Minutes of the 149thmeeting of the Expert Appraisal Committee for Projects related to Infrastructure Development, Coastal Regulation Zone, Building/Construction and Miscellaneous projects held on 24th – 26th June, 2015 at Conference Hall (Narmada), Jal Wing, Ground Floor, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003

| 1. | Opening Remarks of the Chairman. | | | | |
|-------|--|-------------|---|---|--|
| | The Chairn Expert Appraisal | | | 149 th meeting of the | |
| 2. | Confirmation of the Minutes of the 148 th Meeting of the EAC held on 19 th - 21 st May, 2015 at New Delhi. | | | | |
| | | | | meeting of the EAC following corrections: | |
| | | _ | no. 3.64, the word 'U the project belongs to | Ittarakhand' needs to State of Bihar. | |
| 2.1 | Amendment to Minutes of meeting of EAC regarding the proposal for Expansion of Dr.B.L.Kapoor Memorial Hospital at Pusa Road, New Delhi by M/s Dr B. L Kapoor Memorial Hospital - Environmental Clearance (Expansion) -Correction in Minutes. [F.No.21-64/2015-IA-III] | | | | |
| 2.2.1 | The Member Secretary informed the Committee that due to inadvertent typographical error, the project details as presented by the PP before the Committee has not been correctly incorporated in the minutes of the 148th EAC meeting in respect of the above project (agenda item no. 3.38). The EAC noted the issue and after thorough examination of the minutes and project details presented by PP, agreed to make the following correction in the minutes. Accordingly Para -3.38.1 of agenda item no 3.38 may be re-read as follows: i. The project proponent made a presentation before the EAC and informed the Committee about the changes/amendments in the proposed expansion: | | | | |
| | PARAMETERS | EC Granted | Proposed Amendment. Addn./Subn. | EC Required | |
| | Plot Area 5 acres | 20240 | | 20240 | |
| | Permissible FAR @375 | 2.0 (40480) | 1.75(35420) | 3.75(75900) | |
| | Proposed FAR | 40334.40 | -7824.74 (Demolish) + | | |

| M 1: 1 C/ CC | 4440.00 | (1500.00) | 2066 70 |
|------------------------------|--------------|-----------------------|---------------------|
| Medical Staff | 4448.23 | -(1588.23) | 2866.79 |
| Quarters Permissible | 30% | 10% | 40% |
| | 30% | 10% | 40% |
| Ground Coverage | | | |
| for Hospital | 56935 | 63776.54 | 120711.54 |
| Total Built up | 50935 | 03770.54 | 120711.54 |
| Area including Basement & | | | |
| Services | | | |
| Provided Car | 810ECS | 733 | 1543 |
| | 810ECS | 733 | 1543 |
| Parking | | | |
| Required/Provided | 222 171 5 | (550, 450, 0550, 45, | TOCHE D |
| Domestic water | 232 KLD | (550x450+2750x45+ | 786KLD |
| required for beds, | | 1000x45(opd)+floating | |
| visitors & Staff | | 1500x10+kitchen | |
| | | 1000x30) | |
| | | =462KLD + add | |
| | 405 777 5 | 20%=554.2KLD | 110 777 5 |
| Water cooling | 125 KLD | 288KLD | 413 KLD |
| Tower | | | |
| Horticulture | 21 KLD | 0 | 21 KLD |
| Total water | 378 KLD | 842 KLD | 1220 KLD |
| required | | | |
| Waste water | 263 KLD | (@80%) | (@80%) of 786 = |
| Generation | | 443KLD | 628 KLD |
| STP Capacity | 300 KLD | (443+20%=531.6 KLD | (831.6) Proposed |
| | | | Capacity- 1000KLD |
| ETP Capacity | No ETP | 100KLD | 100KLD |
| No. of Beds | 400 Nos | 550 | 950 |
| Transformers | 3Nos.1250KVA | 2 nos 2000KVA | 3 nos.1250KVA |
| | | | +2nos2000KVA |
| DG Sets | 2 nos | 2 nos 1500KVA each | 1 nos. 1000 KVA + |
| | 1000KVA | | 1no. 500KVA + 3nos |
| | &1no. 500KVA | | 1500KVA |
| Solid Waste in | 400kg/day+ | 550+150 kg/day | 950kg/day+250kg/day |
| including Hospital | 100kg/day | | |
| Waste | | | |
| Total Power | 25090KVA | 4010KVA | 6510KVA |
| requirement | | | |
| Project Cost | 150cr | 250cr | 400cr |
| RWH | 4 | 1 | 5 |

- ii. Mobile Toilets will be provided for construction labour during the whole construction period.
- iii. Proper drainage facility will be provided to handle the waste water arising out of the site. The
- iv. drainage will be planned in a way that there is no accumulation of water within the project area or vicinity to the site.
- v. Regular cleanup or the drainage system will be practice.
- vi. Treated sewage water from STP will be used for cooling ,flushing and horticulture.
- vii. Mitigation Measures for Air Pollution
- viii. To minimize such impact following measures shall be take:
- ix. All the loose material either stacked or transported shall be provided with suitable covering such as tarpaulin, etc. Water

- sprinkling shall be done at the location where dust generation is anticipated. To minimize the occupational health hazard, proper personal protective gears i.e. mask shall be provided to the workers who are engaged in dust generation activity.
- x. All the DG sets will be attached with stack of proper height as per CPCB norms to
- xi. Peripheral green belt has been provided.
- xii. Regular sprinkling of water during construction phase.
- xiii. Use of wind breaking walls.
- xiv. Total Run Off to be recharged = Q1 + Q2 + Q3 = 482cum/hr.
- xv. Total Run Off to be harvested for 15 Minutes, i.e. 94.000 cum
- xvi. Parking required=1467, Parking Provided:1543
- xvii. Solar lighting will be provided for open spaces.
- tviii. Roofs will be insulated to minimize heat gain with 50 mm expanded polystyrene or Equivalent insulation.
- xix. Use of LEDs in common areas.
- xx. DG sets shall be PLC controlled to optimize their usage based on the actual load requirements.
- xxi. Fly ash made bricks and cement will be used in common area i.e. Building Envelope, pathway and paved area.
- xxii. Car park has been designed to operate through timers to achieve 33%, 66% and 100% illumination to suit the occupants of the premises.
- xiii. The Hospital will reserve 2% of the project cost for social activities as given under.
- xiv. The institute will organize at least one free scanning camps in the nearby areas/Delhi. The institute will organize health and medical awareness camp in the schools, colleges & residential welfare association in the Delhi NCR region.
- xxv. The institute will prepare a documentary on safety, health & environment to educate the visitors.
- xvi. The institute will provide free training to the medical students specializing in medical treatment

Subject to the above mentioned amendments, minutes were confirmed.

2.2 Discussion on Hon'ble NGT Order dated 18.03.2015 and 27.04. 2015 on condition being stipulated by EAC/SEAC for Green Belt in EC/ToR.

2.2.1 The Member Secretary briefed the EAC about the Orders passed by Hon'ble NGT, Bhopal in the case.

Above mentioned court matter is related to violation of Environmental Clearance conditions by the developer/respondent No.5 (M/s D.B. Mall Pvt. Ltd.) who constructed a Shopping Mall in Sanjay Nagar, City Area Hills at Bhopal. The Ministry has accorded Environmental Clearance to the project vide letter no. 21-510/2006-IA-III dated June, 11, 2007, as SEIAA, Madhya Pradesh was not in place at

that time.

The petitioner has claimed that developer is violating the terms and conditions of the Environmental Clearance which leads to the violation of Environmental Laws and effects the ecology of the Environment. One of the conditions stipulated in EC regarding 'Green Belt' states "The green belt design along with periphery of the plot shall achieve attenuation factor confirming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety". The petitioner has stated that the above condition has been violated by the PP. project proponent.

During the hearing on 18.03.2015 the Hon'ble Tribunal has directed that, the MoEF needs to throw some light on the following:

"While granting EC, the condition of establishment of Green Belt requires to be specified with regard to:

- (a) Width, length and area to be covered under the green belt.
- (b) Number of rows of trees to be planted.
- (c) Tree species required to be planted and spacing to be maintained between them depending on the local climatic and site conditions and also the nature of the project.
- (d) As the purpose of raising green belt is to reduce air /noise pollution suitable plantation models may be evolved and details mentioned in the EC depending on the nature of project and also considering the location and the area of project.

Otherwise, merely incorporating the condition of raising of green belt in the EC does not serve the purpose and may give scope to the Project Proponent to plant some trees of his choice and sometimes even herbs and shrubs and ornamental plants claiming that the condition of raising green belt has been fulfilled and in such cases, the very purpose of raising green belt is defeated and it turns out to be only a cosmetic exercise."

In this context the Ministry filed an affidavit stating that:

"The directions of the Hon'ble Tribunal shall be placed before the Expert Committee for compliance".

2.2.2 The EAC deliberated in detail the above matter and opined that the Committee is in full agreement with the observations of the Hon'ble Court regarding the design of the green belt. The Committee further noted that the issues related to green belt are being given due importance by the EAC while considering the proposal for grant of EC and suitable condition is stipulated on case to case basis. As the issue related to green belt is site specific as well as activity specific, the Committee noted that a general condition on green belt may not be

| | applicable in all cases. However, in exceptional cases where the creation of Green Belt is not feasible in accordance with the stipulated condition, due justification will be provided by the PP and reasons for the same will be recorded. | | | | |
|-------|---|--|--|--|--|
| 3. | Consideration of Proposals: | | | | |
| 3.1 | Setting up of port based product SEZ at Kandla Port, Gujarat by M/s Kandla Port Trust- Environmental Clearance[F.No. 11-83/2011-IA.III] | | | | |
| 3.1.1 | The proponent requested for postponement of their presentation. | | | | |
| 3.2 | Development of Greenfield International Airport at MOPA in Goa by M/s Directorate of Civil Aviation, Govt. of Goa – Environmental Clearance [F.No.10-29/2011-IA-III] | | | | |
| 3.2.1 | i. The project was accorded ToR vide letter no. 10-29/2011.IA.III Dated 11-12th May 2011 for 4500 acres of land for development of airport with two parallel runways. ii. The proposal involves Development of Greenfield International Airport at MOPA in Goa by M/s Directorate of Civil Aviation, Govt. of Goa. The project site (N 15º44'30", E 73º52'00") is located at Pernem Tehsil, Mopa, Goa. iii. The total area proposed for the development of Greenfield International Airport will be 2271 acres. The land required has been acquired based on approved compensation as per Govt. of Goa. iv. The water requirement in phase I, phase II, phase III and phase IV is 1MLD, 1.8MLD, 3MLD and 6MLD respectively. The source of water will be provided by Tillari Irrigation canal of Irrigation Department, Dhargal division. Consent letter to draw 5MLD water from the right bank of main canal of Tillari Irrigation project dated 30.01.2015 is attached in EIA Report as Annexure XVIII v. The total solid waste generation will be 6.1 tonnes per day for phase I and 18.2 tonnes per day for phase IV. Solid waste collected will be disposed in disposal facility owned by Government of Goa. From airport, used oil, lubricants, electronic waste shall be generated and the same shall be disposed through SPCP authorized reprocessor. Used batteries will be given to dealers as part of buy back arrangement. | | | | |
| | vi. The quantity of sewage generated in phase I, phase II, and phase IV is 1MLD, 1.5MLD, 2.4 and 5MLD respectively. vii. The total power required for the proposed airport is 40MW. Power supply shall be sourced from 220/110 KV independent High Tension (HT) lines from Western Grid: Tivim/Colvale/Mapusa substation and from Southern Grid of Karnataka/Amona at Sesa | | | | |

