requirement will be 30 KLD which will be sourced from supply of Mandvi Nagar Palika.
- vi. Power requirement will be 1 MW which will be met from State Grid , D.G Set of 200 KVA is proposed as standby.
- vii. Sewage generation is estimated to be 27 KLD which will be treated in STP and utilized for green belt development.
- viii. Solid waste generation is estimated as 60 kg/day and package treatment facilities (Composting) will be installed.
- ix. Rainwater-harvesting system will be provided at the project site to recharge the roof top water to ground water aquifers
- x. Energy efficient electrical appliances will be provided
- xi. Total cost of the project is Rs. 30 Crores.

**3.6.3 The EAC recommended for grant of CRZ clearance with the following conditions:**

- i. The project proponent shall not undertake any construction within 200 metres in the landward side of High Tide Line and within the area between Low Tide Line and High Tide Line;
- ii. There shall be no drawal of ground water in No Development Zone of CRZ area. The drawl of water can be permitted between 200-500m from HTL with the approval of the State Ground Water Authority.
- iii. Necessary arrangements for the treatment of effluents and solid wastes must be made and it must be ensured that the untreated effluents and solid wastes are not discharged into the water or on the beach; and no effluent or solid waste shall be discharged on the beach.
- iv. The quality of treated effluents, solid wastes, emissions and noise levels and the like, from the project area must conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- v. The total covered area on all floors shall not exceed 33 percent of the plot size i.e., the Floor Space Index shall not exceed 0.33 and the open area shall be suitably landscaped with appropriate vegetal cover;
- vi. The overall height of construction, upto the highest ridge of the roof, shall not exceed 9metres and the construction shall not be more than two floors (ground floor plus one upper floor);
- vii. Installation and operation of DG sets, if any, shall comply with the guidelines of CPCB. The diesel required for operating DG sets shall be stored in underground tanks and clearance from Chief Controller of Explosives shall be taken, if required.
- viii. Rain water harvesting for roof run- off and surface run- off, according to 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. Metering of fresh water, rainwater harvesting and water recycling shall be maintained and submitted to the Competent Ground Water Authority to evaluate water balance.

### **3.7 Proposed Mithivirdi Nuclear Power Plant at village Mithivirdi, Dist. Bhavnagar by M/s Nuclear Power Corporation of India Limited - CRZ Clearance[F.No.11-/2014-IA-III] - further consideration**

3.7.1 The project was discussed by the EAC in its meeting held in May, 2014 and sought the following:

- i. Details of tunnelling techniques, sound, vibration, and likely impact on marine life.
- ii. Details of the temperature rise near outlet, mixing zones with distance and temperature, designed dilutions and the indicating contour map with source.
- iii. Impact of Intake channel on adjacent areas and fisheries

3.7.2. PP made the presentation and informed that:

- i. The Condenser Cooling Water discharge tunnels of 8 m diameter and 6 km length (for 2 Units) and a total of 18 km (for 6 units), will be constructed using Tunnel Boring Machine (TBM).
- ii. NPCIL approached Central Water & Power Research Station (CWPRS), Pune for assessment of impact on marine ecology due to operations of TBM during tunnel construction .
- iii. TBM typically consist a large rotating cutting wheel in front of large metal cylinder(s) with control and ancillary mechanisms.
- iv. TBM excavates a tunnel in such a way that the material to be removed is disintegrated by the continuous rotation of a group of cutting tools thrust against the surface of the material at the working face.
- v. Behind the cutting wheel is a chamber where the spoil is removed using conveyors to the rear of the machine.
- vi. TBM has the advantages of producing a smooth tunnel wall with minimum disturbance to the surrounding environment.
- vii. It is estimated that tunnelling of approximately 10 m per day can be achieved by TBM.
- viii. The Alaska Department of Fish & Game (ADAG) and Canadian Department of Fisheries has recommended safe Peak Particle Velocity (PPV) of 13 mm/s and the minimum PPV which can cause embryo mortality as 147 mm/s.
- ix. The expected vibrations levels due to TBM operations in terms of Peak Particle Velocity (PPV)) will be 0.2–2 mm/s, which is sufficiently lower than recommended.
- x. According to the Marshall Day Acoustic Assessment report (2014), the threshold noise levels to prevent behavioral changes and risk of auditory injury (fish and mammals) is of the order of 150 dB re 1 $\mu$ Pa and 180 dB (A)\_ 1 $\mu$ Pa.
- xi. According to “Corrib Onshore Pipeline Tunnel Drive, Modeling of Noise and Vibration Report, 2010”, the maximum noise levels generated by TBM under

- water is about 140 dB (A) 1 $\mu$ Pa, which are lower than the above referenced values.
- xii. Hence, the impact on the marine environment due to the TBM operations are expected to be acceptable.
  - xiii. It is proposed to construct a small barge handling marine facility of draft 3 to 4m for receiving handling Over Dimensional Consignments during construction stage. It will be in the form of shore based wharf type or an open piled jetty system
  - xiv. Intake Channel of 100 m wide and 10 m deep mean sea level is proposed.
  - xv. A groyne based channel type seawater intake system has been proposed with the sump at the shore. Such channel type intake system is more advantageous than the closed conduit drawal system for such large quantity of withdrawal with features such as provisions of trash bars & screens, silt screens, groynes comprising a rubble mound protection system and barrier fish nets.
  - xvi. There is no sensitive eco-system in the intertidal area and 500 m coastal zone beyond HTL. The above area is not being used for salt pans by local people.
  - xvii. There are no fishing hamlets or intensive fishing activity in the vicinity of the proposed site.
  - xviii. The Fish catch reported around the neighboring villages is négligeable.
  - xix. Impact of Intake channel on adjacent areas and fisheries is expected to be minimal.
  - xx. The total CCW of 43200 MLD will be discharged through a configuration of 6 numbers of concrete tunnels each of about 8 m diameter, with 5 ports in each tunnel at discharge end with a spacing of 100m.
  - xxi. The length of each pair of tunnels extending into sea is 2500 m, 3000 m and 3500 m. The outfall is designed with multiple ports to enhance the jet mixing
  - xxii. The resultant rise in the temperature of receiving water in the zone near to the CCW outfall does not exceed 7°C over and above the ambient temperature of the receiving water body. The NIO survey shows ambient Sea temperature varies from 20° to 30 ° C.
  - xxiii. Thermal dispersion modelling done at 2500m, 3000 and 3500 m

**3.7.3. The EAC after deliberation recommended for grant of CRZ clearance with the following conditions:**

- i. Filters shall be provided at intake to prevent entry of marine life along with the sea water.
- ii. Examine the possibilities of deploying ultrasonic device to divert the aquatic life from entering into Sea water intake, in connection with NIOT.
- iii. All the recommendations and conditions specified by State Coastal Zone Management Authority shall be complied with.
- iv. The outlet quality as well as the sea water near the outfall shall be monitored especially for temperature regularly. If the parameters are found significant in future, necessary remediation measures shall be taken. A report in this regard shall be submitted to Regional Officer, MoEFCC along with six monthly monitoring report.
- v. Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in

Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

### **3.8 Development of a captive jetty (4.5 MTPA) i.e. an village Nate, Rajapur Taluka, Ratnagiri, Maharashtra by M/s I Log Ports Pvt. Ltd. - Finalization of ToR [F.No.11-10/2014-IA-III]**

3.8.1 PP made a presentation and informed that:

- i. The proposal is for developing a captive jetty in Phases to handle all type of cargo such bulk, container and liquid with projected throughput of 1.5 MTPA in initial years to about 4.5 MTPA. The infrastructure planned consists of a main berth about 700 m away from shore line connected by approach trestle / approach bund connecting to the shoreline.
- ii. Two alternative sites are observed at Ganeshgule in Ratnagiri district and at Alewadi near the Dahanu in Thane district. Both the sites are rejected due to non-availability of required back up land, technical aspects and other considerations based on a detailed comparative evaluation of various locations.
- iii. Project site has been finalized to be located at latitude 16 39 00 N and longitude 73 20 00E at a distance of 5 km from Nate village. 300 meter of new road to connect to an existing two-lane village road is proposed. The village road is connected to State Highway-4.
- iv. Total area of the development will be 100 Ha barren land in initial phase. Total allotted area is 428.515 ha.
- v. Dredge quantity is estimated to be 1.5 lakh Cum which will be used for land connection.
- vi. Total water requirement is expected to be around 140 KLD. Ground water reservoir of 500 KL capacity and elevated reservoir of 150 KL capacity will be constructed. The water requirement will be fulfilled by ground water.
- vii. The village Nate is not in the Western Ghat-ESA declared the list.
- viii. Cargo handling capacity is less than 5MTPA, therefore project is category B, However, falls within 10 km distance from village Bharade (4.5 km) a ESA, treated as 'A' category.
- ix. The project falls within the 10 km of Eco Sensitive Area.
- x. No forest land is involved in the project area.
- xi. Total investment planned in phase I is Rs 1350 million.

#### **3.8.2 The EAC after deliberation recommended for grant of ToR with the following specific ToRs:**

- i. The Nate village is not in high eroding site according to the study carried out by Indian Integrated Coastal and Marine Area Management (ICMAM) Project Directorate, Chennai and Indian National Centre for Ocean Information Services (INCOIS), Hyderabad. Therefore, the PP shall carryout shoreline change study to ensure that the site is not in high eroding coast where development is not permissible
- ii. 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/interstate boundaries and international boundaries. Analysis should be made based on latest satellite imagery for land use with raw images.
- iii. 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.
  - iv. 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.
  - v. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area
  - vi. Submit the details of terrain, level with respect to MSL, filling required, source of filling materials and transportation details etc.
  - vii. 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.
  - viii. Submit details regarding R&R involved in the project
  - ix. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
    - x. Submit the status of shore line change at the project site
    - xi. Details of the layout plan including details of channel, breakwaters, dredging, disposal and reclamation.
    - xii. Details of handling of each cargo, storage, transport along with spillage control, dust preventive measures.
    - xiii. Submit the details of fishing activity and likely impacts on the fishing activity due to the project.
    - xiv. Details of oil spill contingency plan.
    - xv. Details of bathymetry study.
    - xvi. Details of ship tranquillity study.
    - xvii. Examine the details of water requirement, impact on competitive user, treatment details, use of treated waste water. Prepare a water balance chart.
    - xviii. Details of rainwater harvesting and utilization of rain water.
    - xix. Examine details of Solid waste generation treatment and its disposal.
    - xx. Details of desalination plant and the study for outfall and intake.
    - xxi. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
    - xxii. The air quality monitoring should be carried out according to the notification issued on 16<sup>th</sup> November, 2009.
    - xxiii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
    - xxiv. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disasters
    - xxv. 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.

- xxvi. 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.
- xxvii. The Public Hearing should be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- xxviii. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.

### **3.9 Development of Vashishta & S1 Fields of K.G. Offshore, Eastern Offshore Asset at Kakinada, Andhra Pradesh by M/s ONGC – CRZ Clearance [F.No.11-2/2015-IA-III]**

#### **3.9.1 PP made a presentation and informed that:**

- i. The proposal involves drilling of 4 wells at Vashishta & S1 Fields about 35km from the Coast and laying of dual 14 inch sub- sea pipeline to evacuate the production fluid from fields to proposed on shore terminal expansion of onshore terminal.
- ii. The proposed activity in CRZ is laying pipeline from the proposed expansion unit till the land fall point in CRZ –III and from the land fall point to wells in CRZ-IV areas. The proposed expansion site falls beyond CRZ area.
- iii. Vashishta field is located at a distance of 35 km off Amalapuram Coast in water depth ranging between 500-700m on the southern plunge of the rollover structure and located south of G-1 field and comprises a vertically stacked channel system.
- iv. The well VA-DA and VA-DB have encountered the gas reservoir developed in Godavari clay of Pliocene age. The survey shows different gas water contacts for VA-DA and VA-DB wells suggesting both the wells are in different blocks. S-1 field, located in Bay of Bengal at a water depth of approximately 250m - 600m, is 26 kilometers from onshore terminal and East of G-1 field.
- v. Sub-sea tieback to onshore Odalarevu Terminal has been proposed by installation of dual pipelines (2x14” pipelines of approximately 45 km), designed to transport 10 MMSCMD of gas with suitable infield sub-sea architecture including subsea umbilical.
- vi. The current field architecture provides suitable tie-in locations at both S-1 and Vashishta locations. The pipeline has been split into two sections for determination of wall thickness: subsea (355.6mm OD x 20.6mm WT) and landfall (365.2mm OD x 25.4mm WT).

- vii. The landfall section of pipe has higher integrity requirements and therefore higher wall thickness. Maintaining a constant bore throughout the pipeline is preferable to allow for pigging. Hence, pipe with non-standard outer diameter is selected for the landfall sections, with bore matched to the subsea section.
- viii. An average daily gas rate of 5.75 MMSCMD is envisaged for a period of six years. The cumulative gas production at the end of nine years is expected to be close to 15.775 BCM. These two fields are under Eastern Offshore Asset, which is headquartered at Kakinada.
- ix. The gas from Vashishta and S-1 fields shall be transported through dual subsea pipelines to the new onshore terminal at Odalarevu. The new onshore processing terminal at Odalarevu will be located adjacent to the existing onshore processing terminals.
- x. The existing onshore processing terminal at Odalarevu receives hydrocarbons from GS-15 field and the processing facilities under construction will receive & process hydrocarbons from G-1 as well as GS-15 fields located in the KG Basin.
- xi. Pipeline routing will follow the existing G1 pipeline system as much as possible and therefore has a minimal impact on the seabed and surrounding environment. The system has been designed so that pigging can be undertaken from onshore; this negates the need to for offshore intervention and therefore reduces the overall operating carbon footprint of the asset.
- xii. The landfall section of pipe has higher integrity requirements and therefore higher wall thickness. Maintaining a constant bore through the pipeline (to allow for pigging) is preferable. Hence, pipe with non-standard outer diameter is selected for the Subsea pipeline (2 X 14) pipelines of 45 km long; including infield sub-sea architecture –subsea umbilical).
- xiii. 2.5 meters burial and 60 mm concrete coating up to 27 meters water depth will be provided for pipeline. This will be approximately up to two thirds of the way along the first leg of the pipeline. 2.5 meter burial and 60 mm concrete coating up to 79 meters water depth. This is just after the first deviation away from the G-1 pipelines 30mm concrete coating up to 200 meters water depth. 3LPP coating and surfaced laid for the remainder of the development.
- xiv. For the first two stages, the pipeline is protected against the likely forms of risk (on shore- surface movement of man/ vehicle; off shore- Coastal movement of crafts/fishing vessels). As the water depth increases the protection provided is mainly against mechanical risks such as fishing gear and dropped objects. Once the water depth is greater than 200metres the overall risk to the field is as low as reasonably practicable and therefore no additional protection is provided.
- xv. According to the NIOT study on shoreline change shore line shifted towards land about 130 m from 2003 to 2010 and over seven years span and there was negligible change in coastal configuration between 2010 to 2013. According to NCSCM study, the site is high eroding site.
- xvi. Andhra Pradesh and State Coastal Zone Management Authority has recommended the project vide letter number 6555/ENV/CZMA/2013 dated 25.11.2013.

**3.9.2 The EAC after deliberation recommended for grant of CRZ clearance with the following conditions:**

- i. Keeping in view the CRZ Notification, 2011 which prohibits foreshore facilities in high eroding sites, the project shall not have any foreshore activity except laying of pipeline.
- ii. All the conditions stipulated by APCZMA shall be complied with.
- iii. All safety requirements shall be strictly followed.
- iv. The pipeline route shall be demarcated with floating buoys as indicators.

**3.10 Development proposed Multi modal, multipurpose all season port in Vijaydurg, Sindhudurg District, Maharashtra by M/s Vijaydurg Ports Private Limited - Finalization of ToR [F.No.11-12/2011-IA-III]**

3.10.1 PP made the presentation and informed that:

- i. The proposed site is approx. 424 km from Mumbai, NH17 is 52 km from site (Talere – Jn). It has good connectivity to NH-17 through MSH4 and various State Highways. Nearest Railway station Vaibhavwadi on Konkan Railway is 70 km. MMB has completed a study for Railway Connectivity from Kolhapur to Vaibhavwadi through KRCL. Vijaydurg Fort (ASI Notified) located 1.37km NNE of site.
- ii. Burmana Site is within Sterilized zone of 5km radius but outside Exclusion zone.
- iii. Application is made to AERB to get their No Objection for Port Location
- iv. Ministry imposed Moratorium imposed 16.08.10 on all new projects in Sindhudurg & Ratnagiri districts. OM dated 13.11.13 based on HLWG identified 21 villages out of 98 villages in Deogadtaluka as ESA, HC vide order dated 11.12.14 held that Moratorium shall continue only in respect of villages listed in ESA . Port Site & nearby villages are not listed as ESA.
- v. The site has advantageous like water front free from habitation and is open, deep water contours available very close to the shoreline, large waterfront enabling development of berths needed to serve the Master plan needs, privately owned land and extensive backup land available for port operations and storage as well as setting up of port related industries.
- vi. Capital dredging estimated to be 0.12 Mcum at Burmana and 0.6 Mcum at Girye.

3.10.2 The Committee noted that the site is proposed in sterilized zone where developments are frozen. Mangrove area are in the vicinity.

**3.10.3 The EAC after deliberation sought the following information for further consideration:**

- i. NOC from Archaeological Survey of India and NOC from Jaitapur Nuclear Power Project.
- ii. 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.
- iii. Details of shoreline changes at the site.
- iv. Details of mangroves, proposed buffer between the mangroves and layout etc

- v. Layout of the site and project components on google map, details of water bodies present in the site

**3.11. Construction/establishment of Seawater Intake and Effluent Disposal facilities in Arabian Sea for proposed Soda Ash Project by RSPL Limited near Village Kuranga, Taluka Dwarka / Okhamandal, Dist. Devbhumi Dwarka (earlier Jamnagar District), Gujarat by M/s RSPL Ltd. - CRZ Clearance [F.No.11-51/2014-IA-III]**

**3.11.1 PP made the presentation and informed that:**

- i. The proposal involves laying of pipeline for seawater intake (6,00,000KLD) from the Arabian Sea for the Soda Ash plant and discharge of effluent back to Arabian Sea (6,00,000KLD).
- ii. Environmental Clearance for the Soda Ash Plant was considered by the EAC (Industry-2) at MoEF&CC on 20.01.2015.
- iii. 0.94 km of pipeline passes through forest area, applied to State Forest Department for clearance
- iv. GPCB granted consent vide letter No. GPCB/CCA-JMN-1071/GPCB-ID-443851/221836 dated 12.08.2014.
- v. GCZMA recommended the project vide letter No, ENV-10-2014-72 E dated 17.12.2014 after site visit.
- vi. HTL/LTL demarcation carried out by IRS, Anna University, Chennai.
- vii. Gaga Wild Life Sanctuary is located at a distance of 6.4 km. No mangrove ecosystem near project site.
- viii. The return once through cooling water shall be mixed with process effluent from Soda Ash Plant, rejects from RO/DM plant and brine preparation reject. To achieve GPCB norms, effluent will be treated and diluted with seawater.
- ix. The treated and diluted mixed effluent will be discharged in the Arabian Sea at a designated point (22 00 30 N, 69 09 7.01 E) at 12 m below CD with diffuser system as recommended by NIO. NIO Mumbai conducted the comprehensive Marine EIA studies.
- x. Modelling studies revealed that the treated effluent/diluted will achieve further dilution of 22.3 times by discharging through Multiport diffuser system thereby temperature, SS and ammonia will attain the ambient conditions within 300 m maximum.

**3.11.2 The EAC after deliberation recommended for grant of CRZ clearance with the following conditions:**

- i. PP shall explore possibility for enhance recycling of treated water.
- ii. The intake and outfall shall be through buried pipelines the pipelines shall be buried two meter below the ground level /sea bed.
- iii. The marine outfall shall be at 12 m below Chart Datum. The effluents shall be discharged through multiple ports at the outfall for proper thermal and salinity dispersion. The total effluent discharge to sea is approx. 6,00,000 KLD .
- iv. Installation of trash bar/screen shall be put in place at the intake well to avoid fish entrapment.

- v. All the recommendations and conditions specified by State Coastal Zone Management Authority shall be complied with.
- vi. The outlet quality as well as the sea water near the outfall shall be monitored regularly especially for temperature and salinity. Necessary remediation measures shall be taken in case of significant impact of temperature and salinity. A report in this regard shall be submitted to Regional Office, MoEF&CC along with six monthly monitoring report.
- vii. 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 MoEF&CC along with half yearly compliance report to RO-MoEF&CC.
- viii. Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- ix. The project shall be executed in such a manner that there shall not be any disturbance to the fishing activity. It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.

### **3.12 Proposed wind farm project at Village Ratdi, Dist Porbandar, Gujarat by M/s K. P. Energy Private Limited - CRZ Clearance [F.No.11-47/2014-IA-III]**

#### **3.12.1 PP made a presentation and informed that:**

- i. The proposal is for establishment of a 70 MW wind energy project on the coast of Porbandar in Saurashtra, Gujarat.
- ii. Out of the total 17 locations acquired for the project, only five locations fall in the CRZ -III.
- iii. Gujarat Coastal Zone Management Authority has recommended the project vide letter No. ENV-10-2014-85E dated 11.12.2014.
- iv. The site already has more than 70 MW of power generating turbines installed earlier on the sea coast in the project vicinity at village Ratdi.
- v. Marine environment in the vicinity of the project site does not have any significant ecosystems such as overall reef, mangroves and No eco-sensitive areas are present within 10 km of the site
- vi. All prefabricated structures will be mobilised to site for on-site assembling. Concreting will be done through transit mixers carrying from batching plant approximately 4 km away from CRZ area. Only material handling, and erection will be done at the site
- vii. Suzlon S-97-90 wind turbines which are proposed are made with upgraded technology, which reduces considerable noise at nacelle during operation base.
- viii. Since the wind turbine installations would be done away from the marine waters, their impact on marine environment are likely to be negligible
- ix. Marine environment in the vicinity of the project and the site does not have any ecosystems such as coral reef, mangroves or sea grass bed.
- x. The sandy coast near project site is known for sporadic nesting of sea turtles. In the absence of the project activities during night, no disturbance envisaged in nesting activity of sea turtles. Wind farms would not cause significant increase in illumination on the coast and therefore it is not likely to affect sea turtle hatchlings.

**3.12.2. The EAC after deliberation recommended for grant of CRZ clearance with the following conditions:**

- i. All the conditions stipulated by GCZMA shall be complied with.
- ii. Proper maintenance of turbines shall be ensured so as to control the noise level
- iii. Spike guards on channels at poles to reduce bird sitting on sensitive electrical items.
- iv. Noise level monitoring to keep control on maximum permissible noise level.

**3.13. Development of proposed Common Bio-Medical Waste Management & Recycling Facility at Plot No K1, Fatwah village, Fatuah Industrial Estate, Patna, Bihar by M/s Ramky Enviro Engineers Ltd. - Finalization of ToR [F.No.10-30/2014-IA-III]**

**3.13.1 PP made a presentation and informed that:**

- i. The project site is falling under Notified Industrial Area of Bihar Industrial Association Development Authority. The area is having medium to small scale industries.
- ii. According to CPCB guidelines an application with SPCB and BIADA was made by M/s Sembramky which is now M/s.Medicare EPL and land in the proposed notified industrial area was allotted and purchased for the proposed facility.
- iii. The selected site meets the siting guidelines and is far from residential area and there is no eco sensitive area falling in the notified industrial area. National Highway about 2.37 KM N from the project site.
- iv. The project area is 1 acre. The project components are:
  - a. Bio Medical Waste Segregation
  - b. Autoclaving, Shredding, Landfill of Ash
  - c. Incineration
  - d. Recycling Units
- v. The project is aimed to cater treatment and disposal of BMW generated in Patna and nearby districts According to CPCB guidelines to the maximum of 30.000 beds-@ 0.160 Kg/Day/Bed= 5 TPD
- vi. No Critically Polluted Area (CPA) falling under 5 KM of project site.
- vii. No forest land is involved in the project cover area.
- viii. Total water requirement is of 13 KLD.
- ix. Waste water generation would be of 4 KLD
- x. Waste water generated is mainly from the washing area of equipments, vehicles maintenance and office purposes. This will be treated in ETP then reused for green belt and plantation, and if excess it will be diverted to sewage system.
- xi. The BMW waste will be collected from the HCE units in specialised container in segregation manner processed According to the BMW rules 1998 (revised in 2013) and CPCB guidelines.
- xii. No tree cutting and rehabilitation issues are involved in the project
- xiii. Power requirement to run the facility is 79.39 KW. For emergency backup DG set of 100 KVA to be installed.
- xiv. No fresh water stream is flowing in nearby area of the project site.

### **3.13.2 The EAC after deliberation recommended to grant of ToR with the following specific ToRs:-**

- i. Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures
- ii. Submit the present land use and permission required for any conversion such as forest, agriculture etc
- iii. Examine the details of transportation of wastes, and its safety in handling.
- iv. Examine and submit the details of pollutant generation, collection and treatment along with on line pollutant monitoring.
- v. Examine the details of monitoring of Dioxin and Furon if any.
- vi. MoU for disposal of ash through the TSDF.
- vii. MoU for disposal of scrubbing waste water through CETP.
- viii. Examine and submit details of the odour control measures.
- ix. Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. Regular monitoring shall be carried out for odour control.
- x. The details of the applicable regulation, responsibility of the PP and compliance including the Bio- Medical Waste( Management and handling ) Rules, 1998.
- xi. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

### **3.14 Proposed Paradip – Balasore – Haldia – Budge Kalyani – Durgapur LPG pipeline project at Odisha by M/s IOCL - CRZ Clearance [F.No.11-1/2015-IA-III]**

3.14 PP made the presentation and informed that:

- i. Indian Oil Corporation Ltd., (IOCL) is planning to lay Paradip-Haldia-Durgapur LPG Pipeline in the state of Odisha and West Bengal for transportation of LPG from up-coming Paradip Refinery and existing Haldia Refinery to bottling plants at Balasore in the State of Odisha and Budge Budge, Kalyani and Durgapur in the State of West Bengal.
- ii. The total length of the pipeline is 710 km out of which 240 km is within the State of Odisha. The route of proposed laying of pipeline is Paradip-Balasore-Haldia-Budge Budge-Kalyani-Durgapur, which is alongside (5 km) of the existing pipeline route of Paradeep-Haldia crude oil pipeline up to Durgapur.
- iii. Pipeline will pass through 17 water bodies including ‘Santra creek’, ‘Gupti River’, ‘Guptagiri River’, ‘Gobri River’ and ‘Nuna Nala’ which falls in CRZ-IB area. NIO, Goa demarcated HTL/LTL. Total length of 10.788 km (CRZ-IB 3213 m, CRZ-III-2250.232 m and CRZ -IV- 5324.842 m) pass through CRZ. HDD in CRZ-IB- 15 m depth.
- iv. The proposed pipeline is not passing through any settlements.
- v. As the pipeline is originating from Paradip and is encountering CRZ-IB, III and IV area for about a length of 10.78 km, Odisha CZMA has recommended the project for grant of CRZ Clearance vide letter no. 203/OCZMA dated 03/12/2014.