- Goa and Ponda Substation. Emergency/generator power supply shall be met from 5 numbers of generators each having capacity of 2000KW.
- viii. A disaster management plan for various scenarios which includes the emergency control measures, plan of coordination and interaction with various agencies including administrative agencies, rescue and relief operations, training and awareness to minimize the severity of disasters has been prepared to plan for emergency response and to provide for resource mobilization.
 - ix. Investment/Cost: The Total cost of the project is estimated at Rs. 3000 Crores.
 - x. Public Hearing was conducted on 01.02.2015 at Simechen Adven, Mopa, Goa. The major issues raised during public hearing and responses sought from the project proponent related to employment opportunities.
 - xi. Wildlife issues: There are no National Parks, Wildlife sanctuary, biosphere reserves found in the 10km buffer zone.
- xii. Forest Land: No forest land is involved in the project.
- xiii. There are no court cases/violations pending with the project proponent.
- **3.2.2** The EAC after detailed deliberation sought the following additional information for further consideration:
 - i. There is a need to superimpose the layout plan showing the drainage pattern including natural drainage, construction in the area on superimposed map showing clear topography of the region.
 - ii. 10 year data regarding rain fall in the area.
 - iii. Justification on sustainability of existing traffic and transportation arrangements especially at inter-section points of the approach road to the airport needs to be submitted.
 - iv. A traffic circulation plan needs to be evolved for smooth running of traffic in the area.
 - v. Measures taken to comply with the CPCB guidelines formulated for noise pollution control in airport areas to be submitted.
 - vi. Minimum 20% energy conservation measures should be adopted incorporating provisions for use of LED, star rated A.Cs. etc. Revised Energy Conservation Plan to be submitted.
- Proposed Integrated Common Hazardous Waste Treatment, Storage, Disposal and Recycling Facilities at Mahui Mauja, Bhojpur District, Bihar by M/s Ramky Enviro Engineers Limited Environmental Clearance[F.No.10-6/2013-IA.III]
- **3.3.1** The PP made a presentation before the EAC and informed that:
 - i. The project was accorded ToR vide letter no. F.No. 10-6/2013-IA.III dated 21st August 2013.
 - ii. The proposal is for setting up an Integrated Common Hazardous

Waste Treatment, Storage, Disposal and Recycling Facilities at Mahui Mauja, Bhojpur District by M/s Ramky Enviro Engineers Limited. The proposed project is located at Survey Numbers Plot no: 401, Khata No: 69-68/2,67/3 Thana no: 107, Mahui Mauza, Jamalpur- Koelwar road, near Mohammadpur- Sadashivpur Village, Bhojpur District, Bihar.

- iii. The project is established on the barren land with 57.24 Acres.
- iv. The total water requirement for the facility is 423 KLD and will be drawn from groundwater. Necessary clearance will be taken from the concerned authorities after obtaining EC.
- v. The total hazardous waste generation will be 100045 MTA.
- vi. The quantity of wastewater generated will be 80.5 KLD from various stages of the operation and most of the wastewater is treated and recycled to minimise the usage of groundwater. The entire waste water will be treated and reused for various activities such as vehicle tyre washing, dust suppression on roads, landfill, green belt development etc.
- vii. The total power required is 1500KVA. Power supply shall be sourced from Power Development Department / agency of Bihar.
- viii. Son-River is flowing from south to north approximately 1.0km East of the project site.
 - ix. Investment/Cost: The Total cost of the project is 248.67 Crores.
 - x. Public Hearing was held on 16th October 2014 at premises of Ambika Sharan Singh High School, Jamalpur, New Mohmadpur, Koilwar- Babura Road, District Bhojpur.
- xi. Employment potential: During construction around 65 no. and during operational around 220 no. employment will be given to the local youth based on the qualification and experience.
- xii. Benefits of the project:
 - a. There are 98 hazardous waste generating industries in Bihar where the expected quantity of hazardous waste is 3439 MTPA. Ramky proposes to establish an integrated hazardous waste treatment & disposal facility meeting CPCB guidelines to cater to the requirement of disposal of such wastes in the State of Bihar. This project is 1st of its kind in Bihar.
 - b. The project will be designed as per standards of MoEFCC and CPCB guidelines for disposal of hazardous waste (direct landfill, landfill after stabilisation and incineration) which will cater to all industries present in Bhojpur and its nearby districts.
 - c. The project also consists of Bio Medical Waste treatment, E-waste management, Spent Solvent recycling, Used oil recycling, alternative fuel and raw material facility, Used Lead Acid batteries, Waste plastic recycling, Waste paper recycling, renewable energy (Solar), waste energy plant.
- xiii. **Wildlife issues**: There are no National Parks, Wildlife sanctuary, biosphere reserves found in the 10km buffer zone.
- xiv. Forest Land: No forest land is involved in the project.

- xv. There are no court cases/violations pending with the project proponent.
- xvi. **Public Hearing**: The major issues raised during public hearing are about the air pollution due to the recycling process, burning of waste, groundwater depletion and the presence of water body within 50m from the site boundary and burning of plastic wastes leading to the formation of Dioxins and Furans. The project proponent informed that steps would be taken to prevent reformation of dioxins by rapidly lowering the flue gas temperatures. Common facilities related to Biomedical Waste Treatment and Disposal Facilities will be as per CPCB guidelines. As regards the issue on whether the project site is located in a flood prone area, it was clarified by the PP that a certificate has been obtained from the revenue department, block development officer, Bhojpur district stating that that the land is not prone to flood and is around 1.25km away from Sone River on the western side.

xvii. Other details:

- a. A greenbelt of 15m wide is provided for along the boundary of the project. Overall 33% of the total area will be developed as greenbelt (open areas, along the roads, road junctions)
- b. Parking will be provided for employees near the main entrance, trucks carrying waste will be kept near Vehicle workshop.
- c. There will not be any tree cutting in the proposed site, but some bushes are cleared for the development of the site.
- d. As this is a hazardous waste management project, it is proposed to setup a solar power of 2MW and waste to energy of 2MW power plants. Energy conservation measures such as use of LED lights, solar panels for street lighting are proposed.
- **3.3.2** The EAC after detailed deliberations recommended the project for grant of Environmental Clearance subject to compliance of following specific conditions:
 - i. PP to maintain Zero effluent discharge.
 - ii. The PP would arrange for third party monitoring of existing environmental conditions through Special Purposed Vehicle (SPV).
 - iii. Green belt of 15 meters, with plant species that are significant and used for the pollution abatement, shall be provided all along the periphery of the site. The green belt area shall not be used for any other purpose. The names of plant species shall be submitted immediately to MoEFCC.
 - iv. 20% energy conservation to be maintained.
 - v. Certification that project is not falling under flood plain area of Son River from Irrigation Department of the State to be submitted by PP.

- vi. "Consent to Establish" shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- vii. Transportation and handling of Hazardous Wastes shall be as per the Hazardous Wastes (Management, Handling and Transboundary Movement)) Rules, 2008 including the section 129 to 137 of Central Motor Vehicle Rules, 1989.
- viii. Guidelines of Central Pollution Control Board (CPCB) for Common Hazardous Wastes Incinerators shall be followed.
- ix. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
- x. Periodical air quality monitoring in and around the site shall be carried out. The parameters shall include Dioxin and furans.
- xi. Use only low sulphur diesel. No other oil shall be used.
- xii. The proponent shall comply with the Environmental standards notified by Ministry of Environment, Forest & Climate Change for incinerators along with the technology/guidelines.
- xiii. Necessary provision shall be made for firefighting facilities within the complex.
- xiv. The Project Proponent should carryout periodical air quality monitoring in and around the site including VOC, HC.
- xv. Treated flue gas emissions discharge through stack to atmosphere shall always be less than or equal to the parameterspecific emission standards notified by the CPCB.
- xvi. All the facilities shall be designed to achieve a minimum temperature of 1100°C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two) seconds.
- xvii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
- xviii. Guidelines published by the Central Board from time to time for common incineration facilities shall be referred for implementation.
 - xix. Transportation and handling of Bio-medical Wastes shall be as per the Bio-medical Wastes (Management and Handling) Rules, 2000 including the section 129 to 137 of Central Motor Vehicle Rules, 1989.
 - xx. The proponent shall ensure that the project fulfills all the provisions of Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration 2005, issued by CPCB.
 - xxi. The gas generated from the Landfill facility shall be collected and disposed as per rules

- xxii. The Leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- xxiii. The proponent should obtained necessary clearance from the Ground Water Authority.
- xxiv. The depth of the land fill should be decided based on the ground water level at the site.
- xxv. Project proponent should prepare and implement an On Site Emergency Management Plan.
- xxvi. Project proponent should carryout periodical ground water/ soil monitoring in and around the site to check the contamination.
- xxvii. Project proponent should carryout periodical ground water/ soil monitoring in and around the site to check the contamination including TCLP test for heavy metals.
- xxviii. All measures for air pollution control shall be adopted.
- xxix. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and diverted to the leachate treatment plant.
- xxx. There should not be any spillage from the transportation vehicles.
- xxxi. The width of all internal roads should be 9.0 meters. The entry and exit point should be at different location.
- xxxii. Double containment system shall be provided for all waste transport vehicles to avoid spillage. The spillage shall be cleared immediately.
- xxxiii. Vehicles should prominently display complaint numbers for use of public as well as antidotes to any toxic waste.
- xxxiv. All the recommendations of EMP/DMP shall be strictly complied.
- xxxv. The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- xxxvi. Untreated domestic effluent should not be discharged into open drain. Till the sewerage system in the Industrial Estate, which is presenting being laid, is completed, the domestic effluent should be treated in a well-designed septic tank with soak pit, as committed. As soon as the sewerage system is made operational the domestic effluent from the project should be discharged only into the sewerage system for treatment in terminal STP.
- xxxvii. The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- xxxviii. Corporate Environment Responsibility:
 - a. The Company shall have a well laid down Environment Policy approved by the Board of Directors.
 - b. The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.

- c. The hierarchical system or Administrative Order of the company to deal with environmental issues and any emergency for ensuring compliance with the environmental clearance conditions shall be furnished.
- d. To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
- Proposed residential development at S.NO.294,295, 296, 297PT,300, 301, 302, 308, 309 & 310/1, Village Sholinganallur, Kancheepuram Dist. Tamil Nadu by M/s Tamil Nadu Housing Board Environmental Clearance[F.No.21-70/2015-IA.III]
- **3.4.1** The PP made a presentation before the EAC and informed that:
 - i. Proposed Residential Development by Tamil Nadu Housing Board is located along 12°53′50.62″ N Latitude and 80°14′10.00″E-Longitude at S.NO.294,295, 296, 297PT,300, 301, 302, 308, 309 & 310/1, Sholinganallur Village Sholinganallur Taluk, Kancheepuram District.
 - ii. The project is a new residential development
 - iii. Presently there is no construction activity at site. The site is a barren land.
 - iv. The total Plot area for development is 58315sq .m. The project will comprise of 26Residential blocks of Stilt + 10 floors 1 Utility block G + 3 Floors. FSI area is 112650.16Sq.m, total construction area is 118099.34Sq.m. Total 1500 Flats are proposed. Maximum height of the building is 39.6 m
 - v. During Construction phase, total water requirement is expected to be 50KLD and this will be met from CMWSSB. During construction phase, soak pits and septic tanks will be provided for disposal of waste water.
 - vi. During operation phase, total water demand for the project is expected to be 1190 KLD. Fresh water demand is 815 KLD & recycled water is 375 KLD. Sewage generated will be 987 KLD, which will be treated in STP of 1000 KLD. 937 KLD of treated sewage will be generated, which will be reused for toilet flushing (375 KLD) and green belt development (20 KLD). About 542 KLD of treated sewage will be disposed to municipal Sewer. Water supply will be met from CMWSSB.
 - vii. About 5850kg per day of solid waste will be generated due to the project. The biodegradable waste of 2667.5 kg/day, will be processed in OWC and non-biodegradable waste of 3217.5 kg/day, will be handed over to authorised local vendor.
 - viii. Total power requirement during construction phase is 250 kVA and will be met from TNEB/ DGs. And power requirement during operation phase is 9486.22 kVA and will be met from TNEB. Backup power of 3x 320 kVA DGs are proposed during operation