### **3.14.2 The EAC recommended for grant of CRZ clearance for the 10.788 km pipeline in CRZ area with the following conditions:**

- i. All the conditions stipulated by Odisha CZMA shall be complied with.
- ii. HDD method shall be used to lay pipeline across creek, river areas, as committed.
- iii. The smooth and safe operation of the system shall be ensured by incorporating a computerized SCADA (Supervisory Control And Data Automation) system. Any leakage in the pipeline shall be immediately detected by the Computer system and product pumping shall be immediately cut off.
- iv. PP shall obtain all required statutory clearances as applicable.

### **3.15 Setting up of Floating Storage and re-gasification Unit (FSRU) in Mumbai Harbour by M/s Mumbai Port Trust - Finalization of ToR [F.No.10-31/2014-IA-III]**

3.15.1 PP made a presentation and informed that :

- i. In order to meet the growing demand of natural gas in the markets along the western coast of India, MPT has decided to pursue the opportunity of setting up of floating storage and re-gasification unit (FSRU) in Mumbai Harbour area. The capacity of the terminal will be 5 MMTPA.
- ii. The berthing structure will be of overall length of the 348 m and width of 69m with an seaside water depth of – 15 m below CD and approach channel depth of -13.5 m below CD. consist of 6 Mooring Dolphins, 8 Nos of berthing Dolphins and one service platforms resting on cast- in – situ piles
- iii. LNG carrier vessel of capacity 2,16,000 Cum will be berthed at one side of the jetty and FSRU vessel of storage capacity of 1,76,000 Cum will be moored on the other side of the jetty. The refrigerated LNG is pumped from the LNG carrier through the dedicated marine unloading arms located on the unloading platform of the jetty. The LNG received at the FSRU stored in the tanks within FSRU itself. The stored LNG is passed to the re-gasification facility and produces natural gas and pass through the conditioning and metering and sent through the dedicated loading arm to the unloading platform from which a dedicates riser is taking the gas through submarine pipes. The submarine pipeline will be connected to the existing ONGC/GAIL pipelines to land fall point. The location of FSRU is approximately 7 km from the land fall point inside Mumbai Port water areas.

#### **3.15.2. The EAC after deliberation recommended for grant of ToR with the following specific ToRs:**

- i. Submit the details of the various applicable regulations including safety regulations along with the proposed compliances. Also details of safety aspects associated with handling of LNG vis-a-vis other cargo in other facilities within the port.
- ii. Submit the details of the HAZOP Analysis.
- iii. Submit details of Risk Assessment, Disaster Management Plan including emergency evacuation during natural and man-made disaster like floods, cyclone, tsunami and earthquakes etc.

- iv. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
- v. Submit details of storage and re-gasification, distribution network etc. and vulnerability of human habitation vis-a-vis LNG associated risks.
- vi. Type of LNG carriers proposed taking into account the future growth in vessel sizes beyond the present day market trend and the handling aspects of such vessels from environmental considerations.
- vii. Submit the details of the reclamation along with the source of materials and its quantity & quality.
- viii. Submit the details of Environmental Management Plan and Environmental Monitoring Plan with parameters and costs.
- ix. Submit the details of the fishing activity and likely impact due to the activity.
- x. Submit the details of the solid/liquid wastes generation and their management.
- xi. Water requirement, source, impact on competitive users.
- xii. Submit the details of the eco-sensitive areas, if any.
- xiii. Submit the details of Oil Spill Contingent Management Plan.

**3.16 Development of Jharsuguda Airport for A- 320 Operations, Jharsuguda, Odisha by M/s Airport Authority of India – Finalisation of ToR [F.No. 10-28/2014-IA-III]**

3.16.1 The PP made a presentation and informed that:

- i. Jharsuguda airport of Airports Authority of India (AAI) was constructed during Second World War period with low bearing strength suitable for general aviation aircraft
- ii. The aerodrome is lying unused for more than three decades except for occasional use by general aviation aircraft of industrial houses situated at Jharsuguda and is presently unfit for commercial operations
- iii. In the year 2008, a feasibility study was carried out by AAI to revive Jharsuguda airport as one of the 32 Non-operational airports
- iv. According to the feasibility report by M/s RITES, it is technically feasible for development of Jharsuguda airport for operations of wide bodied aircraft with augmentation of facilities, additional land acquisition and obstruction elimination
- v. Govt. of Odisha has requested to operationalize the airport. Hence, AAI is considering to develop Jharsuguda Airport for A-320 type of aircraft operations.
- vi. The proposed project is development of Jharsuguda airport for A-320 operations which involves construction of Terminal building; Technical block and control tower; Fire station and work shop; Car park; and Other aviation facilities. Further, strengthening and extension of existing runway, and strengthening of existing apron, taxiway are also included.
- vii. Project site is situated at Latitude 21°54'23.1" N to 21°55'34.4"N & Longitude- 84°02'4.8"E to 84°03'58.4"E.
- viii. Following forest areas are located within 10 KM of project site:
  - a. Jamaatalia RF - 3.5 km, NNE
  - b. Deuli RF - 6.7 km, N
  - c. Pitamal RF - 7.4 km, ENE

- d. Shriyapali RF - 7.7 km, SSE
- ix. Two rivers (IB River - 2.4 km, NW, Sapai River - 4.3 km, N) are flowing in nearby area of project site.
- x. Total land to be acquired (D+E)= 296.50 Acres
- xi. No agricultural land is involved
- xii. About 3.88 ha (9.6 ha) of forest land is involved.
- xiii. Power required for the entire airport would be 1500 KW which will be provided by Govt. of Odisha.
- xiv. Total water demand by 2029-30: 52.8 MLD  
Fresh water requirement: 28.08 MLD.
- xv. Rest of the water demand will be met by recycling and rain water harvesting initiatives proposed.
- xvi. About 8 families would be affected due to the proposed project. The relocation of habitation will be taken up by the Govt of Odisha

**3.16.2 The EAC after deliberations, recommended for grant of ToRs with the following specific ToRs:**

- i. 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.
- ii. 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.
- iii. 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.
- iv. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area
- v. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- vi. Examine the impact of proposed project on the nearest settlements.
- vii. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities
- viii. 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
- ix. 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.

- x. Submit details regarding R&R involved in the project
- xi. 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.
- xii. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.
- xiii. Examine details of Solid waste generation treatment and its disposal.
- xiv. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- xv. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xvi. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- xvii. Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
- xviii. The air quality monitoring should be carried out according to the notification issued on 16<sup>th</sup> November, 2009.
- xix. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xx. Submit details of corporate social responsibilities (CSR)
- xxi. 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.
- xxii. 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 botanical studies.
- xxiii. 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>".

**3.17 Proposed construction of 100 Bedded Hospital at KL-Block, Sarita Vihar, South East Delhi, Delhi by M/s Directorate of Health Services, Govt. Of NCT of Delhi,-Environmental Clearance [F.No.21-106/2014-IA-III]-further consideration**

3.17.1 The proposal was discussed by the EAC in its meeting held from 6<sup>th</sup> -7<sup>th</sup> January, 2015 and sought the following:

Site suitability in view of the existence of Waste to Energy facility at about one km distance and its likely impact on the Hospital since there are complaints against the pollution problem of the unit. The wind rose for other seasons, major

wind direction etc may be taken into consideration. Any other hazardous or pollution potential facility in the neighbours may also be considered.

3.17.2 PP made a presentation and informed that:

- i. The Waste to Energy facility is at 2.4 km on NNW direction,
- ii. The Okhla facility is at 1.6 km on western direction and NTPC Ash treatment plant is at 1.8 km on SE direction.
- iii. According to the wind rose diagram, the predominant wind direction is NNW and the site is on downwind direction of the Waste to Energy facility.
- iv. It is planned to make hospital air-tight by providing fixed glazing in the whole building keeping in view of the presence of above emission generating facilities in the vicinity

**3.17.3. The EAC after deliberation recommended for grant of Environmental Clearance with the following specific conditions:**

- i. Authorization from PCB shall be obtained as applicable under Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.
- ii. The bio-Medical wastes shall be managed in accordance with the Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.
- iii. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC along with six monthly Monitoring reports.
- iv. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- v. Solid waste shall be collected, treated and disposed according to rules.
- vi. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- vii. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- viii. Parking facility with 6 m clear driveway shall be provided as committed.
- ix. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- x. Parking facility for taxi and three wheelers to be provided within the premises taking care for movement of patients and elderly.
- xi. PP shall take measures to ensure 20% power / energy conservation in perpetuity with regular monitoring report to competent energy management authority.
- xii. PP shall take all precaution to ensure that there is no adverse impact from the nearby Waste to Energy facility. State PCB to monitor the same.

**3.18. Construction of proposed residential project at Plot Bearing S. No. 85/1B, S. No. 85/1C, S. No. 85/2B, S. No. 85/4B, S. No. 85/5B, S. No. 85/1/1B, S. No. 86/1/1C, S. No. 86/4B, S. No. 87/17B, S. No. 87/17 C, S. No. 87/18C, S. No. 87/19, S. No. 96/4B, S. No. 96/4C, S. No. 96/5B, S. No. 96/5C & S. No. 90 at**

**village Kolshet, Thane, Maharashtra by M/s D.D. Associates -  
Environmental Clearance [F.No.21- /2014-IA-III] - further consideration**

3.18.1 The proposal was discussed by the EAC in its meeting held in November, 2014 and sought the following:

- i. Details of green belt.
- ii. Revised layout showing green belt, clear driveway of 6 m, circulation and parking be submitted.
- iii. Information in accordance with the OM dated 20.08.2014 with respect to Wild life Clearance be submitted.

3.18.2 PP made a presentation and submitted that:

- i. The RG proposed in 7102.83 sqm against requirement of 4061.48 sqm 298 tree saplings are proposed.
- ii. Clear driveway of minimum 6 m is proposed.
- iii. Parking for 420 four wheelers and 330 two wheelers have been proposed against the 290 and 318 respectively.
- iv. Applied for Wild Life clearance

**3.18.2. The committee after detailed deliberations recommended the proposal for grant of Environment Clearance subject to the following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF&CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with clear 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- x. D.G set shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.19 Construction of proposed residential development - Prarambha at S.No 21/11A Part, 21/9, 21/11B Part, 22/5, 22/1, 23/4, 23/3A, 23/2A, 18/2,18/4,18/6, 22/2,22/4, 22/6, 22/3 village-Vadavli, Ghodbunder road, Thane, Maharashtra by M/s. Sai Pushpa Enterprises - Environmental Clearance [F.No.21-62/2014-IA-III] -**

3.19.1. The project proponent informed the committee that :

- i. The project is located at 19°15'38.93"N Latitude and 72°57'27.96"E Longitude
- ii. The project is a proposed residential development wherein no redevelopment component has been involved.
- iii. The total plot area is 17800.00 sqm. The project will comprise of 4 nos. of Buildings & 4 bungalows. FSI area is 31711.09 sqm and total construction built-up area of 77351.70 sqm. Total 556 flats & 4 bungalows shall be developed. Maximum height of the building upto terrace level is 85.40 mt.
- iv. During construction phase, total water requirement is expected to be 23 KLD for workers & 20-30 KLD for construction which will be met by Thane Municipal Corporation (T.M.C.)/Tanker water. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- v. During operational phase, total water demand of the project is expected to be 421 KLD and the same will be met 167 KLD by Recycled Water, 252 KLD by T.M.C & 2 KL by Tanker water of potable quality. Wastewater generated (328 KLD) will be treated in two STP of 300 KLD & 85 KLD capacity. 167 KLD of treated wastewater will be recycled (127 KLD for flushing, 40 KLD for gardening). About 168 KLD will be disposed in to municipal drain.
- vi. About 1.3 TPD solid wastes will be generated in the project. The biodegradable waste (0.8 TPD) will be processed in OWC and the non-biodegradable waste generated (0.5 TPD) will be handed over to T.M.C.
- vii. The total power requirement during construction phase is 150 KW and will be met from MSEDCL and total power requirement during operation phase is 8019 KW and will be met from MSEDCL.
- viii. Rooftop rainwater of buildings will be collected in 2 RWH tanks of total 80 KLD capacity for harvesting after filtration.
- ix. Parking facility for 565 four wheelers and 560 two wheelers is proposed to be provided against the requirement of 564 four wheelers and 560 two wheelers (according to local norms).
- x. Proposed energy saving measures would save about 27 % of power.
- xi. It is located within 10 km of Eco Sensitive areas (Sanjay Gandhi National Park).
- xii. There is no court case pending against the project.

**3.19.2 The EAC after deliberation recommended for grant of Environmental Clearance with the following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF&CC and the Ground Water Authority along with six monthly Monitoring reports.

- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 9 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State. PP shall also consider to issue at least two LED light for each flats as part of energy conservation measures.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.20 Proposed “ARIISTO HEAVEN” at CTS. No. 19/2, 19/3(pt.), 19/4, 19/5(pt.), 19/6, 19/8(pt.), 19/10 & 19/11, 3/B, 3B-1, 3/C, 3/D, 3/E & 3/F of Village Mulund, Near Veena Nagar, Off L.B.S. Marg, Mulund (West), Mumbai by M/s. Ariisto Developers - Finalization of ToR [F.No.21-67/2014-IA-III] - further consideration**

3.20.1 The proposal was discussed by the EAC in its meeting held in October, 2014. The EAC noted that the site falls within 50 m distance from Sanjay Gandhi National Park. PP stated that the Conservator of Forest, Sanjay Gandhi National Park certified that the project site is outside the National Park. The EAC after deliberation felt that prior to considering the project for ToR, it would be appropriate to ensure that the site is away from Sanjay Gandhi National Park in the prescribed distance and hence suggested to the PP to submit a survey map superimposing the project site along with the boundary of the Sanjay Gandhi National Park and get authentication of the same done by the Conservator of Forests, Sanjay Gandhi National Park.

3.20.2 PP made a presentation and informed that:

Authenticated survey map superimposing the project site by SGNP and accordingly, the site is away from SGNP.

**3.20.3 The EAC after deliberation recommended for grant of ToRs with the following ToRs:**

- i. Examine details of land use according to Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images.

- ii. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- iii. Examine baseline environmental quality along with projected incremental load due to the project.
- iv. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- v. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area.
- vi. Submit the details of the trees to be felled for the project.
- vii. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- viii. Submit the roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- ix. Ground water classification according to the Central Ground Water Authority.
- x. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- xi. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.
- xii. Examine soil characteristics and depth of ground water table for rainwater harvesting.
- xiii. Examine details of solid waste generation treatment and its disposal.
- xiv. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption.
- xv. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- xvi. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- xvii. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- xviii. Examine the details of transport of materials for construction which should include source and availability.
- xix. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xx. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

**3.21 Proposed residential project on Plot Bearing S No. 269/1A, 269/1B, 270, 408, 421/1 & 421/2 at village Majewade, Thane, Maharashtra by M/s Hubtown Ltd. - Environmental Clearance [F.No.10-71/2014-IA-III] -**

3.21.1 PP submitted information and informed that:

- i. The project is located at Plot bearing S.No. 269/1A, 269/1B, 270, 408, 421/1 & 421/2, at village Majewade, Thane, Maharashtra. Latitude: 19°13'20.66"N ; Longitude: 72°57'17.32"E
- ii. The project is a New Residential Project.
- iii. Earlier Clearance details, No. 21-21/2007.IA.III dated -30.10.2007.
- iv. The total plot area is 27, 070.75Sq.m. The total project will comprise of
- v. Rehabilitation building: Stilt + 24 Floors , Sale building: Wing A: 3B + G + 2P + St + 4<sup>th</sup> – 30<sup>th</sup> Floors, Wing B: 3B + G + 2P + St + 4<sup>th</sup> – 30<sup>th</sup> Floors and Wing C: 3B + G + 2P + St + 4<sup>th</sup> – 30<sup>th</sup> Floors.
- vi. FSI area is 48, 585.00 sqm and total construction area of 1, 06,793.42 sqm. Total 477 flats will be developed (MHADA – 270, SALE – 207). Maximum height of building is 90.30 m.
- vii. During construction phase, total water requirement is expected to be 40 KLD which will be met by TMC/Tankers. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- viii. During operational phase, total water demand of the project is expected to be 331 KLD and the same will be met by the TMC & Recycled water. Wastewater generated 258 KLD uses will be treated in 2 STP's of total 260KLD capacities. 232 KLD of treated wastewater will be recycled, 107 KLD for flushing, 4.6 KLD for gardening. About 120 KLD will be disposed into municipal drain.
- ix. About 1.20 TPD solid wastes will be generated in the project. The biodegradable waste 0.72 TPD will be processed in OWC and the Non-Biodegradable waste generated 0.48 TPD will be handed over to authorized local vendor.
- x. The total power requirement during construction phase is 100KVA and will be met from MSEDCL/DG and total power requirement during operation phase i.e. CL -8809KW and MD – 4117 KW will be met from MSEDCL
- xi. Rooftop rainwater of buildings will be collected in 2 RWH tanks of total 130 KLD capacity for harvesting after filtration
- xii. Parking facility for 2 Wheeler: 477; 4 Wheeler: 455 is proposed to be provided against the requirement of 2 Wheeler: 477; 4 Wheeler: 455.
- xiii. Proposed energy saving measures would save around 25% of power.
- xiv. Project is located within 10 Km of Eco Sensitive areas. (Sanjay Gandhi National Park, Borivali, Maharashtra.) – Applied for Wildlife Clearance.
- xv. There is no court case pending against the project

**3.21.2 The EAC after deliberation recommended for grant of EC with the following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF&CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.

- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State. PP shall also consider to issue at least two LED light for each flats as part of energy conservation measures.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.22 Redevelopment of BorlaSoc, property bearing C.T.S. No. 104, 104/1 to 22 of village Wadhivali, Chembur, Mumbai by M/s Vardhaman Developers Limited - Environmental Clearance [F.No.21-79/2014-IA-III] - further consideration**

3.22.1 PP made a presentation and informed that:

- i. The project is located at on 19°02'46.60"N Latitude and 72°54'08.15"E Longitude
- ii. The project is redevelopment of residential project : The proposed project is redevelopment of a Borla Society at C.T.S. No. 104, 104/1 to 22 of village Wadhivali, Chembur, Mumbai, State: Maharashtra which comes within the Municipal limits of Greater Mumbai
- iii. The total plot area is 13,940.20 m<sup>2</sup>. The Project comprises of 1 residential building with 5 wings of 2B+S+17 upper floors and 1 wing of 2B+S+14 upper floors. FSI area is 33,694.78 m<sup>2</sup> and total construction area of 60,477.19 m<sup>2</sup>. Total 382 nos of tenement will be developed. Maximum height of the building is 53.25 m
- iv. During construction phase, total water requirement is expected to be 60 KLD which will be met by tanker water. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force
- v. During operational phase, total water demand of the project is expected to be 258 KLD and same will be met by fresh water from MCGM and recycled water. Wastewater generated (241 KLD) will be treated in STP of 250 KLD capacity. 86 KLD of treated wastewater will be recycled for flushing and 17 KLD recycled water for Gardening. About 135 KLD will be disposed in to municipal drain
- vi. About 955 kg/d solid waste will be generated in the project. The biodegradable waste (573 kg/d) will be processed in mechanical composting and the non-biodegradable waste generated (382 kg/d) will be handed over to authorized local vendor

- vii. The total power requirement during construction phase is 200 kVA and will be met from Tata/Reliance and total power requirement during operation phase is 3.7 MW and will be met from Tata/Reliance
- viii. Rooftop rainwater of buildings will be collected in 4 RWH tank of total 140 m<sup>3</sup> capacity for harvesting after filtration.
- ix. Parking facility for 817 four wheelers is proposed to be provided against the requirement of 812 four wheelers (according to local norms).
- x. Parking facility for 817 four wheelers is proposed to be provided against the requirement of 812 four wheelers (according to local norms).
- xi. Proposed energy saving measures would save about 22 % of power.
- xii. It is not located within 10 km of. Sanjay Gandhi National Park Eco Sensitive areas.
- xiii. There is no court case pending against the project
- xiv. It would be appropriate in this case the plans are got first approved from the MCGM as this Committee has been following the norms for 6m driveway for all residential building and it is not possible for this proposal.

**3.22.2 The Committee after examining the proposal advised the Project Proponent to submit the revised sanction for building plan.**

**3.23 Proposed redevelopment project at Plot No. 18 to 21 & 23 to 26, CTS No. 195(pt), D. N. Nagar MHADA layout, Andheri (west), Mumbai, Maharashtra by M/s. Axayraj Buildwell Pvt. Ltd. - Environmental Clearance [F.No.21-99/2014-IA-III]**

**3.23.1 PP made a presentation and informed that:**

- i. The project is located at 19°07'27.66"N Latitude and 72°49'53.71"E Longitude
- ii. The project is a redevelopment scheme: This project has received prior Environment Clearance dt. 6<sup>th</sup> May 2011 (EC letter No: 21-260/2008 - IAIII). Total Constructed Built up Area (FSI + Non FSI) on site till date: 42,090.49 Sq. mt
- iii. The total plot area is 10278.39 sqm. The project will comprise of One Building with 11 wings. FSI area is 38,526.97 sqm and total construction area of 65,275.70 sqm. Total 359 flats, 213 shops & commercial area shall be developed. Maximum height of the building up to terrace level is 51.30 mt.
- iv. During construction phase, total water requirement is expected to be 19 KLD for workers & 30 - 40 KLD for construction which will be met by Municipal Corporation of Greater Mumbai (M.C.G.M.)/Tanker water. The waste water will be disposed to existing municipal sewer line. Temporary sanitary toilets will be provided for labor force.
- v. During operational phase, total water demand of the project is expected to be 348 KLD and the same will be met 143 KLD by Recycled Water and 205 KLD by M.C.G.M. Wastewater generated (298 KLD) will be treated in one STP of total 330 KLD capacity. 143 KLD of treated wastewater will be recycled (134 KLD for flushing, 9 KLD for gardening). About 125 KLD will be disposed in to municipal drain.
- vi. About 1.0 TPD solid wastes will be generated in the project. The biodegradable waste (0.6 TPD) will be processed in OWC and the non-biodegradable waste generated (0.4 TPD) will be handed over to M.C. G.M.

- vii. The total power requirement during construction phase is 50 KW and will be met from Reliance and total power requirement during operation phase is 7084 KW and will be met from Reliance.
- viii. Rooftop rainwater of buildings will be collected in 1 No. of RWH tank of 80 KLD capacity for harvesting after filtration.
- ix. Parking facility for 440 four wheelers & 92 two wheelers is proposed against the requirement of 440 four wheelers and nil two wheelers respectively (according to local norms)
- x. Proposed energy saving measures would save about 20 % of power.
- xi. It is located within 10 km of Eco Sensitive areas
- xii. There is no court case pending against the project

**3.23.2 The Committee is of the opinion that the developers should not have taken membership without having clear cut permissible area in view of the height of the building structure. In case there were more members than expected, the total area could have been adjusted with carpet area with earlier members. It would be appropriate, in this case, the plan first approved by the MCGM. This Committee is following a norm of minimum 6 m driveway around each building, which is not possible in this case. Therefore, it is advised to submit these information before the committee takes up the project for further consideration.**

**3.24 Proposed construction of "Prerna Co-op Housing Society" at Plot bearing C.S. No.777(pt.),778 (pt.),779(pt.)780(pt.), New C.S.No.1004 of Worli-Div known as "New Municipal Labour Camp, G/South Ward, at Sasmira Marg, Worli, Mumbai. State - Maharashtra by M/s. Saumya Buildcon Pvt. Ltd. - Environmental Clearance [F.No.21-102/2014-IA-III] - further consideration**

3.24.1 The proposal was discussed in its meeting held in November, 2014 and sought the information in accordance with the OM dated 20.08.2014 with respect to Wild Life Clearance.

3.24.2 PP informed that the site is 16.50 km from Sanjay Gandhi National Park.

**3.24.3 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 9 m driveway shall be provided as committed.

- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- x. D.G sets shall be at least 6 m away from the boundary.

**3.25 Construction of proposed Nirmal Lifestyle PH-II at Plot bearing C.T.S.,706, 709-b,710(pt.), 711,712(pt),713, to20,722,724,724/1 to10,729,730/a to e.(new C.T.S. No.706-b/a, 706-b/b, 706-b/c, 706-b/d, 706-b/e, 706 -b/f, 706-b/g, 706 -b/h & 706-b/j &710,762a,763a,764b &c)) of village Nahur at LBS Marg,Mulund (w) Mumbai by M/s Nirmal Lifestyle Ltd. - Finalization of ToR [F.No.21-189/2014-IA-III]**

**3.25.1 The Committee deferred the proposal as requested by PP for postponement.**

**3.26 Construction of proposed Vikroli Parksite SR Scheme at plot bearing C.T.S. no. 22(pt.) of village Powai, Mumbai by M/s Lake View Developers - Finalization of ToR [F.No.21-194/2014-IA-III]**

3.26.1 PP made a presentation before the EAC and informed that:

- i. The site situated on plot bearing C.T.S No. 1 (pt) of village Ghatkopar, Hanuman Nagar, Tal. Kurla, Mumbai. It lies between Latitude 19°06'36.11"N & Longitude 72°54'59.30"E. It is located in and surrounded by a densely populated area.
- ii. The total plot area for the proposed SRA scheme is 64,219.67sq.mt. The total proposed construction area (FSI + Non FSI) is 391,086 sq.mt. The Total area of existing 2 buildings is 8708.39sq.mt. The total construction area of the project (existing & proposed) is 399,794.39sq.mt.The proposed project will have Rehab building of total 17 Wings and Sale Buildings of total 6 Wings. The Rehab buildings comprise of 4 Wings of Ground +22 Upper Floors and 13 Wings of Ground +19 Upper Floors. The sale building comprises of 3 Wings of Ground +5 Podium +28 Floors, 2 Wings of Stilt +28 Upper Floors and 1 Wing of Stilt +25 Upper Floors. There will be total 2712 nos. of Rehab residential tenements and 1140 nos. of sale residential tenements. In addition to commercial area for shops (9290.2 sq.mt.), Club house (734.8 sq.mt) will be provided.
- iii. The total water requirement during construction phase will be about 500 klpd expected to be approximately few months required for construction purposes only. The total water requirement for proposed SRA scheme is 2692 klpd including domestic, flushing and gardening purpose. The water supply will be met from Municipal Corporation of Greater Mumbai (MCGM) water supply. The wastewater generated from the project is estimated 2384klpd @ 90% of total

Domestic and flushing water requirement. The total waste generated will be treated in sewage treatment plant based on MBBR Technology.