- phase.
- ix. Roof top rainwater of the buildings will be collected in 8 no of rain water harvesting tanks of 25 KL capacity each (200 KL total) for harvesting after filtration.
- x. Parking facility for 930 four wheelers and 1379 two wheelers are proposed to be provided against the requirement of 784 four wheelers and 444 two wheelers as per CMDA norms.
- xi. Proposed Energy saving measures would save about 3.4% of power.
- xii. The site is located within 7.5 Km of Pallikaranai Marsh Reserve Forest.
- xiii. There is no court case pending against the project.
- xiv. The project cost is Rs.320.85 Crores.
- xv. The proposal is for construction a residential building for 7500 permanent population. Due to the proposed development, employment potential will be generated in the nearby locality.
- xvi. The proposal is a residential building to be developed by Tamil Nadu Housing Board for 1500 flats having sewage treatment, recycling facility. The proposal will generate employment in the nearby areas.
- **3.4.2** The EAC after detailed deliberations sought the following additional information for further consideration:
 - i. Revise the layout plan in terms of:
 - Provision of green belt around the periphery of the project and on other passer ways.
 - Minimum 6 meter driveway for entry of fire fighting vehicles.
 - ii. Revised Energy conservation plan with 20% energy conservation measures.
 - iii. Sources of fresh water.
- 3.5 Development of Industrial estate of HSIIDC at Sector 30, 30-A, 31 & 32 at Manakpur (Jagadhari), Haryana by M/s HSIIDC Ltd. Environmental Clearance [F.No.21-1045/2007-IA-III]
- **3.5.1** The PP made a presentation before the EAC and informed that:
 - i. The project was accorded ToR vide letter no. F.No. 21-1045/2007-IA.III dated 23rd June 2008.
 - ii. The proposal is Development of Industrial estate of HSIIDC at Sector 30, 30-A, 31 &32 at Manakpur (Jagadhari), Haryana by M/s HSIIDC Ltd.
 - iii. The size of the project is 256.39 acres.
 - iv. The total water requirement is 4800 KLD and will be drawn from groundwater (9 No.s of tubewells). Necessary clearance is under process.
 - v. The total Municipal Solid waste is 1.5 MT per day and its disposed is taken up by District Administration, Yamuna Nagar.
 - vi. The quantity of wastewater generated will be 3600 KLD and 8

- MLD CEPT is proposed.
- vii. The power supply network shall be provided by the HSIIDC by providing all LT, HT lines, sub-division and street light. The Total power required is 25 MVA. One number 66/11 KVs/stn is proposed with 1X 25/31.5 MVA transformer.
- viii. Kalesar National Park & Kalesar Wildlife Sanctuary are situated at a distance of more than 20 Km from Project site.
 - ix. River Yamuna and Western Yamuna Canal are flowing at the distance of more than 5km in NE & SE direction from the project site.
 - x. Investment/Cost: The total cost of the project is Rs.183 Crores.
- xi. Public Hearing was held on 9th January 2014 at Manakpur. Minutes of PH are appended in EIA report.
- xii. Benefits of the project:
 - a. The project aims at development of Industrial Model Township at Jagadhri, which would help in creation of stateof the art- industrial infrastructure in the district.
 - b. The proposed project will facilitate in creation of employment opportunities both direct and indirect for local population.
 - c. The project will help in the urban development of better landscaping in the vicinity as well as creation of green belt in the area which would eventually help in the improvement of visual and aesthetic quality of the area.
 - d. With the implementation of this project, other utilities would also be created like development of road network, sewage network, augmentation of water supply system & waste water treatment, solid waste collection facility, educational and health facilities etc.
 - e. Project aims at amelioration of socio-economy of the areas as well as providing basic amenities to the people.
- xiii. No forest land is involved in the project.
- xiv. There are no court cases/violations pending with the project proponent.
- xv. Other details:
 - a. Green belt will be developed in approx. 78.27 acres of land
 - b. The area reserved for utilities & parking is 14.22 acres
 - c. The area kept for open space parking, road and undermined uses is 116.60 acres
- 3.5.2 The EAC noted the information presented by the PP and observed that there is no demarcation of green belt area and the parking space is inadequate. After detailed deliberation the Committee sought the following additional information for further consideration of the project:
 - i. Revised layout plan showing clear demarcation of area for development of green belt with details of tree species to be planted keeping in view the local conditions.
 - ii. Revised layout plan giving details of parking space.
 - iii. Feasibility of segregating industrial units with a view to separate

- timber processing facilities from the IT Park also need be explored. These two areas should be separated by a green belt.
- 3.6 Development of Industrial Estate at Growth Centre, Bawal, Dist Rewari, Haryana by M/s Haryana State Industrial & Infrastructure Development Corporation Ltd. (HSIIDC) Environmental Clearance [F.No.21-57/2012-IA-III]
- **3.6.1** The PP made a presentation before the EAC and informed that:
 - i. The project was accorded ToR vide letter no. F.No. 21-57/2012-IA.III dated 7th May 2013.
 - ii. It is a new Industrial Estate project of Phase-II, III & IV, "Industrial Model Township" located at Tehsil- Bawal, District- Rewari, Haryana.
 - iii. The geographical coordinates of one side of the project are 28°5′56.84′&76°35′31.38″E. Project site is located at Village-Suthana, Karnawas, Puthuhera, Banipur, Tehsil- Bawal, District Rewari, Haryana.
 - iv. The total area of the project is 868.569 Ha
 - v. The total water requirement is 58.31MLD and will be drawn from Jawaharlal Nehru Canal.
 - vi. Total solid waste generation is 8.5 MT/day.
 - vii. 38.96 MLD of waste water will be treated in of CEPT of which 19.49 MLD of wastewater will be recycled for use in horticulture, DG set cooling, flushing etc.
 - viii. 663.31 acres which is 34.78% of the net planned area will be developed as green area.
 - ix. Parking will be provided within the dedicated plots.
 - x. Total Power required is 248.59 MVA. Power supply shall be sourced from State Electricity Distribution Company.
 - xi. No Eco- sensitive areas in the study area. However Sahibi-River approximately 1.0km on the eastern side of the project site is flowing from south to north.
 - xii. Investment/Cost: The land cost is Rs. 437.16 Crore and Development cost is Rs. 575.41 Crore.
 - xiii. Public Hearing was held on 12th June 2015 at Bawal.
 - xiv. The Employment potential is 40,000 persons
 - xv. Benefits of the project:
 - a. To promote rapid industrialization of the country.
 - b. Infrastructure development in the State of Haryana.
 - c. To increase national and local employment.
 - d. To attract private investment both national and foreign
 - e. To promote the development of small industries
 - f. To encourage more effective use of resources through the development of industrial complexes, including diversified industries of all sizes.

g. To bring industries and industrial employment to rural areas. h. To train labour and increase its productivity. xvi. Wildlife issues: There are no National Parks, Wildlife sanctuary, biosphere reserves found in the 10km buffer zone. xvii. Forest Land: No forest land is involved in the project. xviii. There are no court cases/violations pending with the project proponent. 3.6.2 The EAC sought additional information from the PP for further consideration: Submit revised layout plan demarcating area for green belt around periphery of project. Energy conservation plan showing 20 % energy conservation ii. Commitment from concerned authority regarding confirmed iii. supply of water. NOC to be submitted from the Irrigation Department. Details regarding public consultation conducted on 12.06.2015 iv. for the project as the minutes are awaited. Clear indication of status / permission/prohibition of ground v. water extraction. 3.7 Development of Industrial Estate at Growth Centre, Bawal, Dist Rewari, Haryana by M/s Haryana State Industrial & Infrastructure Development Corporation Ltd. (HSIIDC) - Environmental Clearance [F.No.21-57/2012-IA-III] 3.7.1 The EAC observed that this case has been already considered at Agenda item no. 3.6. Hence the Committee decided not to consider the proposal again. Proposed Expansion of Secured Landfill (Phase III) of Existing 3.8 Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at Plot No. 9701-16, GIDC, Ankleshwar, Gujarat by M/s Bharuch Enviro Infrastructure Limited Environment Clearance- [F.No. 10-10/2014-IA-III]-3.8.1 The PP made a presentation before the EAC and informed that: i. The proposal is an expansion of secured Landfill (Phase III) of existing Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) situated at Ankleshwar, Gujarat which lies between 21°36'55"-21° 37'09" latitude and 73°02'03"-73⁰ 02'59" longitude. ii. The total site area is 69 Acres, Pit area is 2.98 acres and Closure area is 14.755 acres. iii. Water requirement will be met through GIDC water supply. Total

- GIDC water supply required is at 610 KL/day for industrial purpose and 26 KLD for domestic purpose.
- iv. The waste water generation is limited to 312 KLD.
- v. The quantity of wastewater generated will be 80.5 KLD from various stages of the operation and most of the wastewater is treated and recycled to minimise the usage of groundwater. The entire waste water will be treated and reused for various activities such as vehicle tyre washing, dust suppression on roads, landfill, green belt development etc.
- vi. No additional power is required. Gujarat Electricity Board (GEB) will supply the power. In case of power failure D.G seat can be used (2no.s 600 KVA capacity each)
- vii. The total cost of the project is Rs. 30 Crores.
- viii. Public Hearing is not required for projects/activities located within the industrial estates/parks as per Office Memorandum from MoEFCC (IA) letter no. J-11013/36/2014-IA-I dated 10th Dec 2014
 - ix. Wildlife issues: There are no National Parks, Wildlife sanctuary, biosphere reserves found in the 10km buffer zone.
 - x. No forest land is involved in the project.
 - xi. There are no court cases/violations pending with the project proponent.
- xii. Green belt development (20% of construction projects and 33% for others). The main objective of the green belt is to provide a barrier between the plant surroundings areas. Total 2,79,233.34 sq.m land area is available at site; out of this about 41,000 sq.m (14.683%) area is covered as greenbelt and other forms of greenery.
- **3.8.2** The EAC after detailed deliberations recommended the project for Environmental Clearance for expansion of project, subject to following specific conditions:
 - i. Water from bore-wells shall not be used for the proposed activities. Existing bore-wells shall be used only for monitoring the quality of ground water.
 - ii. "Consent for Establishment" shall be obtained from State Pollution Control Board under Air (Prevention and Control) Act, 1981 and Water (Prevention and Control) Act, 1974.
 - iii. The proposed layout plan should be realigned in such a way that the waste tipping area and processing area and other project components which produces maximum air and noise pollution is farthest from the habitation.
 - iv. State of the art measures should be adopted for odor control from the plant.
 - v. The waste lying at the existing dumping site shall be excavated and should be accumulated to designated place within the site and this accumulated waste shall be compacted and closed scientifically after reaching the design height.

- vi. Project Proponent shall develop green belt as committed.
- vii. The connectivity road to the side shall be as per IRC guidelines.
- viii. The waste is proposed to be transported through the village roads, the roads shall be properly widened or proper road for transportation shall be provided. Details shall be incorporated in the EMP.
 - ix. The gas generated from the Landfill facility shall be collected and disposed as per rules.
 - x. The proponent shall obtain necessary clearance from the Ground Water Authority for the use of ground water.
- xi. The depth of the land fill site shall be decided based on the ground water table at the site.
- xii. An On Site Emergency Management Plan shall be prepared and implemented.
- xiii. All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF&CC along with half yearly compliance report to MoEF&CC-RO.
- xiv. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.
- xv. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- 3.9 Widening and improvement of the existing highway to 2-lanes with paved shoulder/ 4 lane/6 lane of Bhavnagar-Pipavav Porbandar-Dwarka Section of NH-8E in the State of Gujarat by M/s NHAI Environmental and CRZ Clearance[F.No.10-12/2012-IA-III]
- 3.9.1 Proposal: The project proponent (National Highways Authority of India) limited informed that the proposal is for widening from 2 lane to 4 lane with paved shoulder of Bhavnagar to Veraval Section of NH8E in the State of Gujarat. The alignment will start at Bhavnagar (km 03.200) and extends up to Dwarka (km 473.000) for a length of approximately 470 km in the State of Gujarat. It would be further extended from Dwarka to Okha for a length of approximately 30 km that is presently SH-25 thereby resulting in to total length of project road up to approximately 500 km. It will start at Bhavnagar, run almost parallel to the Southern Coast of Gujarat and ends at Okha. Initially, it was proposed that the highway would be up to Veraval and continue northwards as NH8E from here. Later on it is decided that a link would be made to Chorwad from NH8E and this link would continue as NH8E up to Dwaraka. From Dwarka to Okha, the existing highway is SH-25.
- **3.9.2 Observations and Recommendations of EAC:** At the outset EAC requested PP to provide details of protected areas, forests land required for the project, status of clearance for diversion of forests land from the concerned Authority, findings of EIA report including the identification of impacts on marine environment due to proposed activities and mitigation

measures thereof, total length of road in CRZ area including CRZ map in 1:4000 scale as per provisions of CRZ Notification.

The PP informed that the proposed road does not pass through National Park, Wildlife Sanctuary and Eco Sensitive Zone. However, it will pass through protection and reserved forest. In addition, the project road will also pass through the Coastal Regulation Zone (CRZ) namely CRZ-IA, CRZ IB, CRZ-III, CRZ-IVB. The CRZ demarcation study has been done by IRS, Anna University Chennai. The project alignment will pass though mangroves area in Gadu to Dwarka section. Turtle habitant locations are marked in CRZ maps. All habitants are on sea Phase. However, there will be no impact on turtle nesting.

The EAC requested PP to show coordinates of project road, mangroves and turtle nest on CRZ maps. PP informed that the entire CZ demarcation is contained in 280 sheets, which have been submitted along with the project proposal both in hard and soft copies.

The EAC deliberated on the information provided by the PP and decided that a team comprising of three members namely Shri R. Radhakrishnan, Dr. M.V. Ramana Murthy, Dr. R. Prabhakaran and representatives of Ministry of Environment, Forest and Climate Change may undertake a site viste to the project site in particular the area falling under CRZ.

The Committee deferred decision on this item for want of inspection report from the sub-committee constituted above.

- 3.10 Construction of a Beach Resort at S.N.No.125/1A3 of Kokilamedu village, Thirukalukundram Taluk, Kancheepuram District, Tamil Nadu by M/s Silver Reeds Hotels and Resorts Pvt. Ltd. CRZ Clearance[F.No.11-80/2013-IA-III]
- 3.10.1 i) **Proposal:** The PP (M/s. Silver Reeds Hotels and Resorts (P) Ltd.) informed that the proposal is to set up a beach resort on a Plot having area of 103906.02 m² and built-up area is 29406.35 m². The Resort will have 31 cottages, 92 guest rooms, other associated facilities comprising of restaurants, meeting hall, etc. with ground floor and first floor.
 - ii) **Location:** The PP informed that the proposed Beach Resort will be S.No.125/1A3 Kokilamedu developed at of Village, Kancheepuram, Thirukalukundram Taluk, Tamil Nadu. The proposed development of Resort falls within CRZ-III Zone i.e. 200 meter to 500 meter from High Tide Line (HTL) in CRZ. Out of the total plot area, about 41562.41 m² (40%) is within No Development Zone (200 meters-HTL). It is proposed to develop Green Belt/ Water Bodies and to house desalination plant in this area. The Open Space Reserve (OSR) area in No Development Zone will be 10391.34 m² (10%). The present development area from 200 to 500 meter HTL is

- 51952.27m² (50%).
- iii) **Justification:** The main objective is to provide high quality resort with all amenities.
- iv) **FSI & Other Details:** The total height of the buildings is 8.93 m. The FSI is 0.226. The internal roads would be constructed over an area of 11.28%. The parking would be developed in an area of 11897m² (11.45%). Total Green belt area will be developed over an area of 35861.33m². The storage area for Solid waste and Sewage Treatment Plant (STP) will be 477.97 m².
- The proposal has been examined earlier by EAC in the meeting held in January, 2014 and March 2014. The EAC had sought additional information viz. Layout maps and Drawings of each unit/ Module, details of source of water supply, details of tertiary water treatment facility, details of energy saving, details of parking. PP submitted the details and informed that the required water will be met from Panchayat supply. The EAC was not satisfied with the kind of assured arrangements for water presented by the PP. The EAC suggested that the PP should get proper permission for water drawl from the Competent Authority handling ground water drawl or authorized to provide water by the State. The matter was again considered by EAC in the meeting held on March, 2015. In this meeting PP submitted the details and informed that though the local Panchayat has assured for water supply and a desalination plant is proposed to be installed to meet the water requirement. The EAC after deliberation asked PP to seek comments from the local Panchayat about the supply of water for construction purposes and from Government of Tamil Nadu about the water supply scheme for construction activities in the area in view of the proposed large numbers of constructions. It was also suggested to submit details of the commercial viability of project on utilizing desalinated water for construction purpose.
- vi) The PP made a presentation and informed that proposed project site is located at Kokilamedu village of Edayur panchayat, Kancheepuram Taluk, Tamilnadu. Since Kokilamedu village does not have any water supply scheme from TWAD Board [Tamilnadu Water Supply and Sewerage Board], Edaiyur Panchayat President, considering the derived benefits of the upcoming resort in terms of revenue to the Panchayat and job opportunities to the local people, has consented in-principle for the supply of water @ 15 KLD for construction activities from its existing infrastructure. The possibility of using desalinated water during construction and its techno economic feasibility have also been worked out. It is decided to use the construction water from desalination plant.
- vii) The proposed Desalination Plant will have three units having capacity of 25 KLD. The capacity of each unit will be of 10 KL/hr. The intake water flow will be 10 KL/hr [range between 10 to 12 KL/hr] and outfall water flow will be 7 KL/hr. A RCC cylindrical intake well of 2m diameter and 4m height will be installed nearly 600 m from the shore at a depth of 7 m. The well shall be covered

atop with SS 316 L screen. The HDPE intake pipeline will enter the well at the bottom. The intake pipe [HDPE] will be 150 mm in diameter. Intake pipeline shall be shore welded using SPM [a kind of butt fusion welding machine and will be floated out on the sea and will be sunk after alignment. The intake pipeline will draw sea water into an intake sump on the container positioned at the shore from where water will be pumped using 2 Nos. of vertical turbine sea water pumps of variable discharge up to a maximum of 15 m3/hr, 35 m head each into the plant. The pumps will work as a selfpriming suction for sea water intake. The average intake flow is 10 to 12m3/hr, and the average product water output of the plant is about 3-4m3/hr. The reject from the desalination plant will be sent back to the sea at a distance of 1000m away from the shore. A pipeline of 1200 m long with a diameter of 150mm (HDPE), will be sunk in the similar way as that of Intake pipeline at a depth of about 9 m in the sea side and 5.5 m in the shore side. Another 50 m long pipeline with a diameter of 150 mm will also be laid as a standby to discharge waste water from the plant.

- viii) **Water Requirement:** The net water requirement during construction phase will be 3745KL The construction phase is expected to last for 300 days thus the water requirement will be @ 12.5 KL per day. The water during construction phase will be met through outsourcing. Ground water shall not be extracted. It is also proposed to develop STP to treat the domestic sewage quantity of 66 KLD.
- ix) The treated sewage of 11 KLD is to be utilized for gardening purpose and the quantity of 30 KLD will be reused for cooling water make up and remaining quantity of 25 KLD will be used for toilet flushing. The food waste and other organic waste of 240 kg/day generated from the resort will be converted as manure through organicwaster converter system and the 161 kg/day will be disposed through recycles. The STP sludge of 9 kg/day will be used for manure for gardening. The unit proposed to install DG set of 2x750 KVA with stack of 14.5 m height. The total cost of the project is envisaged at Rs. 27.43 Crores. The increased initial investment for setting up one unit of 25 KLD desalination plant to supply water during construction phase will be Rs. 26.70 lakhs.
- x) The TNCZMA has recommended the project vide letter no 22398/EC.3/2013-1dated 21.11.2013.
- **3.10.2 Observations and Recommendations:** The EAC after deliberation recommended granting CRZ and Environmental Clearance with the following specific conditions:
 - i) The technical details of desalination plants namely the intake, outfall, etc shall be submitted to the TNCZMA prior to the commencement of developmental activities.
 - ii) Regular monitoring at outfall shall be carried out especially for the temperature and marine life quality.
 - 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 and the Ground Water Authority along with six monthly monitoring reports.
- iv) The treated wastewater shall be recycled and reused to reduce the demand of fresh water as committed.
- v) Solid waste shall be collected, treated and disposed according to rules.
- vi) The PP shall ensure the operation and maintenance of STP as per the prescribed environmental norms.
- vii) Parking facility with clear 6 m driveway shall be provided.
- viii) All the construction activities shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- 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, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State.
- x) Installation and operation of DG sets shall comply with the guidelines of CPCB. D.G set shall be at least 6 m away from the boundary.
- xi) All conditions stipulated by TNCZMA while recommending the project shall strictly be complied with.
- xii) The construction shall be as per the CRZ Notification, 2011 and as amended from time to time.
- xiii) No construction work violating CRZ Notification shall be carried out in Coastal Regulation Zone area.
- xiv) 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.
- xv) 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.
- xvi) There shall be no drawl of ground water.
- 3.11 Development of alternate Sea route to Baratang island from Port Blair, North & Middle Andaman District by M/s Andaman Lakshdweep Harbour Works CRZ Clearance [F.No. 11-9/2013-IA-III]
- **3.11.1** The Project Proponent (Ministry of Shipping) made a presentation and informed that:
 - i) **Proposal:** The proposal is to develop a Sea Route to Bartan Isalnd in Andaman and Nicobar Island. The developmental activates will

involve:

- a. Dredging up to (-)5 m in the channel from mouth to middle Strait Creek for a length of 2.25 Km & 200m wide resulting in to disposal of 0.34m³ of dredged material into sea at a distance of 3Km at (-)30m depth.
- b. Construction of 12 Nos. of Navigational Markings founded on single RCC cast-in-situ pile of 1000mm diameter for making entrance channel.
- c. Construction of 100 m long and 14.5 m wide RCC Jetty with an approach of 30x5.5 meter connecting Jetty to the Shore. The entire structure shall be founded on 102 Nos. Of RCC cast-in-situ piles of 600m diameter. The jetty shall be located south west to the existing vehicle ferry jetty.
- d. Construction of Port Control Tower at Baratang behind the proposed jetty.
- ii) **Location:** The Bartang is one of the Island between middle Andaman and South Andaman Islands at about 80 Km (aerial distance) from Port Blair. A 360Km long National Highway No. 223, popularly known as Andaman Trunk Road (ATR) is connecting PortBlair to Diglipur. This ATR passes through the Baratang Island and also through Jharwa Biosphere Reserve.
- iii) **Justification:** There are tourist spots such as Mud Volcano, Lime Stone Caves, etc. in Baratang Island. Thus tourist flow to this island is quite good. The rush tourists, local residents and transport of goods, through this ATR creates discomfort to Jharwas Aboriginal Tribes inhabiting Jharwa Bio-reserve. The total population of this Tribe community is 300. Because of considerable traffic movement through ATR sustenance of Jharwa life is considered to be under danger of extinction. Accordingly, the Hon'ble Supreme Court has directed to find measures to close ATR partly and evaluate alternate sea routes. On January, 2013, the Hon'ble Apex Court has directed making the sea route operational at the earliest.
- iv) The proposal is in compliance to the directions of the Hon'ble Supreme Court and decision taken in the 12th meeting of standing committee of Island Development Authority (IDA), held in Planning Commission on 26.07.2010 and point No. 46 of the action taken note by the erstwhile Ministry of Environment and Forests on the Babu Committee report regarding A&N Island, to develop sea route and land parallel to ATR segment that passes through the Jharwa Tribal Reserve.
- v) No land is required for this project. Sea sand shall not be used for this project.
- vi) The Terms of Reference was approved by the erstwhile Ministry of Environment and Forests on 14.11.2013. The Public hearing was conducted on 19.09.2014.
- vii) The project has been recommended by ANCZMA on 16.02.2015 for CRZ Approval.

about the environmental impact assessment report and environment management plans, details of the alternate sites considered, construction plan and impact on marine life due to the proposed activity. It was informed to the proponent that these documents have not been received by the EAC. The EAC deferred discussion on the item for want of aforesaid documents/information and suggested to include this proposal in the agenda for the next meeting of EAC.