- iv. Sewage Treatment Plant based on Moving Bed Biofilm Reactor (MBBR) Technology with total capacity of 2400 kld will be provided.
- v. The power requirement during construction period will be about 1000 kW, which will be temporary nature. The power requirement during operation period for connected load will be about 7307 kW and Maximum demand will be 7037 kW. The power will be supplied by Reliance Energy.
- vi. There will total 6 Nos. of DG set of total 630 kva capacity will be provided with Acoustic Enclosure, in case of emergency.
- vii. Parking facility for 1371 nos. will be provided.
- viii. The estimated project cost of the project is Rs. 951 Crores.

**3.26.2. The EAC after deliberation recommended for grant of ToR with the following ToRs:**

- i. Examine details of land use according to Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images.
- ii. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- iii. Examine baseline environmental quality along with projected incremental load due to the project.
- iv. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- v. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area.
- vi. Submit the details of the trees to be felled for the project.
- vii. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- viii. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- ix. Ground water classification according to the Central Ground Water Authority.
- x. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- xi. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.
- xii. Examine soil characteristics and depth of ground water table for rainwater harvesting.
- xiii. Examine details of solid waste generation treatment and its disposal.
- xiv. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption.
- xv. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- xvi. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities

for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.

- xvii. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- xviii. Examine the details of transport of materials for construction which should include source and availability.
- xix. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xx. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

**3.27 Proposed Redevelopment Project “RNA Address” at CTS No. 4853, 4853/1 to 85, 87, 88 of Village Kole Kalyan at Sundernagar, Kalina, Santacruz East, Mumbai by M/s. A.A. Estate Pvt. Ltd. - Environmental Clearance [F.No.21-82/2014-IA-III]**

3.37.1 The Project Proponent made a presentation before the EAC and informed that:

- i. The project is located at 19°04'25.55"N Latitude and 72°51'53.22"E Longitude. This is a redevelopment scheme: This project has received prior Environment Clearance (EC) from Ministry of Environment & Forest- Government of India in the year 2007 (EC letter No: - 21-352/2006 – IA. III Dated 05/01/2007), Total constructed work (Built up area according to FSI): 14,471.42sqm
- ii. The total plot area is 15,713.32 sq. m. The project will comprise of two buildings i.e. redevelopment building with 5 wings and sale building with 7 wings. FSI area is 57,951.49 sq. mt. and total construction area of 94,123.66 sq. m. Total 659 nos. of flats, 3 nos. of shops and 6 nos. of society offices shall be developed. Maximum height of the building up to terrace level is 48.15 mt.
- iii. During construction phase, total water requirement is expected to be 12 KLD for workers and 10 -20 KLD for construction purposes which will be met by M.C.G.M. and water tankers respectively. The wastewater will be discharged in to existing municipal sewer line. Temporary sanitary toilets will be provided for for labor force
- iv. During operational phase, total water demand of the project is expected to be 466 KLD and the same will be met 167 KLD by Recycled Water and 297 KLD by the M.C.G.M and 2 KLD by tanker water of potable quality. Wastewater generated (387 KLD) will be treated in 2 STPs of 280 KL & 150 KL capacity. 167 KLD of treated wastewater will be recycled (149 KLD for flushing, 18 KLD for gardening). About 181 KLD will be disposed in to municipal drain
- v. About 1.5 TPD solid waste will be generated in the project. The total biodegradable waste (1.0 TPD) will be processed in OWC and total non-biodegradable waste generated (0.5 TPD) will be handed over to M.C.G.M.
- vi. The total power requirement during construction phase is 150 KW and will be met from Reliance Energy and total power requirement during operation phase is 10023 KW and will be met from Reliance Energy

- vii. Rooftop rainwater of buildings will be collected in one no. of RWH tank of 100 KL capacity for harvesting after filtration and 2 nos. of percolation pits is provided
- viii. Parking facility for 607 four wheelers and 37 two wheelers is proposed to be provided against the requirement of 607 four wheelers and Nil two wheelers respectively (according to local norms).
- ix. Proposed energy saving measures would save about 25% of power
- x. It is located within 10 km of Eco Sensitive areas
- xi. There are court cases pending against the project.

**3.27.2 The EAC after detailed celebrations recommended the project subject for grant of Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF&CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- x. D.G set shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.28 Proposed composite development with public parking at CS No. 593 of Mazagaon Division, at Rambhau Bhogle Marg, Byculla. Mumbai by M/s. Gliders Buildcon LLP. - Amendment and expansion in Environmental Clearance [F.No.21-101/2014-IA-III]**

3.28.1 The PP made a presentation before the EAC and informed that:

- i. The project is located at 18° 58'36.69"N Latitude and 2°50'20.83"E Longitude:
- ii. This is an expansion project: This project has received prior Environmental Clearance (EC) from SEIAA, Maharashtra in the year 2014 (EC letter No: SEAC – 2011/CR –832/TC- 2)not yet started.

- iii. The total plot area is 58,197.97 sq. m. The project will comprise of three buildings; One Rehabilitation and EWS building, one Spindle unit and one sale building with 2 wings. FSI area (Including fungible area) is 1, 13,056.33 sqm and total construction area of 3, 54,501.06 sqm. Total 594 flats shall be developed, along with MCGM parking provision. Maximum height of the building up to terrace level is 280.69 mt.
- iv. During construction phase, total water requirement is expected to be 16 KLD for workers and 20-30 KLD for construction activity which will be met by M.C.G.M. and water tankers respectively. The waste water will be disposed in to existing municipal sewer line. Temporary sanitary toilets will be provided for labor force.
- v. During operational phase, total water demand of the project is expected to be 512 KLD and the same will be met by the 214 KLD recycled water, 277 KLD fresh water from M.C.G.M. and 21 KLD from tanker water of potable quality. Wastewater generated (374 KLD) will be treated in two STPs of total 415 KL capacity. 214 KLD of treated wastewater will be recycled (152 KLD for flushing and 62 KLD for gardening). Excess treated sewage shall be given to Veer Jijamata Udyan for watering/ road side plantation etc.
- vi. About 1.4 TPD solid waste will be generated in the project. The total biodegradable waste (1.0 TPD) will be processed in OWC and total non-biodegradable waste generated (0.4 TPD) will be handed over to M.C.G.M.
- vii. The total power requirement during construction phase is 358 KW and will be met from BEST/TATA and total power requirement during operation phase is 16 MW and will be met from BEST/TATA
- viii. Rooftop rainwater of buildings will be collected in One RWH tank of 200 KL capacity for harvesting after filtration
- ix. Parking facility for 1418 four wheelers for captive and 1635 for MCGM parking and Nil two wheelers is proposed to be provided against the requirement of 1147 four wheelers for captive and 1635 for MCGM parking and Nil two wheelers respectively.(according to local norms)
- x. Proposed energy saving measures would save about 20 % of power
- xi. It is not located within 10 km of Eco Sensitive areas
- xii. There is no court case pending against the project

**3.28.2 The EAC after detailed deliberations recommended the proposal for grant of following additional ToRs:**

- i. Examine details of land use according to Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images.
- ii. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- iii. Examine baseline environmental quality along with projected incremental load due to the project.
- iv. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- v. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area.
- vi. Submit the details of the trees to be felled for the project.

- vii. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- viii. Submit the designated roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- ix. Ground water classification according to the Central Ground Water Authority.
- x. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- xi. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.
- xii. Examine soil characteristics and depth of ground water table for rainwater harvesting.
- xiii. Examine details of solid waste generation treatment and its disposal.
- xiv. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption.
- xv. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- xvi. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- xvii. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- xviii. Examine the details of transport of materials for construction which should include source and availability.
- xix. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xx. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.

**3.29 Construction of proposed “Naman Premier” at 304, 305, 317, 322 of Marol Village, Premier Textile Processor, Military Road, Marol Andheri (E) Mumbai 400059, State- Maharashtra by M/s. Shree Naman Developers Ltd. - Environmental Clearance [F.No.21-109/2014-IA-III]**

3.29.1 PP made a presentation before the EAC and informed that:

- i. The project is located 19°07'01.54"N Latitude and 72°53'07.34"E Longitude
- ii. The project is new project wherein no redevelopment component has been involved.
- iii. Earlier Clearance details, Constructions status, if any: Not Applicable
- iv. The total plot area is 8,959.50 sqm The project will comprise of 1 Building with 6 wings. FSI area is 18,515.38 sqm and total construction area of 38,082.92 sqm Total 354 Nos. of flats shall be developed. Maximum height of the building is 41.16 mt. (up to terrace level).

- v. During construction phase, total water requirement is expected to be 12 KLD for workers and 15 -20 KLD for construction purposes which will be met by M.C.G.M. and water tankers respectively. The waste water will be disposed in o existing municipal sewer line. Temporary sanitary toilets will be provided for labor force.
- vi. During operational phase, total water demand of the project is expected to be 248 KLD and the same will be met 89 KLD by Recycled Water and 159 KLD by the M.C.G.M. Wastewater generated (207 KLD) will be treated in STP of total capacity 230 KLD. 89 KLD of treated wastewater will be recycled (80 KLD for flushing, 9 KLD for gardening). About 90 KLD will be disposed in to municipal drain.
- vii. About 0.8 TPD solid wastes will be generated in the project. The biodegradable waste (0.6 TPD) will be processed in OWC and the non-biodegradable waste generated (0.2 TPD) will be handed over to M.C.G.M.
- viii. The total power requirement during construction phase is 100 KW and will be met from Reliance Energy and total power requirement during operation phase is 4787 KW and will be met from Reliance Energy.
- ix. Rooftop rainwater of buildings will be collected in 1 RWH tank of total capacity 125 KLD for harvesting after filtration and provision of shallow trenches of length 78 mt.
- x. Parking facility for 364 four wheelers and 46 two wheelers is proposed to be provided against the requirement of 307 four wheelers and nil provision of two wheelers respectively (according to local norms).
- xi. Proposed energy saving measures would save about 22% of power.
- xii. It is located within 10 km of Eco Sensitive areas (Sanjay Gandhi National Park-2.6 km).
- xiii. There is no court case pending against the project

**3.29.2 The EAC after detailed delebrations recommended the project subject for grant of Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF&CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.

- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- x. D.G set shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.30 Construction of proposed Residential cum Commercial Project at land bearing new S. No 7 to 10, 88, 99, 100, 101 and 105 of village Balkum Tal. & Dist. Thane, Maharashtra by M/s V3 Designs LLP - Environmental Clearance [F.No.21-124/2014-IA.III]**

3.30.1 PP made a presentation and informed that:

- i. The project is located at on 19°13'30.17"N Latitude and 72°59'24.72"E Longitude.
- ii. The project is new project: Proposed residential & commercial project on land bearing S. No 7 to 10, 88, 99, 100, 101 and 105 of village Balkum Tal. & Dist. Thane, Maharashtra which comes under the Thane Municipal Corporation.
- iii. ToR granted by SEIAA, Maharashtra.
- iv. NOC obtained from Sanjay Gandhi National Park.
- v. The total plot area is 1,29,580 m<sup>2</sup>. The Project comprises of 15 residential buildings with 2 level basement + ground + 5 level podium + 27 floors, 1 residential tower with 2 level Basement + Ground + 24 floors, East Commercial with 2 Level basement + Ground + 4 level Podium + 26 floors, West Commercial ground + 5 Level podium + 6 Floors, Experience Centre with Lower Level and Upper level and Temple Complex. FSI area is 1,81,519 m<sup>2</sup> and total construction area of 4,18,898 m<sup>2</sup>. Total 1876 flats and Commercial area will be developed. Maximum height of the building is 92 m
- vi. During construction phase, total water requirement is expected to be 250 KLD which will be met by tanker water. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force
- vii. During operational phase, total water demand of the project is expected to be 1449 KLD and same will be met by fresh water from TMC and recycled water. Waste Water generated (1359 KLD) will be treated in STP of 1500 KLD capacity. 544 KLD of treated wastewater will be recycled for flushing and 182 KLD recycled water for Gardening. About 619 KLD will be disposed in to municipal drain.
- viii. About 5994 kg/d solid waste will be generated in the project. The biodegradable waste (3596 kg/d) will be processed in mechanical composting (Ecobiocompack) and the non-biodegradable waste generated (2398 kg/d) will be handed over to authorized local vendor
- ix. The total power requirement during construction phase is 400 kVA and will be met from MSEDCL and total power requirement during operation phase is 15 MW and will be met from MSEDCL
- x. Rooftop rainwater of buildings will be collected in RWH tanks of total 560 m<sup>3</sup> capacity for harvesting after filtration.

- xi. Parking facility for 3262 four wheelers and 2632 nos. of two wheelers is proposed to be provided against the requirement of 2796 four wheelers (according to local norms).
- xii. Proposed energy saving measures would save about 22.3 % of power.
- xiii. There is no court case pending against the project.
- xiv. The total cost of the project is Rs. 1330 Cr.
- xv. The proposed project is 4 km away from Sanjay Gandhi National Park.