- 3.12 Construction of Groynes at Perathalai Village, Tiruchudur Taluka Thoothukudi Dist, Tamil Nadu by M/s PWD/WRO, Basin Division, Tamil Nadu- CRZ Clearance [F.No. 11-12/2015-IA-III]
- i) The EAC was informed that as per the CRZ Amendment Notification dated 28.11.2014, the competent authority to consider such projects is the SEIAA. However, the SEIAA for Tamil Nadu State has not yet been reconstituted. Considering the importance of the project, the project has been placed before EAC for appraisal on priority. The EAC asked PP to provide details of the proposal.
 - ii) Proposal and Location: The PP (PWD/WRO, Basin Division, Tamil Nadu) informed that coast along the state of Tamil Nadu is very dynamic due to various developmental activities along the coast, which leads to sea erosion and hence loss of land to the sea. The Periyathalai village, with geographical coordinates 8°20'11.043" N and 77°58'43.134" E is located in Sathankulam Taluk of Thoothukudi District in Southern Tamilnadu. This area is a sandy beach prone to littoral drift and severs erosion. The boats are anchored at the sea thus leaving them to the impacts in the open seas. In order to protect the coast and provide a safe landing for the boats, Public Works Department, Government of Tamil Nadu is proposing to construct the Groyne at coastal stretch in Periyathalai. In order to protect the coastal stretch, a 800m long groyne (G1) on the southern side is envisaged by extending the groyne up to the offshore reef. This would also ensure the protection from south-easterly waves during the south-west monsoon period from May to September. In addition, a groyne of length 200m (G2) is suggested north of G1 at a distance of 600m. In the presence of G1 and G2, a highly tranquil basin would form which will act as coastal protection measure as well as facilitate safer berthing of fishing vessels. It is expected that the shoreline north of G2 might get eroded due to the predicted net northerly littoral sediment drift. Hence, two short groins of length 75m (G3) and 50m (G4) are proposed to tame the negative effect of groins G1 and G2 on the neighbourhood shoreline. G3 is positioned at 200m from G2 and G4 is located about 150m from G3.
- **3.12.2 Observations and Recommendations of EAC:** The EAC informed PP that the a few proposals (4.4 to 4.7 of agenda of 131st EAC Meeting) namely (i) construction of shoreline protection structures between the villages of Sothanaikuppam to Bommaiyarpalayam in Vanur Taluk of Villupuram District M/s PWD/WRO, Lower Pennaiyr Basin Division

Villupuram, (ii) Construction of RMS wall at Vanagirikuppam village in Sirkali Taluk of Nagapattinam District M/s PWD/WRO, Lower Pennaiyr Basin Division Villupuram, (iii) Construction of RMS wall and groynes to 4.70 Km coastal stretch along Devanampattinam in Cuddalore District, M/s PWD, Kavari Basin Div (East) and (iv) construction of RMS wall at Thirumullaivasal village in Sirkali Taluka of Nagapattinam Division M/s PWD, Kavari Basin Div (East) were examined in earlier meetings of the EAC held in February, 2014. The EAC had suggested to PWD, TamilNadu that a pilot project at highly eroding sites should be taken up initially. wherein shoreline of length 3 km on either side of the project site should be monitored for performance of proposed shoreline protection structures. Based on the performance of experimental Groynes and evaluation after two years of a base line study, other sites could be taken up. The base line study and evaluation was to be carried out by Tamil Nadu, PWD with the active involvement of the NIOT. It was also suggested that they should calibrate/validate the numerical model with near shore observations for obtaining reliable results since the coastal protection measures proposed above were arrived at based on a numerical model calibrated with deep water wave conditions. The EAC requested PP to inform the EAC about the status of CRZ Clearance for these projects. It was informed to EAC that Construction of Groynes at Veerapandianpattinam in Tiruchendur Taluk of Thoothukudi District and Construction of Grovnes at Kallamozhi in Tiruchendur taluk of Thoothukudi District have been cleared by the Tamilnadu State Coastal Zone Management Authority (TNCZMA) vide proceedings of the Member Secretary, TNCZMA and Director of Environment, Chennai Proc. No: P1/2030/2014 dated 01.06.2015 based on the amendment issued by MOEF, GoI in notification S.O No: 3085(E) dated 28.11.2014.

The EAC took a serious note of the development and expressed that the new district wise localized schemes for shoreline protection have potential to cause irreversible damage to adjacent control area and ecology of the area under consideration. Taking this into account, EAC in the past had suggested to the PWD to undertake Integrated Shoreline Management Programme on the basis of a pilot study. Further, the length of Groyne cannot be 800 meters. In the garb of a Groyne, the PWD appears to be going for development of Breakwater, which could become a major port. Such district based localized shore protection measures do not appear appropriate. The EAC requested the Ministry to take up the matter with TNCZMA on priority. The TNCZMA must state upfront about the action taken on the suggestions of EAC given during the meeting held during 22 to 24th February, 2014. If deemed necessary, the Ministry may keep the National Green Tribunal informed about the environmental hazards of such activities. The EAC deferred a decision on the item and suggested returning the proposal to TNCZMA along with the observations of the EAC.

3.13 Construction of resort at Semancheri Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu by M/s Olympia Merlin

- **3.13.1** The Project Proponent (M/s Olympia Merlin Developers Pvt. Ltd.) made a presentation and informed that:
 - i) **Proposal:** The proposal is to construct a beach resort at Semancheri Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu. The total plot area is 24,000.64 sqm (6.67 acres) and total built-up area is 15,271.172m². It is proposed to construct 20 rooms and 3 cottages besides other features comprising of restaurant, bar and banquet halls with ground floor and first floor with total built up area of 9439.89 sqm. The FSI is 0.325. The total height of the building is 8.95 m from ground level. The width of access road will be 30 meter. The internal road width would be 7.2 meter.
 - ii) **Location:** The site for the proposed beach resort is located at Sy. No. 136/1A1pt, 136/1B1B pt, 136/8B of Thiruvidanthai Village and Sy. No. 73/4A pt, 73/4B pt, 73/4C pt of Semancheri Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu. The Latitude & Longitude for the proposed project site is 12°46'28"N, 80°14'52"E. The proposed site falls under the classified CRZ-III zone with HTL demarcation of the site done through IRS-Anna University, Chennai. The proposed resort development will be taking place between 200m and 500m from HTL it attracts the provisions of CRZ Notification, 2011, a permitted activity within CRZ-III Zone.
 - iii) Earlier the project proponent had presented the case in 122nd Meeting on 26.03.2013 wherein the EAC suggested PP to inform about source of water along with required permission, revise Environment Management Plan (EMP), consider shifting away from east coast road and submit revised layout plan. EAC also suggested submitting parking and circulation plan, details for energy conservation measures along with percentage of saving and management plan in case of any disaster like earthquake and Tsunami. The aforesaid information desired by the EAC was presented in 133rd meeting on 22.04.2014. The PP made a presentation and informed that the development will take place in two blocks (Block-I & II). There will be 20 Guest Rooms, one Banquet (200 Person) and other facilities. The complex will generate 25 KLD of waste water and have STP (30KLD) and all treated water will be reused. There will be a green area of 1.52ha. (56% of plot area). Solid Waste generation will be 370 kg/day, which will be segregated. The bio-degradable waste shall be treated in in-house Organic waste convertor. There will rain water collection and reuse (Roof top rain water). Energy conservation measure shall be taken to conserve 19% energy. There will be parking provision of 122 cars and 215 two wheelers. There will be proper Environment Management Plan for environmental safeguards. EAC noted that the proponent has yet to submit requisite undertaking or NOC from the Chennai Metropolitan Water Supply Board for the allotment of water for the resort.

- iv) Again, project proponent presented the case in 146th meeting on 9th March, 2015. Considering the advantage of shorter distance between sea and the project site, EAC suggested relocation of proposed intake to sea from earlier proposed intake from backwaters. Also, EAC suggested seeking comments from CMDA/CMWSSB on water supply for the proposed construction activities. In view of the forgoing PP further informed that:
 - a. The possibility of the raw water intake has been explored and now it is proposed to source it from the sea itself.
 - b. The map has been revised to show location of the proposed Desalination Plant (DSP) and route of intake pipe from Sea.
 - c. The Thiruvidanthai village is falling outside the CMWSSB Operational Area. The Thiruvidanthai panchayat supplies water to the village households from its own sources. Considering the benefits of the proposed resort, in terms of revenue to the Panchayat and generation of employment opportunities to local people, Thiruvidanthai Panchayat President has consented to supply water for construction activities. However, PP will depend on its proposed DSP for construction phase.
 - d. The fresh water requirement is estimated to be 21 KLD. Thus capacity of the proposed a DSP will be 30 KLD. The water will be drawn at the rate of 10 KL/hr. The outfall water flow rate will be 07KL/hr. The intake and outfall HDPE pipes will be of 800 mm NB. In addition, the plant will have three storage tanks namely (i) One Raw Water Tank (30 m³)(ii) One Lamella Treated Water Tank (20 m³) and one final Product Water Tank (20 m³).
 - e. A RCC cylindrical intake well of 2m diameter and 4m height will be installed nearly 600 m from the shore at a depth of 7 m. The well shall be covered atop with SS 316 L screen. HDPE intake pipeline will enter the well at the bottom.
 - f. The reject from the desalination plant will be sent back to the sea at a distance of 1000 meter away from the shore.
 - g. The reject from the Desalination plant will be sent back to the sea at a distance of 1000m away from the shore.
- **3.13.2 Observations and Recommendations:** The EAC after deliberation recommended granting CRZ and Environmental Clearance with the following specific conditions:
 - i) The technical details of Desalination plants namely the intake, outfall, etc shall be submitted to the TNCZMA prior to the commencement of developmental activities.
 - ii) Regular monitoring at outfall shall be carried out especially for the temperature and marine life quality.
 - 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 and the Ground Water Authority along

- with six monthly monitoring reports.
- iv) The treated wastewater shall be recycled and reused to reduce the demand of fresh water as committed.
- v) Solid waste shall be collected, treated and disposed according to rules.
- vi) The PP shall ensure the operation and maintenance of STP as per the prescribed environmental norms.
- vii) Parking facility with clear 6 m driveway shall be provided.
- viii) All the construction activities shall be in accordance with the local building byelaws. PP shall obtain all necessary clearances.
- 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, in perpetuity. This would be monitored by the designated Energy Conservation/ Efficiency Authority in the State.
- x) Installation and operation of DG sets shall comply with the guidelines of CPCB. D.G set shall be at least 6 m away from the boundary.
- xi) All conditions stipulated by TNCZMA while recommending the project shall strictly be complied with.
- xii) The construction shall be as per the CRZ Notification, 2011 and as amended from time to time.
- xiii) No construction work violating CRZ Notification shall be carried out in Coastal Regulation Zone area.
- xiv) 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.
- xv) 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.
- xvi) There shall be no drawl of ground water.
- 3.14 Widening and strengthening of existing 2 lane to 4/6 laning from Panikoili Keonjhar Rimuli (km 0.000 to km 163.000) of NH-215 in the State of Odisha by M/s NHAI Extension of validity of Environmental Clearance Further consideration [F.No.5-20/2007-IA.III]
- **3.14.1** The EAC noted that the PP has submitted the request for extension of validity of EC to the Ministry within the validity period as provided under the EIA Notification, 2006. The EAC after detailed deliberation recommended the extension of validity of EC granted by the Ministry to the project up 15th May, 2017.
- 3.15 Proposed National Cancer Institute, Phase-I, AIIMS at Village

Badsha, Dist. Jhajjar, Haryana by M/s AIIMS, New Delhi - Environmental Clearance - Further consideration - [F.No.21-108/2015-IA.III]