**3.30.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance after submission of copy of permission/ concurrence for water supply subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall obtain and comply with the conditions of NOC/Clearance from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 9 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designed Energy Conservation/ efficiency Authority in the State.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.31 Proposed Enkay Garden Project “Residential Township at Survey No. 92/1,92/4,89/1,2,3, 4,5,6,91/1,3, 75/1,2,87/2. Village Vavanje, Near MIDC Talaja, Tehsil Panvel, District Raigad, Maharashtra by M/s. Enkay Castle - Environmental Clearance [F.No.21-138/2014-IA-III]**

**3.31.1 The Committee deferred the consideration of the project since the PP did not attend the meeting.**

**3.32. Proposed I.T. Building project at Sy. No. 86/1 part, 98/1 part, 98/5 part, 102/5 part, 98/1 part, 98/5 part, 102/5 part, Puthencruz Panchayat, Kunnathunadu Taluk, Ernakulam District, Kerala by M/s Trans Asian**

## **Shipping Services (P) Ltd. - Environmental Clearance [F.No.21-158/2014-IA-III]**

The project proponent made a presentation and informed that:

- i. The project is located at 10° 00' 14.72" N Latitude and 76° 22' 31.87" E Longitude.
- ii. The project is New IT Building Project according to Schedule 8(a) of EIA Notification
- iii. It is a new IT Building Project. No construction work at site
- iv. The total plot area is 8,337.40 sq. m. The project comprise of two towers connected together with Ground to 6<sup>th</sup> Floor (Parking Levels) + 7<sup>th</sup> to 19<sup>th</sup> Floor (IT Offices) Buildings. FSI area is 33,349.60 sq. m. and total construction area of 54,743 sq. m. (IT Project) shall be developed. Maximum height of the building is 73 m.
- v. During construction phase, total water requirement is expected to be 14 KLD which will be met by Kerala Water Authority supply, Open well existing at site & Stored rain water. During the construction phase, portable toilets with mobile STP for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- vi. During operational phase, total water demand of the project is expected to be 127 KLD (domestic) + 40 KLD (make-up water for cooling) and the same will be met by 92 KLD Recycled Water. Wastewater generated (102 KLD) will be treated in STP of total 123 KLD capacity. 92 KLD of treated wastewater will be recycled (85 KLD for flushing, 3 KLD for horticulture & 4 KLD as make-up for cooling). No disposed in to municipal drain.
- vii. About 0.422 TPD solid wastes will be generated in the project. The biodegradable waste (253.20 Kg / Day) will be processed Organic Waste Convertor and the non-biodegradable waste generated ( 168.80 Kg / Day ) will be handed over to authorized local vendor.
- viii. The total power requirement during construction phase is 40 kVA and will be met from Kerala State Electricity Board & 62.50 KVA D.G. Set and total power requirement during operation phase is 2,900 KVA and will be met from Kerala State Electricity Board & D.G. Sets (standby source) ( 1010 KVA X 4 + 500 KVA X 1 Nos.)
- ix. Rooftop rainwater of buildings will be collected in RCC RWH tanks of total 700 KL capacity for harvesting after filtration.
- x. Parking facility for 648 ECS + 797 Two Wheelers proposed to be provided against the requirement of 639 ECS according to local norms and 511 ECS according to NBC respectively.
- xi. Proposed energy saving measures would save about 23 % of power.
- xii. There is no Eco Sensitive Area located within 10 km radius of the proposed project site.
- xiii. There is no court case pending against the project.

### **3.32.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
  - iii. Solid waste shall be collected, treated and disposed according to rules.
  - iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
  - v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
  - vi. Parking facility with 6 m driveway shall be provided as committed.
  - vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
  - viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
  - ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State.
  - x. D.G sets shall be at least 6 m away from the boundary.
  - xi. Temporary toilets will be provided for all construction labour.

**3.33. Proposed Housing Project (“Nautica”) at Survey Nos. 51/14, 39/3, 39/2, 39/5, 39/6, 39/1, 39/11, 39/12, 51/1, 39/13, 39/7, 1/11, 51/15, 1/7, Kumbalam Village & Panchayat, Kanayannur Taluk, Ernakulam District, Kerala by M/s Asten Realtors Pvt. Ltd - Environmental Clearance [F.No.21-159/2014-IA-III]**

3.33.1 PP made a presentation and informed that:

- i. The project is located at 9<sup>0</sup> 54’20.72” N Latitude and 76<sup>0</sup> 20’00.63” E Longitude.
- ii. The project is New Residential Construction Project according to Schedule 8(a) of EIA Notification.
- iii. It is a new Residential Project. There is no construction work at site
- iv. The total plot area is 8,414.68 sq. m. The project will comprise of Two Residential Blocks with 64 Residential Units Buildings. FSI area is 17,998.89 sq. m. and total construction area of 24,687.67 sq. m. Total 64 flats shall be developed. Maximum height of the building is 62.90 m.
- v. During construction phase, total water requirement is expected to be 22 KLD (7 KLD domestic + 15 KLD construction demand) which will be met by Stored rain water, Open well existing at site .Portable toilets with mobile STP for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- vi. During operational phase, total water demand of the project is expected to be 44.64 KLD and the same will be met by the 15.36 KLD Recycled Water. Wastewater generated (35.712 KLD) will be treated in STP of total 45 KLD capacity. 25.36 KLD of treated wastewater will be recycled (15.36 KLD for

- flushing & 10 KLD for gardening). About 6.78 KLD will be disposed in to external drain.
- vii. About 0.128 TPD solid wastes will be generated in the project. The biodegradable waste (76.80 Kg/Day) will be processed (Bio-bin) Compositing Plant and the non-biodegradable waste generated (51.20 Kg/ Day [40%]) will be handed over to authorized local vendor.
  - viii. The total power requirement during construction phase is 40 kVA and will be met from Kerala State Electricity Board & 62.50 KVA D.G. Set and total power requirement during operation phase is 8,000 kWh and will be met from Kerala State Electricity Board & D.G. Sets (standby source) ( 500 KVA X 2 Nos.)
  - ix. Rooftop rainwater of buildings will be collected in RCC RWH tanks of total 1,000 KL capacity for harvesting after filtration.
  - x. Parking facility for 112 ECS and 112 two wheelers is proposed to be provided against the requirement of 97 ECS respectively (according to local norms).
  - xi. Proposed energy saving measures would save about 20.85 % of power.
  - xii. Project site is abutting the Vembanad backwaters.
  - xiii. There is no court case pending against the project.

**3.33.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.34 Proposed residential cum commercial project on plot bearing S. No. 54, 62, 63, 78, 79, 80, 81, 82, 83, 192, 193 at Village-More, Virar (E), Taluka Vasai,**

**District-Thane by M/s Viva Holding - Environmental Clearance [F.No.21-161/2014-IA-III]**

3.34.1 PP made a presentation and informed that:

- i. The project is located at on 19°26'14.07"N Latitude and 72°49'14.50"E Longitude
- ii. The project is new residential project : The proposed residential cum commercial project is located on plot bearing S. No. 54, 62, 63, 78, 79, 80, 81, 82, 83, 192, 193 at Virar (E), Village – More, Taluka Vasai, District-Thane which comes within the Municipal limits of Vasai Virar Municipal Corporation
- iii. The total plot area is 80,920.00sqm The Project comprises of 9 residential buildings with 28 wings. FSI area is 1,20,847.82 sqm and total construction area of 1,47,850.38 sqm. Total 1296 nos for Mhada and 2195 nos of tenements for sale with 146 nos shops will be developed. Maximum height of the building is 66 m.
- iv. During construction phase, total water requirement is expected to be 120 KLD which will be met by tanker water. Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force
- v. During operational phase, total water demand of the project is expected to be 2,376 KLD and same will be met by fresh water from VVMC and recycled water. Wastewater generated (2,218 KLD) will be treated in STP of 2300 KLD capacity. 799 KLD of treated wastewater will be recycled for flushing and 38 KLD recycled water for Gardening. About 1359 KLD will be disposed in to municipal drain.
- vi. About 8,815 kg/d solid waste will be generated in the project. The biodegradable waste (5289 kg/d) will be processed in mechanical composting and the non-biodegradable waste generated (3526 kg/d) will be handed over to authorized local
- vii. The total power requirement during construction phase is 300 kVA and will be met from MSEDCL and total power requirement during operation phase is 11.8 MW and will be met from MSEDCL
- viii. Rooftop rainwater of buildings will be collected in RWH tank of total 180 m<sup>3</sup> capacity for harvesting after filtration.
- ix. Parking facility for 760 four wheelers is proposed to be provided
- x. Proposed energy saving measures would save about 23.3 % of power
- xi. It is not located within 10 km of any Eco Sensitive areas.
- xii. There is no court case pending against the project.

**3.34.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. Submit information to obtain Wildlife Clearance.
- 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- iii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.

- iv. Solid waste shall be collected, treated and disposed according to rules.
- v. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- vi. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vii. Parking facility with 9 m driveway shall be provided as committed.
- viii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- ix. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- x. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- xi. D.G sets shall be at least 6 m away from the boundary.
- xii. Temporary toilets will be provided for all construction labour.

**3.35. Proposed residential project at Sy. Nos. 2413/B1, 2414/1, 2415, 2413/B, 2413/A, 2414 of Vanchiyur Village, Trivandrum Municipal Corp., Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala by M/s Indroyal Property Developers Pvt. Ltd. - Environmental Clearance [F.No.21-163/2014-IA-III]**

3.35.1 PP made a presentation and informed that:

- i. The project is located at 80 30'19.22" N Latitude and 760 56'15.03" E Longitude.
- ii. The project is New Residential Construction Project according to Schedule 8(a) of EIA Notification.
- iii. It is a new Residential Project. There is no construction work at site
- iv. The total plot area is 9,429.51 sq. m. The project will comprise of Two Residential Blocks with 208 Residential Units Buildings. FSI area is 34,900 sq. m. and total construction area of 47,630.74 sq. m. Total 208 flats shall be developed. Maximum height of the building is 44 m.
- v. During construction phase, total water requirement is expected to be 29 KLD (14 KL domestic + 15 KL construction demand) which will be met by Kerala Water Authority supply, Open well existing at site & Stored rain water. Portable toilets with mobile STP for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- vi. During operational phase, total water demand of the project is expected to be about 144.90 KLD and the same will be met by 71.30 Recycled Water. Wastewater generated (115.92 KLD) will be treated in STP of total 140 KLD capacity. 71.30 KLD of treated wastewater will be recycled (48.30 KLD for flushing & 23 KLD for gardening). About 32.70 KLD will be disposed in to municipal drain.
- vii. About 0.416 TPD solid waste will be generated in the project. The biodegradable waste (249.60 Kg / Day ) will be processed Bio-gas generation plant and the

non-biodegradable waste generated (166.40 Kg / Day] ) will be handed over to authorized local vendor.

- viii. The total power requirement during construction phase is 40 kVA and will be met from Kerala State Electricity Board & 62.50 KVA D.G. Set and total power requirement during operation phase is 1,300 kWh and will be met from Kerala State Electricity Board & D.G. Sets (standby source) ( 200 KVA X 1 + 380 KVA X 1 Nos.)
- ix. Rooftop rainwater of buildings will be collected in RCC RWH tanks of total about 100 KL capacity for harvesting after filtration.
- x. Parking facility for 247 Cars and 104 two wheelers is proposed to be provided against the requirement of 247 Cars and 104 Two-wheelers respectively (according to local norms).
- xi. Proposed energy saving measures would save about 23.92 % of power.
- xii. The project site is located within the Municipal Corporation Limit of Thiruvananthapuram Municipal Corporation and Lakshadweep Sea is about 4.50 km (aerial distance) away from the project site.
- xiii. There is no court case pending against the project.

**3.35.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.36. Proposed residential project at Survey Nos. 2353/2, 2353/1, 2347/3, 2353/3, 2347/2, of Vanchiyoor Village, Kannammola Ward, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk**

**& District, Kerala by M/s State Bank of Travancore Officers' Housing Co-operative Society Limited and M/s Travancore Bank Officers' Educational Society (TRABOES) - Environmental Clearance [F.No.21-164/2014-IA-III]**

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

- i. The project is located at 8° 30'03.72" N Latitude and 76° 55'56.59" E Longitude
- ii. The project is New Residential Construction Project according to Schedule 8(a) of EIA Notification.
- iii. It is a new Residential Project. There is no construction work at site
- iv. The total plot area is 5,427.03 sq. m. The project will comprise of Three Residential Blocks with 156 Residential Units . FSI area is 19,259.68 sq. m. and total construction area of 24,230.01 sq. m. Total 156 flats shall be developed. Maximum height of the building is 47.55 m.
- v. During construction phase, total water requirement is expected to be 29 KLD (14 KL domestic + 15 KL construction demand) which will be met by Kerala Water Authority supply, Open well & Stored rain water. Portable toilets with mobile STP for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- vi. During operational phase, total water demand of the project is expected to be about 108.90 KLD and the same will be met by 46.30 KLD Recycled Water. Wastewater generated (87.12 KLD) will be treated in STP of total 105 KLD capacity. 78.40 KLD of treated wastewater will be recycled (36.30 KLD for flushing & 10 KLD for gardening). About 32.10 KLD will be disposed in to municipal drain.
- vii. About 0.312 TPD solid waste will be generated in the project. The biodegradable waste (187.20 Kg / Day ) will be processed Bio-gas generation plant and the non-biodegradable waste generated (124.80 Kg / Day ) will be handed over to authorized local vendor.
- viii. The total power requirement during construction phase is 40 kVA and will be met from Kerala State Electricity Board & 62.50 KVA D.G. Set and total power requirement during operation phase is 1,458 KVA and will be met from Kerala State Electricity Board & D.G. Sets (standby source) ( 200 KVA X 1 + 250 KVA X 1 Nos.)
- ix. Rooftop rainwater of buildings will be collected in RCC RWH tanks of total 235 KL capacity for harvesting after filtration.
- x. Parking facility for 207 Cars + 206 Two Wheelers which is equivalent to 276 ECS is proposed to be provided against the requirement of 238 ECS respectively (according to local norms).
- xi. Proposed energy saving measures would save about 24.30 % of power.
- xii. The project site is located within the Municipal Corporation Limit of Thiruvananthapuram Municipal Corporation.
- xiii. There is no eco-sensitive area located within 10 km of the project site.
- xiv. There is no court case pending against the project

**3.36.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 6 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour

**3.37 Proposed construction of residential – cum commercial building project with municipal parking at CTS No. 5530/A, 5530/A-1 to 3 of village Kolekalyan, Santacruz, Mumbai, Maharashtra by M/s Ultra Space Developers Pvt. Ltd. - Environmental Clearance [F.No.21-165/2014-IA-III]**

3.37.1 The PP made a presentation before the EAC and informed that :

- i. Environmental Clearance granted by SEIAA vide letter no. SEAC-2210/CR.675/TC-2 dated 07.05.2013.
- ii. It is proposed to modify project as scheme change from DC rule 35 to 33 (24). Amendment in environmental clearance is required as proposed built up area is changing from 80,711.02 Sqm to 94,311.88 sqm.
- iii. The location of the project is at 19°04'20.78" N Latitude and 72°52'04.91" E Longitude. The proposed project comprises a residential building + shop line & Municipal Parking comprising of Wing A, B, C, E & F. The configuration of all the wings is: 3 Basements + Lower Ground + Upper Ground + Podium floor + 13 upper Residential floors. Except Wing D is of 12 Upper Residential Floor (Duplex Flat). The total height of the building is 46.7 m. The details of the proposed project is as follows:

Particular	Details as per previous EC	Revised details
Plot area	9874.00	9874.00
Permissible BUA (sq. m)	24,853.33	37,102.80

Proposed BUA (sq. m)	23,437.8	37,102.62
Total Construction Area (sq. m)	80,711.02	94,311.88
No of Buildings /Wings	6	6
Water requirement (KLD)	135	247
Wastewater (KLD)	108	194
Solid waste Generation (TPD)	0.5	0.667

- iv. Total water requirement is 246 m<sup>3</sup>/Day (Fresh water from MCGM = 148.4 CMD) & (Treated water from STP = 171.65 CMD).
- v. Total wastewater generation from the proposed activity would be 190.72 CMD. STP of 220 CMD is proposed.
- vi. Total Municipal Solid waste will be 667 Kg/Day, STP having capacity of 220 CMD will be provided.
- vii. The total power requirement is 3036 kVA which will be met through Reliance Energy Ltd.
- viii. Two D.G. sets of capacity 750 KVA and 210kVA respectively, will be provided for emergency.
- ix. 1 No. of Rain water Harvesting Tank of 75 Cum capacity is provided below Basement 3.
- x. MPCB has filed a case on dated 16/07/2013 against PP according to MoEF OM dated 12/12/2012 as they has started construction activities at site without obtaining EC.

**3.37.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 9 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State.

- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour

**3.38. Proposed construction of residential project at CTS No. 956, 956-1 to 83 of village Juhu, Juhu Tara Road, Juhu, Mumbai, Maharashtra by M/s Greentown Realtors Pvt. Ltd. - Environmental Clearance [F.No.21-166/2014-IA-III]**

**3.38.2. Since the PP had not submitted the project documents to the members in advance so that every aspect of the proposal could be well examined, the EAC decided to defer the proposal**

**3.39. Proposed construction of residential Complex at Sub Plot-C on plot bearing CTS No. 874C-8, Village Poisar, Kandivali, Mumbai, Maharashtra by M/s M. H. Marchant - Environmental Clearance [F.No.21-167/2014-IA-III]**

39.1. The PP made a presentation before the EAC and informed that:

- i. The project was granted EC earlier on 15.09.2006; however construction work not started yet.
- ii. The PP has amended the project in line with modified DCR.
- iii. Total plot area is 10529.50 sqm, Floor space area is 26,298 sqm and total construction area is 49241.74 sqm, ground coverage area is 8930 sqm.
- iv. Water requirement is 304 KLD.
- v. Sewage generation would be 269 KLD
- vi. Solid waste generation is estimated to be 641 kg/day
- vii. Two DG sets of 180 KVA & 320 KVA respectively to be installed.

**3.39.2. The PP did not circulate the project documents in advance; however, after examining the proposal, the EAC suggested to the PP to submit revised project documents in terms of following conditions:**

- i. Provision of green belt within the project area.
- ii. Revision of Energy Conservation Plan, since there was no energy conservation measure of any consequence other than heat pump.

**3.40. Proposed residential building No. 4 on Plot Bearing F. P. No. 723/A and 723/B, TPS III at Shimpoli Road, Borivali (W), Mumbai, Maharashtra by M/s R. K. Builders - Environmental Clearance [F.No.21-168/2014-IA-III]**

3.40.1 PP made a presentation and informed that:

- i. The project is located at on 19°13'23.19"N Latitude and 72°51'03.31"E Longitude
- ii. The project is new in residential project : The proposed residential building No. 4 on Plot bearing F. P. No. 723/A and 723/B, TPS III, at Shimpoli Road, Borivali (W), Mumbai which comes under the Municipal Corporation of Greater Mumbai
- iii. The total plot area is 18,668.10 m<sup>2</sup>. The layout contains 5 existing buildings, out of these 4 buildings were constructed prior to EIA notification 2004, and one

after 2004. Now, the proposed project comprises of a residential building with 2 wings. FSI area is 14,107.61 m<sup>2</sup> and total construction area of 28,253.63 m<sup>2</sup>. Total 201 flats will be developed. Maximum height of the building is 69.75 m.

- iv. During construction phase, total water requirement is expected to be 45 KLD which will be met by tanker water. During the construction phase soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- v. During operational phase, total water demand of the project is expected to be 136 KLD and same will be met by fresh water from MCGM and recycled water. Wastewater generated (127 KLD) uses will be treated in STP of 130 KLD capacity. 45 KLD of treated wastewater will be recycled for flushing and 22 KLD recycled water for Gardening. About 59 KLD will be disposed in to municipal drain
- vi. About 503 kg/d solid waste will be generated in the project. The biodegradable waste (302 kg/d) will be processed in mechanical composting (Ecobiocompack) and the non-biodegradable waste generated (201 kg/d) will be handed over to authorized local vendor
- vii. The total power requirement during construction phase is 150 kVA and will be met from Tata/Reliance and total power requirement during operation phase is 2.2 MW and will be met from Tata/Reliance
- viii. Rooftop rainwater of buildings will be collected in one RWH tank of total 35 m<sup>3</sup> capacity for harvesting after filtration
- ix. Parking facility for 475 four wheelers is proposed to be provided against the requirement of 475 four wheelers (according to local norms)
- x. Proposed energy saving measures would save about 22.1 % of power
- xi. It is located within 10 km of. Sanjay Gandhi National Park Eco Sensitive areas.
- xii. There is no court case pending against the project.

#### **3.40.2 The EAC after detailed deliberations decided to recommend the proposal for Environment Clearance subject to following specific conditions:**

- i. 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 PP. The record shall be submitted to the Regional Office, MoEF& CC and the Ground Water Authority along with six monthly Monitoring reports.
- ii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iii. Solid waste shall be collected, treated and disposed according to rules.
- iv. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- v. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vi. Parking facility with 9 m driveway shall be provided as committed.
- vii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- viii. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.

- ix. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/Efficiency Authority in the State.
- x. D.G sets shall be at least 6 m away from the boundary.
- xi. Temporary toilets will be provided for all construction labour.

**3.41 Proposed construction of Children Hospital Building at Plot Bearing S. No. 217 H. No. 1,2, S.No. 219, S. No. 220 H No. 1,3,5, S. No. 222, S. No. 225, H. No. 1,2, 3, 4, 5 S. No. 226, H. No. 1,2,3,4,5, S. No. 227, S. NO. 228, H. No. 4 at Majiwade, Thane, Maharashtra by M/s Raptakos, Brett & Co. Ltd - Environmental Clearance [F.No.21-169/2014-IA-III]**

3.41.1 PP made a presentation and informed that:

- i. The project is located at on 19°12'43.04"N Latitude and 72°57'34.97"E Longitude.
- ii. The project is a proposed Hospital Building at Plot Bearing S. No. 217 H. No. 1, 2, S. No. 219, S. No. 220 H No. 1, 3, 5, S. No. 222, S. No. 225, H. No. 1, 2, 3, 4, 5 S. No. 226, H. No. 1, 2, 3,4,5, S. No. 227, S. NO. 228, H. No. 4 at Majiwade, Thane
- iii. The total plot area is 7,608.95 m<sup>2</sup>. The Project comprises of 1 Hospital Building (Basement + Ground + 6 Floors). FSI area is 12,585.70 m<sup>2</sup> and total construction area of 24,150.41 m<sup>2</sup>. Total capacity of hospital is 105 Beds. Maximum height of the building is 29.70 m.
- iv. During construction phase, total water requirement is expected to be 35 KLD which will be met by tanker water. During the construction phase soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force
- v. During operational phase, total water demand of the project is expected to be 95 KLD and same will be met by fresh water from TMC and recycled water. Wastewater generated (95 KLD) uses will be treated in STP of 95 KLD capacity. 35 KLD of treated wastewater will be recycled for flushing and 6 KLD recycled water for Gardening. About 54 KLD will be used for HVAC makeup.
- vi. About 191 kg/d solid waste will be generated in the project. The biodegradable waste (115 kg/d) will be processed in mechanical composting (Ecobiocompack) and the non-biodegradable waste generated (76 kg/d) will be handed over to authorized local vendor. Biomedical Waste Generation will be 788 kg/month which will be handed over to MPCB authorized agency for safe disposal
- vii. The total power requirement during construction phase is 200kVA and will be met from MSEDCL and total power requirement during operation phase is 5.35MW and will be met from MSEDCL
- viii. Rooftop rainwater of buildings will be collected in one RWH tank of total 44 m<sup>3</sup> capacity for harvesting after filtration
- ix. Parking facility for 86 four wheelers and 130 nos. of two wheelers is proposed to be provided against the requirement of 84 four wheelers and 126 two wheelers (according to local norms).
- x. Proposed energy saving measures would save about 22.46 % of power.
- xi. It is located within 10 km of. Sanjay Gandhi National Park Eco Sensitive area.

xii. There is no court case pending against the project.

**3.41.2 The EAC after deliberations suggested to the PP to submit the revised plan incorporating the following information:**

- i. Adequate provision for ambulances keeping in view the beds / patients..
- ii. Submission of statement regarding No. of OPD, beds, ICU, consultants to evaluate adequate parking needs.

**3.42. Construction of proposed residential project (C-Wing) with Municipal car Parking Facility at Plot bearing C.T.S. no. 5/209 & 5/210 of Parel-Sewree, Mumbai, Maharashtra by M/s Dosti Corporation - Environmental Clearance [F.No.21-170/2014-IA-III]**

3.42.1 PP made a presentation and informed that:

- i. The project is located at on 18°59'51.63"N Latitude and 72°50'57.78"E Longitude.
- ii. The Proposed Residential Project (C-Wing) With MCGM Parking Lot at Plot bearing C.T.S. no. 5/209 & 5/210 of Parel-Sewree, Mumbai, Maharashtra which comes within the Municipal limits of Greater Mumbai.
- iii. The total plot area is 29,958.44 m<sup>2</sup>. The proposed development comprises of One residential building (wing C) and 1 MLCP Building. FSI area is 7,688.85 m<sup>2</sup> and total construction area of 26,474.94 m<sup>2</sup>. Total 41 nos of tenement will be developed. Maximum height of the building is 68.15 m.
- iv. During construction phase, total water requirement is expected to be 50 KLD which will be met by tanker water. During the construction phase soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force
- v. During operational phase, total water demand of the project is expected to be 31 KLD and same will be met by fresh water from MCGM and recycled water. Wastewater generated (29 KLD) will be treated in STP of 30 KLD capacity. 11.5 KLD of treated wastewater will be recycled for flushing and 5 KLD for existing developed RG area and proposed green belt area. About 12.2 KLD will be disposed in to municipal drain.
- vi. About 118 kg/d solid waste will be generated in the project. The biodegradable waste (70.8 kg/d) will be processed in mechanical composting and the non-biodegradable waste generated (47.2 kg/d) will be handed over to authorized local vendor
- vii. The total power requirement during construction phase is 150 kVA and will be met from BEST and total power requirement during operation phase is 2.2 MW and will be met from BEST.
- viii. Rooftop rainwater of buildings will be collected in 1 RWH tank of total 15 m<sup>3</sup> capacity for harvesting after filtration
- ix. Parking facility for 95 four wheelers for C wing and 197 for MLCP building is proposed to be provided against the requirement of 93 four wheelers for C wing and 197 for MLCP building (according to local norms).
- x. Proposed energy saving measures would save about 22.4 % of power
- xi. It is not located within 10 km of any Eco Sensitive areas.

xii. There is no court case pending against the project.

**3.42.2 The EAC after examining the proposal asked the proponent to submit the revised building plan incorporating the following information:**

- i. DG set installation at 6 m distance from the boundary of the project site.
- ii. Revision of energy conservation plan in terms of justification for internal lighting and common area lighting and proposed energy saving proportions.

**3.43. Construction of "Swaraj Kingston" at Plot no. 47 at Sector-18, Ulwe village, Raigad District, Maharashtra by M/s Swaraj Builders and Developers - Environmental Clearance [F.No.21-171/2014-IA-III]**

3.43. The PP made a presentation before the EAC and informed that:

- i. It is a Housing Project on a plot of 4999.570 sqm with a total development of 21762.948 sqm meant for residential use. The site is about 7.5 km from Ulwe station, about 39 km from Mumbai Airport and about 7.6 km from the proposed Navi Mumbai airport.
- ii. No Critically Polluted area/CRZ/Eco-sensitive Area is located in the Project cover area.
- iii. Total Water Demand is 128.8KLD, Domestic Water Demand is 76.28 M<sup>3</sup>/DA,

**3.43.2 The Committee after deliberation suggested to the PP to resubmit the proposal after addressing the following:**

- i. Revise the parking requirement, area taking in to account adequate visitors parking
- ii. Explore possibility for relocation of shops since the present location may lead to parking on road side and block it.

**3.44. Construction of proposed "Shelter Riverside" at Plot no. 114, 115, 116, Sector- 14, Taloja village, Raigad, Maharashtra by M/s Shelter Builders and Developers - Environmental Clearance [F.No.21-172/2014-IA-III]**

3.44.1 The PP made a presentation before the Committee and informed that :

- i. The project is located on Barren land. The proposed project site is designated for the intended purpose and the proposed built-up area is 29223.124.
- ii. Total population of the residential scheme is 980 nos. and Commercial scheme is 141 nos.
- iii. Quantity of solid waste to be generated is 476.25 kg/day i.e.0.48 T/day approx.
- iv. Biodegradable and non-biodegradable waste will be segregated. Dry waste will be sent for recycling and wet waste will be treated by 'Organic Waste Converter' for composting.
- v. During Construction phase CIDCO water supply / Tanker water will be used for the construction purpose.

- vi. Total Water Demand is 148.91KLD and 113.85 KLD treated water will be reused.

**3.44.2 The EAC after deliberation recommended for grant of EC with the following specific conditions:**

- i. Parking at least 1 for each shopping shall be provided.
- 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 PP. The record shall be submitted to the Regional Office, MoEF&CC and the Ground Water Authority along with six monthly Monitoring reports.
- iii. The treated wastewater shall be recycled and reused for flushing of toilets, horticulture to reduce the demand of fresh water as committed.
- iv. Solid waste shall be collected, treated and disposed according to rules.
- v. PP shall comply with the conditions of NOC/Clearance obtained from Fire Department.
- vi. The Operation and Maintenance of STP shall be made in the MoU with supplier. PP shall ensure the operation and maintenance of the STP.
- vii. Parking facility with 6 m driveway shall be provided as committed.
- viii. All the construction shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- ix. The EC be granted only after the undertaking by the PP that he is in possession of all necessary and valid building and town planning permission for the entire project.
- x. The PP shall put in place a credible enforcement mechanism for compliance of energy conservation measures indicating at least 20 % energy saving from conventional mode, with its allottees, as projected, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State. PP shall also consider to issue at least two LED lights for each flats as part of energy conservation measures.
- xi. D.G sets shall be at least 6 m away from the boundary.
- xii. Temporary toilets will be provided for all construction labour.

**3.45. Proposed Residential cum Commercial Project at Plot bearing C.T.S. NO. 2956, 2956/1 to 8 of village Dahisar at Western Express Highway Dahisar (East) Mumbai, Maharashtra by M/s Haren Textiles Pvt. Ltd. - Environmental Clearance [F.No.21-175/2014-IA-III]**

**3.45.1 PP made a presentation and informed that:**

- i. The project is located at on 19°15'20.31"N Latitude and 72°52'17.67"E Longitude
- ii. The project is new project: Proposed residential cum commercial project on land bearing C.T.S. NO. 2956, 2956/1 to 8 of village Dahisar at Western Express Highway Dahisar (East) Mumbai, Maharashtra which comes under the Municipal Corporation of Greater Mumbai
- iii. The total plot area is 41890.20 m<sup>2</sup>. Applied for EC for balance portion of 18,830.8 m<sup>2</sup>. The Project comprises of 2 residential buildings with 4 wings and one commercial wing. FSI area is 53,019.31 m<sup>2</sup> and total construction area of

1,21,404.24 m<sup>2</sup>. Total 831 flats, one kindergarten school and IT offices will be developed. Maximum height of the building is 132.5 m.

- iv. During construction phase, total water requirement is expected to be 70 KLD which will be met by tanker water. During the construction phase soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- v. During operational phase, total water demand of the project is expected to be 588 KLD and same will be met by fresh water from MCGM and recycled water. Wastewater generated (549 KLD) will be treated in STP of 600 KLD capacity. 205 KLD of treated wastewater will be recycled for flushing and 41 KLD recycled water for Gardening. About 298 KLD will be disposed in to municipal drain
- vi. About 2202 kg/d solid waste will be generated in the project. The biodegradable waste (1321 kg/d) will be processed in mechanical composting (Ecobiocompack) and the non-biodegradable waste generated (881 kg/d) will be handed over to authorized local vendor
- vii. The total power requirement during construction phase is 350 kVA and will be met from Tata/Reliance and total power requirement during operation phase is 10.4 MW and will be met from Tata/Reliance
- viii. Rooftop rainwater of buildings will be collected in one RWH tank of total 125 m<sup>3</sup> capacity for harvesting after filtration.
- ix. Parking facility for 982 four wheelers and 171 nos. of two wheelers is proposed to be provided against the requirement of 894 four wheelers (according to local norms).
- x. Proposed energy saving measures would save about 22 % of power
- xi. It is located within 10 km of. Sanjay Gandhi National Park Eco Sensitive areas
- xii. There is no court case pending against the project

### **3.45.2 EAC deferred the consideration of the project since the project documents are incomplete.**

### **3.46. Proposed construction of Chhatrapati Shivaji Maharaj Memorial along with equestrian statue of Chhatrapati Shivaji Maharaj in the Arabian Sea of the Coast of Mumbai, Maharashtra by M/s PWD, Mumbai – Finalization of ToR [F.No.11-4/2015-IA-III]**

#### **3.46.1 PP made the presentation and informed that:**

- i. The Government of Maharashtra intends to establish a memorial and statue of Chhatrapati Shivaji Maharaj, off Nariman Point, Mumbai. The memorial is aimed at not only providing a place for people to visit, but also create an internationally acclaimed landmark of our Country.
- ii. The memorial shall be 190 m high statue of the Chhatrapati Shivaji Maharaj.
- iii. The identified location is an oval shaped Rocky out crop at latitude 18°55' 33.8" N and longitude 72° 47'25.0" E, of approximately 650 m x 325 m in size. The identified location is 1.2 km southwest of Raj Bhavan, 3.6 km southwest of the Girgaon jetty and 2.6km west of Nariman point.
- iv. The proposed project area is under the jurisdiction of Port of Mumbai.
- v. Initially, three sites, Site I, 500 m away from the Girgaon Beach, the intertidal zone, Site II, 2km south-west of H2O jetty just beyond LTL and Site III, the rocky

out crop, 3.6 km towards the sea from H2O jetty at Girgaon were evaluated for the establishment of the facility. The Site I was rejected due to its proximity to the land and is in the intertidal zone where reclamation is envisaged. The Site-II falls in the CRZ IV and through this site internet and telecommunication cables are passing through and substantial reclamation is required and hence this site was rejected. The Site III which falls under CRZ IV was selected as suitable site due to the presence of rocky outcrop and no major reclamation would be acquired

- vi. It is proposed to fortify RCC seawall/ curtain wall. In addition to the establishment of a statue, the other facilities planned at the rocky outcrop are
  - a. art museum exhibiting various aspects of Shivaji Maharaj's Kingdom era records,
  - b. amphitheatre and auditoria of various sizes,
  - c. exhibition gallery,
  - d. marine aquarium,
  - e. coastal and marine resources interpretation and sensitisation centre,
  - f. landscaping and open space of viewing and galleries,
  - g. common facilities such as cafeteria, lavatories, medical facilities, stalls and offices,
  - h. security installations of safety and disaster management system ,
  - i. wastewater treatment and environmental safeguards facilities and berthing jetty for embarkation and disembarkation of tourist.
- vii. The total estimated cost for the project is Rs 1400 crores. The total construction period for the proposed development would be approximately 5 years.
- viii. According to the proposed traffic plan, the boats carrying the visitors will be operating from the Nariman Point and Gateway of India. From the Gateway of India, sea route distances is 12 km and from Nariman Point is 3.5 km
- ix. Government of Maharashtra requested for waiving of Public Hearing in view of the larger Public interest importance and National Monumental importance. The Government of Maharashtra launched a website about the memorial and has received suggestions from a large number of people from all over the State.

**3.46.2 The EAC has noted that a draft notification to the CRZ Notification, 2011 to permit construction of monuments /memorial in CRZ areas has been issued by the Ministry. The Notification will be finalized after mandatory period of 60 days. Taking into consideration of the intention of the Ministry and the Government of Maharashtra, the EAC after deliberation recommended the project for grant of ToRs with following specific ToR.**

- i. The design shall not be isolate and Local architecture and motifs shall be appropriately incorporated in the design to portray the Indian heritage features in a place of tourist importance.(ii) More focus to be given on mitigation plan and safety/security.
- ii. Study on infrastructure facilities at shore and its impacts and mitigation to be carried.
- iii. Examine the carrying capacity vis-a vis safe limit of number of people to be permitted on island at a time.
- iv. Examine impact due to floating population, entry point, traffic management including parking.

- v. Examine emergency evacuation during natural calamity/ man made with required infrastructure stating time required for complete evacuation including safe landing under bad weather condition, jetty facility etc. Examine the EMP from similar projects.
- vi. Take advice from Bombay Natural History Society in respect of likely impacts due to lights on the birds, marine life.
- vii. Details of stone requirement for reclamation, quarry sources and transportation route may be provided.
- viii. Examine details of land use according to Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images.
- ix. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- x. Examine the likely impact on marine life, fishing vessel movement, during construction phase. Submit the details of fishing activity and likely impacts on the fishing activity due to the project
- xi. Examine road 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. Study on transport of materials for construction should include source and availability.
- xii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale along with the recommendation of the SCZMA.
- xiii. Details of dredging, rock dredging, likely impacts of marine life, mitigation measures proposed and disposal of dredge material.
- xiv. Examine the details of water requirement, source, waste generation, treatment, reuse of treated waste water, disposal. Prepare a water balance chart.
- xv. Examine details of Solid waste generation treatment and its disposal.
- xvi. Details of desalination plant and the study for outfall and intake.
- xvii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xviii. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disasters
- xix. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- xx. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption.
- xxi. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- xxii. Based on the submissions of the Government of Maharashtra, EAC recommends for exemption of Public Hearing.

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**Minutes of the 144<sup>th</sup> meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held from 28<sup>th</sup> to 30<sup>th</sup>, January, 2015 at Conference Hall (Testa), Indira Paryavaran Bhawan, JorBagh, New Delhi - 110003.**

**List of Participants**

**Expert Committee**

- |                             |                             |
|-----------------------------|-----------------------------|
| 1. Shri Anil Razdan         | Chairman                    |
| 2. Dr. M.L. Sharma          | Member                      |
| 3. Shri R. Radhakrishnan    | Member                      |
| 4. Dr. M.V. Ramana Murthy   | Member                      |
| 5. Dr. R. Prabhakaran       | Member                      |
| 6. Dr. Anuradha Shukla      | Member                      |
| 7. Ms Mita Sharma,          | Member                      |
| 8. Dr. Manoranjan Hota      | Director & Member Secretary |
| 9. Shri E. Thirunavukkarasu | Joint Director, MoEF&CC     |
| 10. Shri Yogendra Pal Singh | Joint Director, MoEF&CC     |

**List of proponents**

M/s Reliance Industries Ltd.  
M/s Hinduja National Power Corporation Limited  
M/s Covalent Laboratories Private Ltd.  
M/s Trimex Sands Pvt. Ltd  
M/s Tata Power Co. Ltd.  
M/s Tourism Corporation of Gujarat Limited  
M/s Nuclear Power Corporation of India Limited  
M/s I Log Ports Pvt. Ltd  
M/s ONGC Ltd.  
M/s Vijaydurg Ports Private Limited  
M/s RSPL Ltd  
M/s K. P. Energy Private Limited  
M/s Ramky Enviro Engineers Ltd  
M/s IOCL  
M/s Mumbai Port Trust  
M/s Airport Authority of India  
M/s Directorate of Health Services, Govt. Of NCT of Delhi  
M/s D.D. Associates  
M/s. Sai Pushpa Enterprises  
M/s. Ariisto Developers  
M/s Hubtown Ltd.  
M/s Vardhaman Developers Limited  
M/s. Axayraj Buildwell Pvt. Ltd  
M/s. Saumya Buildcon Pvt. Ltd  
M/s Lake View Developers  
M/s. A.A. Estate Pvt. Ltd  
M/s. Gliders Buildcon LLP  
M/s. Shree Naman Developers Ltd  
M/s V3 DESIGNS LLP  
M/s Trans Asian Shipping Services (P) Ltd.  
M/s Asten Realtors Pvt. Ltd  
M/s Viva Holding  
M/s Indroyal Property Developers Pvt. Ltd.  
M/s Travancore Bank Officers' Educational Society (TRABOES)  
M/s Ultra Space Developers Pvt. Ltd.  
M/s M. H. Marchant  
M/s R. K. Builders  
M/s Raptakos, Brett & Co. Ltd  
M/s Dosti Corporation  
M/s Swaraj Builders and Developers  
M/s Shelter Builders and Developers  
M/s Haren Textiles Pvt. Ltd.  
M/s PWD, Mumbai