- **3.15.1** The proposal to set up National Cancer Institute at Jhajjar, Haryana was considered by the EAC in the 148th meeting held on 21.05.2015 where the EAC after detailed deliberations asked the PP to submit following additional information for further consideration:
 - i. A detailed clarification from HUDA regarding availability of water in the area and corresponding summation of commitments made so far to be obtained by the PP from HUDA in Gurgaon or concerned areas.
 - ii. Revised map showing adequate parking space based on calculation of expected no. car/motorcycle to accommodate Patients, staff and visitors.
 - iii. The project location is falling within 10 KM radius of Sultanpur Bird Sanctuary; necessary clearance to be obtained. Submit the status of application for the same.
 - iv. Valid permission from fire department to be submitted.
 - v. Statement regarding Green belt indicating area of Green Belt and plant species to be planted.
- **3.15.2** The PP presented additional information sought by the EAC and informed that:
 - i. An assurance letter for water supply has been obtained from the Superintending Engineer, Public Health Engineering Circle, Jhajjar vide Memo no. 4699; dated 08.06.2015 stating that the Department will provide 2021 KLD canal based water supply to National Cancer Institute at Jhajjar, Haryana as a deposit work and the same letter was submitted.
 - ii. The details of parking for residential, hospital facilities and staff has been increased to 1830 car spaces + 15HUV from 1549 car spaces. Provision for 120 two wheelers parking on surface is also being provided.
 - iii. The copy of NOC from National Board for Wild Life (NBWL) will be submitted in due course of time as the application is under process. Approval from the State Govt. has been submitted to MoEFCC (Wildlife Division) New Delhi. Permission from Director, Fire Service, Haryana for approval of fire fighting scheme from fire safety of view of proposed Institutional Building of National Cancer Institute (NCI) has been obtained vide Memo No.33953 dated 15.06.2015.
 - iv. The project will develop Green Belt Area (Phase –I) at 52.52% of development area (1, 07,489 sq.m.) comprising of Shelter Belt at 18%, Avenue Plantation at 15.5%, Lawns/Herbs at 14% and Water body at 5% of development area.

- **3.15.3** The EAC noted the additional information provided by the PP and after detailed deliberations recommended the project for grant of EC subject to following specific conditions:
 - i. The public parking facility will be clearly demarcated for specific purpose and shall not to be encroached by others.
 - ii. Internal shuttle transportation facility shall be provided for staff movement from resident to hospital to minimise parking requirements.
 - iii. Aesthetic and shady plants to be given priority during development of green belt around the periphery of the plot.
 - iv. The Project Proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work.
 - v. "Consent for Establishment" shall be obtained from State Pollution Control Board/Committee under Air (Prevention and Control Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974.
 - vi. Authorization from CPCB/SPCB shall be obtained as applicable under Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.
 - vii. The project proponent shall comply with the conditions of NOC/Clearance obtained from Fire Department.
 - viii. All the construction shall be in accordance with the local building byelaws. The Project Proponent shall obtain all necessary clearances.
 - ix. Suitable toilet fixtures for water conservation shall be provided.
 - x. The rainwater harvesting plan should be incorporated by the CGWA.
 - xi. Provision shall be made for housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
 - xii. A First Aid Room will be provided both during construction and operation of the project.
 - xiii. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
 - xiv. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and shall be disposed taking all necessary precautions for general safety and health aspects of people, The waste shall be disposed only in approved sites with the approval of competent authority.
 - xv. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate water courses and the dump sites for such material must be secured so that they should not leach into the ground water.

- xvi. Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- xvii. The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- xviii. The diesel required for operating DG sets shall be stored in underground tanks and clearance from Chief Controller of Explosives shall be taken, as applicable.
- xix. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during nonpeak hours.
- xx. Ambient noise levels should conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/DPCC.
- xxi. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003.
- xxii. Ready mixed concrete must be used in building construction.
- xxiii. Storm water control and its re-use as per CGWB and BIS standards for various applications.
- xxiv. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xxv. Permission to draw ground water shall be obtained from the Competent Authority prior to construction/operation of the project.
- xxvi. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xxvii. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xxviii. Use of glass may be reduced by up-to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- xxix. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- xxx. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it

was found that construction of the project has been started without obtaining environmental clearance.

II. Operation Phase

- (i) The bio-Medical wastes shall be managed in accordance with the Bio-Medical Waste (Management and Handling) Rules, 1998 as amended.
- (ii) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- (iii) The treated wastewater of 88 KLD and 12 KLD of treated lab effluent shall be recycled and reused for gardening (12 KLD), flushing (34 KLD), HVAC cooling (54 KLD) to reduce the demand of fresh water as committed. ETP treated water shall be used only for HVAC cooling.
- (iv) Solid waste management shall be collected, treated disposed in accordance with the Municipal Solid Waste (Management & Handling) Rules, 2000. No municipal waste should be disposed off outside the premises.
- (v) The Operation and Maintenance of STP shall be made in the MoU with STP supplier. Project Proponent shall ensure regular operation and maintenance of the STP.
- (vi) Total parking facility shall be provided for 253 ECS. Parking facility for taxi and three wheelers shall be provided within the premises taking care for movement of patients and elderly. Parking facility with 6 m clear driveway shall be provided as committed.
- (vii) The project proponent shall take measures to ensure 20% power/energy conservation in perpetuity with regular monitoring report to competent energy management authority.
- (viii) The project proponent shall take all precaution to ensure that there is no adverse impact from the nearby Waste to Energy facility.
- (ix) The Project Proponent shall explore the possibilities of reusing the treated wastewater from nearby projects.
- (x) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the State Pollution Control Board/ Committee. Necessary measures should be made to mitigate the odour problem from STP.
- (xi) The solid waste generated should be properly collected and

- segregated. Wet garbage should be composted and dry/ inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- (xii) Diesel power generating sets proposed as source of back-up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board/ Committee.
- (xiii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (xiv) The green belt of the adequate width of at least 4 meters preferably with local species along the periphery of the plot shall be raised.
- (xv) Rain water harvesting for roof run- off and surface run- off, in accordance with 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.
- (xvi) Energy conservation measures like installation of LEDs/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used LEDs/CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible. 20% energy saving, duly monitored by the competent Bureau of Energy Efficiency/EMC, must be attained through use of star rated ACs, Lifts, LEDs etc.
- 3.16 Development of Bhal Industrial Park at village Moti Boru & Bholad of Taluka:Dholka Dist. Ahmedabhad, Gujarat by M/s Gujarat Construction Ltd. Environmental Clearance Further consideration- [F.No.21-1111/2007-IA-III]

- 3.16.1 M/s. Gujarat (Bhal) Construction Limited proposes to set-up a chemical/multi-product industrial estate namely "BHAL INDUSTRIAL PARK" Ahmedabad, Gujarat. The proposal was considered in the 133rd EAC meeting held on dated 21st 22nd April 2014 wherein the following additional information was sought:
 - i. No non-permissible activities are allowed in the CRZ area.
 - ii. The forest area falling within the Industrial Area should be protected and a buffer of 100 meters shall be provided all around.
 - iii. A green belt of 50 meters along the highway and 15 meters for the internal roads shall be provided
 - iv. 5 meters of green belt shall be provided for the individual plots.
 - v. Electro-plating type of industries shall not be allowed within the industrial area.
 - vi. The type of industry and the no of units as proposed in the EIA report shall be the strictly adhered to.
 - vii. The natural drainage within the industrial area should not be disturbed and a green belt shall be developed on either side of the natural drains.
 - viii. A report may be submitted after estimation of various supportive and assimilative capacity dimension and impacts thereon of alternative development actions across the proposed industrial area through a set of carrying capacity indicators or indices.
- **3.16.2** Response to the above additional information was presented by the PP in the 138th EAC meeting dated 29thSeptember 1st October 2014. The EAC after deliberation deferred the project and suggested the PP to submit final mode of disposal of treated effluent and details of the incineration facility along with the pollution control measures.
- **3.16.3** The PP presented the above details at the 149th EAC meeting held on 19-21May, 2015 and informed that:
 - i. During operational phase, 2110 m³/day domestic wastewater generated from member units will be treated along with industrial wastewater in three separate Common Effluent Treatment Plants (CETP). Out of total industrial wastewater i.e. 15,310 m³/day, 15,000 m³/day will be treated in three separate CETP. The CETP and common incinerator facilities will be provided within the proposed industrial park. Treated wastewater will be used in the industrial park for gardening/ greenbelt purposes.
 - ii. **Solid/Hazardous Waste Management & Disposal:** Municipal Solid Waste Disposal facility, Common Hazardous Waste Incinerator facility as well as Secured Landfill site will be provided in the Bhal Industrial Park for treatment and safe disposal of solid/hazardous wastes.
 - iii. Adequate control measures for air pollution, noise pollution, odour problem will be provided /suggested to each unit and its efficacy/adequacy will be monitored regularly by the environment

management cell.

- **3.16.4** The EAC after detailed deliberations recommended the project for grant of Environment Clearance subject to the following conditions:
 - (i) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
 - (ii) All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF&CC along with half yearly compliance report to MoEF&CC-RO.
 - (iii) The PP while issuing the allotment letter to individual member units shall specifically mention the allowable maximum quantity of water usage and effluent generated by each member unit.
 - (iv) The member units shall provide storage tanks for storage of effluent for monitoring the characteristics of effluent before taking into the CETP for further treatment.
 - (v) Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity sent from member industries to CETP and from CETP to the final disposal/ reuse on a continuous basis.
 - (vi) Member industries shall treat the effluent to meet the prescribed CETP inlet norms.
 - (vii) The environmental monitoring and compliance mechanism as stipulated by MoEF&CC shall be complied. The same shall be specifically mentioned in the allotment letter issued to individual member units by the project proponent.
 - (viii) The PP shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.
 - (ix) Internal Road widths within the Industrial Park shall be minimum 24 m ROW.
 - (x) Common facilities such as repair shops, rest rooms for drivers and attendants shall be provided.
 - (xi) A green belt of minimum width of 20 m shall be developed all around the project boundary.
 - (xii) 2% of the project cost shall be earmarked for CSR activities.
 - (xiii) MoU duly covering environmental legal frame work for disposal of effluents with PP shall be entered and the copy shall be submitted to MoEF & CC and State PCB.
 - (xiv) Solar lighting in the non-process area shall be provided.
 - (xv) Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.
 - (xvi) On-line monitoring system shall be provided at the outlet of

- ETP for critical parameters in consultation with SPCB.
- (xvii) Continuous VOC monitors at Industrial Park periphery at different locations shall be provided in consultation with SPCB.
- (xviii) 20% energy conservation in perpetuity.
- 3.17 Development of Industrial Model Township, Rojka Meo, Dist. Mewat, Haryana by M/s HSIIDC Ltd. [F.No.21-36/2012-IA-III] Environmental Clearance Further consideration.
- 3.17.1 The project was accorded ToR vide letter dated 13th July, 2012. The Public Hearing was conducted on 28th October, 2013. The EIA/EMP report has been considered in the 137th EAC meeting held on 28.05.2014. The Committee observed that the water requirement for the project is proposed to be fulfilled mainly by canal water which would be transported from Basai to IMT Rojka-Meo. Water demand during construction phase shall be met from STP treated water sourced from PHE Department (Sohana). Total water requirement of the IMT project will be around 40 MLD. The Committee after detailed deliberations sought the following additional information.
 - a. PP to provide calculations for water requirement and the availability of water in the proposed industrial area. The Committee was of the opinion that water which is available in the region is very meagre. Keeping in mind the massive amount of urbanization taking place in the area around Gurgaon and beyond, water allowance provided by the Government of Haryana for domestic use, the Committee suggested to provide details regarding the availability of water which is left for industrial purpose after catering for the present population of Gurgaon, Manesar and beyond and also for the proposed residential development area where CLU for urbanization has been provided.
 - b. Amount of water released into the drinking water channel at Bahadurgarh and how much of the total supply is reaching the Basai area at Gurgaon, and whether a water conduit scheme can be prepared to conserve water and prevent water theft from the open channel.
 - c. Feasibility study may be submitted if the treated sewage effluent from the Gurgaon area could be utilized for the Industrial Purpose.
 - d. The types of industries suggested in the industrial area should be very specific. As the inter-industrial area falls in a water scarcity zone, the type of industries should be less water intensive.
 - e. The revised green belt plan along with the layout map should be submitted. Detailed calculations for the green area proposed to be provided in the industrial area should be submitted.
- 3.17.2 The PP in the 149th EAC meeting presented the following additional information sought by EAC and informed that:

- a. Total water requirement of the project will be 40MLD. It is proposed to treat the wastewater upto tertiary level for recycling within the project premises to reduce fresh water demand to 30MLD. The total ultimate water demand of Gurgaon as per development plan is 683 cusec out of which water requirement of HSIIDC is 317 cusec. The source of water supply in Gurgaon is through NCR water channel and Gurgaon water supply channel having capacity of 935 cusec (total capacity). At present, water is being supplied from NCR water channel while GWS channel is being run as per requirement. Capacity of NCR water channel (source of water for HSIIDC) is 800 cusec.
- b. 2 water canals/channels viz. NCR Water Channel and Gurgaon Water Supply (GWS) Channel reach Chandu Budhera & Bansai Water Treatment Plants in Gurgaon to meet the water demand of Gurgaon and adjoining places. The total capacity of these two channels is 935 cusecs. As regards water being received through these channels, the losses are being reduced day by day as patrolling by Irrigation Dept is getting more and more stringent. Since there is lot of silting in the GWS channel and is also damaged at places as per reports of Irrigation Dept, Haryana, the state may consider the proposal of conduct to have permanent solution to water thefts in Gurgaon water supply channel.
- c. The Industrial Estate (Roz Ka Meo) will have a dual piping system within the project premises for meeting the fresh water and recycled water demands. The project will be self-sufficient in meeting various industrial water requirements. Therefore there will be no need to divert treated sewage effluent from district Gurgaon. HUDA has also intimated that the total sewage generated from Gurgaon development plan area shall be treated and reutilized, and there is no surplus for further supply.
- d. Keeping in view the suggestions of the committee, type of industries proposed to be set up in IMT Rojka Meo will not be water intensive.
- e. The total area to be landscaped ad development into greenery is 140251sq.m from which 30 % is green area is within industrial plots and 30 % of green area in buildings earmarked for substation, public utilities etc. The proposed activities is a 100m wide Green belt along KMPO expressway.
- 3.17.3 The EAC took note of the above information and noted that the main water supply source to this area is exclusively for Bahadurgarh, Gurgaon, Manesar, Sohna and SEZ for drinking water and industries. This includes all urbanization township schemes. It is felt that for long term sustainability it is imperative the water comes in a closed conduit with effective metering system so that water theft or unauthorized use is minimized if not eliminated. The Committee further noted that an open channel is an open invitation to unauthorized water extraction as it is required to run 365 days a year as against periodic running of irrigation channels. The Govt. of Haryana be well advised to take up the conduiting

of the water supply channel at the earliest in a time bound manner. Otherwise the entire urban area particularly south of Basai Waterworks would be jeopardized.

HSIDC has reported 5 Km stretch from Budahera to Basai will be converted to a closed conduit which is inadequate and insignificant for a stretch of 70km water channel.

- **3.17.4** The EAC after detailed deliberations recommended the project for grant of Environmental Clearance subject to the following conditions.
 - i. No groundwater shall be tapped for the proposed activities.
 - ii. Water valance to be metered at entry and exit point
 - iii. No electroplating industries shall be established.
 - iv. Commitment to be submitted stating that general manufacturing industries shall exclude water intensive, hazardous substance manufacturing units.
 - v. The plot allotted by HSIDC will not be used for setting up any other industries by the allottee other than the one listed. Any violation of this condition would lead to cancellation of plot allotment.
 - vi. HSIDC should take urgent measures to supply the water through a closed system. A communication in this regard may be sent by the Ministry to the State Government.
 - vii. The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
 - viii. All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF&CC along with half yearly compliance report to MoEF&CC-RO.
 - ix. The PP while issuing the allotment letter to individual member units shall specifically mention the allowable maximum quantity of water usage and effluent generated by each member unit.
 - x. The member units shall provide storage tanks for storage of effluent for monitoring the characteristics of effluent before taking into the CETP for further treatment.
 - xi. Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity sent from member industries to CETP and from CETP to the final disposal/ re-use on a continuous basis.
 - xii. Member industries shall treat the effluent to meet the prescribed CETP inlet norms.
 - xiii. The environmental monitoring and compliance mechanism as stipulated by MoEF&CC shall be complied. The same shall be specifically mentioned in the allotment letter issued to individual member units by the project proponent.

- xiv. The PP shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.
- xv. Internal Road widths within the Industrial Park shall be minimum 24 m ROW.
- xvi. Common facilities such as repair shops, rest rooms for drivers and attendants shall be provided.
- xvii. A green belt of minimum width of 20 m shall be developed all around the project boundary.
- xviii. 2% of the project cost shall be earmarked for CSR activities.
- xix. MoU duly covering environmental legal frame work for disposal of effluents with PP shall be entered and the copy shall be submitted to MoEF&CC and State PCB.
- xx. Solar lighting in the non-process area shall be provided.
- xxi. Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.
- xxii. On-line monitoring system shall be provided at the outlet of ETP for critical parameters in consultation with SPCB.
- xxiii. Continuous VOC monitors at Industrial Park periphery at different locations shall be provided in consultation with SPCB.
- 3.18 Construction of berthing and allied facilities off Tekra, Gujarat by M/s Adani Kandla Bulk Terminal Pvt. Ltd. Amendment in Environmental and CRZ Clearance- [F.No.10-10/2008-IA-III]
- **3.18.1** The PP (**M/s Adani Kandla Bulk Terminal Pvt. Ltd.**) made presentation and informed EAC that:
 - i) **Proposal:** The present proposal is for amendment in two additional conditions recommend by the EAC while considering the proposal for amendment in EC and CRZ clearance for addition of 16.3 Ha land namely the (a) The coal shall be stored only in designated stock yard with dust control measures viz. wind screen of height at least 2m above the of coal stock, made of fabric/HDPE, water sprinkler assignment, green belt of at least three layers of suitable trees and scrubs and (b) the coal from the ships shall be conveyed through closed conveyor to the coal stock yard. The conveyor shall be seamless without joints/transfer points.
 - ii) **Justification:** With regard to additional condition mentioned at (i) (a) above, PP submitted that dust control measures such as water sprinklers and greenbelt are already in place. The nearest habitation is more than 5 km away in North and NW direction of the Port. The predominant wind direction is NW to SE and the nearest habitation in this downwind wind direction is near Kandla Port at approximate distance of 13 km. Thus, there would be no impact on habitation due to operations at the back up area. With regards to SPM, EIA report mentions that the concentrations approach baseline levels within 1000 m of the discharge location (i.e. back up area. The ambient air quality monitoring done near habitation shows that compliance to

NAAQ standards. These results have been submitted to concern RO of MoEFCC as part of the compliance report. Regarding additional condition at (i) (b) above, PP submitted that alignment of conveyor decides the need of transfer towers. The transfer towers are enclosed system, equipped with sprinkler system to control fugitive emissions, if any. The conveyor belt is installed to handle the cargo as per sanctioned capacity. Hence, these conditions may kindly be removed.

3.18.2 Observations and Recommendations: The EAC after deliberations on the above mentioned submissions of the PP, opined that there is hardly any green belt. The plantation at the project site is very young. The coal has already arrived. It was of the view that wind screens are a necessity. Thus the request for removal of additional condition stipulated in para (i) (a) and (b) above were not accepted. However, the EAC agreed to modify additional condition at para (i) (b) above and suggested stipulating this condition as under:

The coal from the ships shall be conveyed through closed conveyor to the coal stock yard. The conveyor shall be seamless without open joints/transfer points.

- 3.19 Establishment of intake and outfall facilities of proposed 2x660 MW Coal Based Power Thermal Plant at village Kaj-Nanavada, Kodinar Taluka, Dist- Gir Somnath, Gujarat by M/s Sharpoorji Pallonji Energy (Gujarat) Pvt. Ltd. CRZ Clearance Further consideration [F.No.11-5/2015-IA-III]
- 3.19.1 The PP (M/s Shapoorji Pallonji Energy (Gujarat) Pvt. Ltd.) made presentation and informed EAC that the project proposal has earlier been considered by EAC in its 147th meeting held during 23rd-24th April, 2015. The EAC asked PP to submit revised report after rectifying the error in data given for sampling points of water body. It was also suggested to verify that observations of the report are based on authentic and credible input data. For determination of dilution distance, the PP should consider worst case scenario. The PP further informed that considering locations of intake as 20°42'54.0"N 70° 44' 54.5" E. Outfall as 20°42'47.3"N & 70°45'46.3" E, with sea water intake of 13193 m³/hr, discharge of 8885m³/hr at temperature 5°C above ambient sea water temperature of 30°C, it is observed that in neap tide within 350 m, the salinity will be 0.42 ppt above ambient and the sea water temperature will be 0.2 deg C above ambient. During spring tide within 400 m the salinity will about 0.35 ppt above ambient and within 290 m, the temperature will be about 0.2 deg C above ambient. As the predicted changes in salinity and temperature are insignificant, these will not result in any adverse impact on marine ecology. The details for mathematical model for dilution distance were also presented before the EAC.

3.19.2 Observations and Recommendations: From the details provided for

mathematical modeling for dilution distance, the EAC observed that predicted and observed tide elevations has been superimposed for the reference data of March. 2006. The NIO which has prepared the report should have not done such comparison of observed and predicted tide for March 2006. The NIO should perform up to the standards of their accreditation. EAC suggested the Ministry may also write to these agencies to carry out the studies based on credible and authentic reference data. The EAC after deliberation recommended granting CRZ Clearance to the proposed developmental activity subject to the following specific conditions:

- i) The marine disposal shall meet Gujarat State Pollution Control Board (GSPCB) norms.
- ii) The outlet quality as well as the sea water near the outfall shall be monitored especially for temperature and salinity regularly. This shall also include monitoring of water quality, sediment quality and biological characteristics covered in the Environmental Impact Assessment studies. If the impact of temperature and salinity is found significant in future, necessary remediation measures shall be taken. A report in this regard shall be submitted to concerned Regional office of this Ministry and to GSPCB along with six monthly monitoring reports.
- iii) All the mitigation measures suggested in the EIA report and the marine environment management plan prepared as the study of NIO, Goa shall be implemented and the compliance for each of these measures shall be submitted to concern RO of this Ministry along with six monthly compliance reports.
- iv) The entire stretch of intake and outfall shall be buried pipelines except at pumping station which will be properly fenced and the station would be manned round the clock. No open channels/cutting is permissible in CRZ area.
- v) Markers shall be installed at every 30m to indicate the position of the line. Regular patrolling of the pipeline needs to be done. This will help in identifying any activity that have the potential to cause pipeline damage or to identify small leaks whose effects are too small to be detected by instrument.
- vi) There shall be display boards at critical locations along the pipeline. This will ensure prompt information regarding location of accident during any emergency. Emergency Information board shall contain emergency instructions in addition to contact details.
- vii) The effluents shall be discharged through multiple ports at the outfall for proper thermal and salinity dispersion.
- viii) Appropriate arrangement shall be put in place at the intake well to avoid fish entrapment.
- ix) The project shall be executed in such a manner that there shall not be any disturbance to fishing activity. It shall be ensured that there is no displacement of people, house or fishing activity as a result of the project.
- x) Construction activity shall be carried out strictly as per 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. Construction of resort building at R.S. No.48/2, 48/3A, 48/3B1, 3.20 48/3B/2 at Pooranankuppam Revenue Village Ariyankuppam Commune, Panchayat, Pondicherry by M/s Deedi Resorts Pvt. Ltd. -CRZ Clearance - Further consideration [F.No.16-9/2006-IA-III] **3.20.1** The PP made a presentation and informed that: i) **Proposal:** The proposal is for amendment in condition stipulated in the environmental clearance awarded to the proposed project to the effect that the PP shall be allowed to tap ground water. The matter was earlier examined by EAC in 128th Meeting and the decision was deferred seeking clarification regarding validity of NOC from Pondicherry Ground water Authority, office memorandum concerned authority on restriction of ground drawl of more than 10 KLD within 06Km from the coast and the study on likely impact/ sea water intrusion due to drawl of water 33KLD and also carry out ground water modelling. 3.20.2 Observations and Recommendations: The EAC noted that Report of State Groundwater Unit, State Department of Agriculture has reported intrusion of sea water due ground water drawl. It is destroying the fresh water source. The Committee opined that the study report submitted by the PP should thoroughly be examined by the EAC's member from Central Ground Water Board (CGWB). The PP was asked to submit the study, ground water sampling data to the expert from CGWB. The EAC deferred decision on the item for want of comments from the Expert member from CGWB. 3.21 Development of All-weather Greenfield Jetty at Nandgaon, Taluk-Palghar, Dist. Thane, Maharashtra by M/s JSW Infrastructure Ltd. -Environmental & CRZ Clearance - Further Consideration - [F.No.11-85/2011-IA-III 3.21.1 i) The PP (M/s JSW Infrastructure Ltd.) made presentation and informed that the proposal for development of All-Weather Multi Cargo Captive Jetty in Green Field site at village Nandgaon, Taluk-Palghar, District Thane, Maharashtra was examined earlier by EAC in the 147th meeting held during 23rd-24th April, 2015. The EAC had sought information basis of ranking / assigning numerical values to various parameters used in matrix for site selection, Dredging Plan and details of plants to be used for development of Green belt. ii) Basis of ranking and assigning numerical values to various parameters used in Matrix for site selection and evaluation procedure for alternative sites were explained to EAC. The PP informed that alternative sites for the proposed Greenfield Jetty (Port Phase I) were examined in the hinterland. Accordingly, coast line from the Mumbai in the south to the Gujarat border in the north was studied. However, choice limited to the Maharashtra coastline as it is near to Mumbai. Besides, favourable concession terms are offered from the Maharashtra Maritime Board. Therefore, of the various alternatives examined along these coastlines only three options as below were considered for the final evaluation of the site.

- a. Lagoon Harbour near Wadhvan Point
- b. Outer Harbour to the North of the Virar Creek
- c. Outer Harbour at **Nandgaon**
- ii) The positive attributes associated with Wadhvan point are no breakwater construction, good founding soil condition, reduced the cost and relatively deeper contours (depth) located close to shoreline. However, the drawback associated with this site includes rocky soil condition, blasting required for creation of harbour basin, close proximity of Dahanu Eco-sensitive area (~7 km) and private land required to be acquired for the development.
- iii) The positive attributes associated with Virar Creek Site includes no exposed rocks, soft strata, dredgeble and deeper depth in the near shore region. The draw backs are i.e. site is close to Sanjay Gandhi National Park and MMR region, which may pose traffic constraints on secondary and primary evacuation routes and high siltation rates due to creek sediment load. The drawbacks associated with the proposed project site are i.e. deep water is far from the shore and the length of breakwater will be more. The positive attributes for this sites are namely that the site is located on an embayment with a stable shoreline, the foreshore area is rocky with a wide, rocky intertidal zone, '0' m contour is about 1.5 km from the shoreline, coastal harbour is proposed with reclaimed area for port backup, proximity to rail and road network, land is to be acquired for road and rail access only.
- iv) Regarding dredging plan, PP informed that total quantity envisaged for dredging is 10,000,000m³. The number of berths considered for dredging is 10. The design depth is 15.0 m below CD. The Channel width will be 200 m with Turning circle of 700 meter in diameter and channel length of 3000 meters. It is proposed to deploy one Cutter Suction Dredger, which is suitable for near–shore, low draft (-18 m CD) dredging, one Backhoe Dredger supported by dumb/SP barges, which is suitable for hard strata/rock and two Trailer Suction Hopper Dredger, which are suitable for channel dredging up to (-22 m CD). It is proposed to complete the dredging works in one fair weather season i.e. during October to March.
- v) Regarding plants to be used for green belt, PP informed that species selected are from working plan of Forest Department, Dahanu and in consultation with the concerned Regional Forest Officer. The outer boundary will include plantation of Pine/Suru, Asopalav, Chinch/Imli. The Middle fringe will have Mango, Shirish, Jambul The Inner area will have Gulmohur, Karanj, Ghaneri and Morning glory. This is proposed to have evergreen/deciduous, indigenous, and

ecologically compatible and agro – climatically suitable green belt. The belt will be hardy, dust capturing and wind breaking.

3.21.2 Observations and Recommendations:

- i) The EAC informed PP that the Ministry has received a complaint alleging that the project has been opposed by the farmers of 40 villages in vicinity to the proposed project sites. EAC requested to provide details of issues raised during Public hearing and the proposed environment management plan. PP informed that during the public hearing they were not provided with the opportunity to describe about the project and benefits from the project offered by the proponent to villages. The major issue that emerged during public hearing are:
 - (a) Unemployment due to loss of livelihood sources based on the fishing activities/business;
 - (b) fishing net will be destroyed due to vessel movement in the Port area;
 - (c) blockage in the creeks and it will impact on the fishing activity
 - (d) development of roads and widening of existing road is proposed, the private land be acquired for the purpose;
 - (e) land acquisition on large scale is propose, thus displacement of fisherman community;
 - (f) reclamation may change the water current direction, may cause destruction and risk to the villages in coastal area;
 - (g) breakwaters will be constructed on northern as well as southern side, thus the tide flow would be difficult to analyze and may pose danger to the fishermen;
 - (h) shoreline change in terms of erosion and accretion in the proposed project area;
 - (i) intertidal zone is most fertile and rich biodiversity that will be destroyed due to land reclamation;
 - (j) project require 800 m3/day of water during the operation phase. But, there is no water supply either in Nandgaon or the nearby villages; and
 - (k) spillage of oil and waste water will occur during the ship movement, due to this the fish activity will be destroyed.
- ii) The EAC enquired about the activities proposed under the Corporate Social Responsibility (CSR). In response, PP informed that the CSR activity is planned for the social benefit of the local fisherman and farm community. The adequate job opportunities, both direct and indirect would be created for the local youths by the way of implementation o this project. Preference for small jobs will be given to the locals based on their qualification and expertise. Education sector will be improved with the adequate CSR plan. Free scholarships will be given to the poor students. Regarding other issues raised during the hearing by local fishermen, PP informed that vessels will move in well-defined channels marked with buoys to avoid any damage to fishing nets. The spillage of oil and waste water is

prohibited and would be monitored by the DG shipping and MPCB. As per modelling study by CWPRS, Pune no adverse impact on fishing active or shoreline is envisaged. The construction of the breakwater will create tranquil conditions inside the harbor by dissipating the higher wave energies. The breakwaters do not have any other impacts on the tidal heights or any other marine parameters. The road and the rail corridor will be developed without affecting the present roads. The present roads wherever necessary would be strengthened and widened through the Public Works Department. The land requirement for such roads is much less and if any private land is involved, it will be purchased from the land owners directly through negotiations. Even if the government acquisition is necessitated, providing adequate compensation would be JSWIL's moral obligation.

- iii) The Committee after deliberations recommended granting environment and CRZ Clearance to the proposed development activities subject to the following specific conditions:
 - a. The dredging shall be as per committed Dredging Plan and it the dredging works shall be completed in one fair weather season i.e. during October to March.
 - b. A reclamation embankment shall be constructed before the reclamation and all the reclamation material shall be dumped inside the embankment so that no general turbidity in the area is created.
 - c. There shall be no discharge untreated effluent in marine water.
 - d. The project proponent must take up and earmark adequate fund for socio-economic development and welfare measures as proposed under the CSR Programme. This should be taken up on priority.
 - e. The fishing activities by the fishermen living near to the project site and along the creek should not be hindered and mechanisms may be evolved for the movement of shipping boats vis-a-vis shipping activities.
 - f. The project proponent will not cause any destruction to mangroves during the construction and operation phase.
 - g. The project shall not be commissioned till the requisite water supply for operational phase is arranged by MIDC or by the PP from other sources. There shall no withdrawal of ground water in CRZ area.
 - h. No product other than permitted under the CRZ Notification, 2011 shall be stored in the CRZ area.
 - i. The project affected people if any due to the land acquisition should be rehabilitated or compensated as per the norms laid down by the concerned agency of State/ Central Government.
 - i. Stack yard shall be provided with water spraying system.
 - k. As committed, a windshield with a wire mesh fencing with fast growing creepers up to a height of 14 m around the coal/other bulk stack yard shall be provided for control of wind generated dust.
 - 1. Wagon loading system will be complying with the zero emission

standards.

- m. Installation and operation of DG sets shall comply with the guidelines of CPCB.
- n. The PP shall undertake the environmental monitoring programme as committed in the EIA study.
- o. Necessary arrangements as committed under the EIA study 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/CRZ area.
- p. 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.
- q. All the mitigation measures suggested in the EIA report and the marine environment study of CWPRS, Pune shall be implemented. The compliance for each of these measures shall be submitted to concerned SPCB and RO of this Ministry along with six monthly compliance reports.

In addition the PP was advised to submit to the Ministry the revised EMP to meet public concern. The plan should include provisions for compensation to fishermen in case of damage to their fishing nets and other relevant measures suggested in the study being conducted by CMFRI. The Ministry may take appropriate decision on the complaint received regarding this project before granting the clearance to the proposed project based on the revised Plan submitted by the PP.

- 3.22 Expansion of the Dharamtar Jetty facility at Dolvi, Raigad, Maharashtra by M/s JSW Dharamtar Port Private Ltd Environmental & CRZ Clearance Further Consideration [F.No.11-79/2013-IA-III]
- 3.22.1 The PP (M/s JSW Dharamtar Port Private Ltd.) made presentation and informed that the proposal is for expansion of the Dharamtar Jetty facility at Dolvi, Raigad, Maharashtra by M/s JSW Dharamtar Port Private Ltd. The matter had earlier been examined by EAC in 147 meeting held during 23-25th April, 2015. The EAC had deferred decision and asked PP to provide additional information. Point wise response presented by the PP are as follows:
 - i) **Provide details of the plots without mangroves**: The PP presented Google map showing the Plots of the Dharamtar Jetty facility. As per the village cadastral level map presented before EAC, the proposed jetty facility is lying on the land parcels.
 - ii) Specify changes in hydrodynamics of affected water body due to blocking effect of the piles on the river water course: In this regard PP informed that mathematical modelling has been done to compute the flow hydrodynamics near the proposed project location,

compute the current and other associated parameters in order to determine the likely effect on the shoreline of the creek and local effect due to the proposed Jetty on the estuarine hydrodynamics and morphology. All modelling for the hydrodynamic study was carried out using DHI's model suite for two dimensional (2D) hydrodynamic modelling, MIKE 21 Flexible Mesh (FM). There were four boundaries defined for the global model, namely, north, west, south and downstream Dharamtar creek. The other boundaries of the creeks joining the Dharamtar creek were considered closed, without appreciably affecting the end result. The distance of these boundaries was large enough to enable simulation of a flow regime without affecting the results. The tidal levels at Worli Point and Revadanda were used to define north and south boundaries. The global flow model was calibrated comparing the current data collected at four sites. The comparison of the results before and after the development the following has concluded the following:

- a. The pile foundations have no effect on the flow hydrodynamics of the water body due to its apparent blocking effect.
- b. The model was then simulated with 50 m wide reclamation behind the proposed berth. The comparison indicated that there is about 8 % change in the flow velocities in the creek due to this. In general 10 % variation on the hydrodynamic parameters is considered within the acceptable limits as per the standard practice. Therefore it can be construed that the changes in the hydrodynamics due to the reclamation is within limits and acceptable.
- c. In conclusion it could be noted that while there is no effect of the piles on the flow hydrodynamics, the 50 m reclamation is only marginal and in acceptable limits.
- iii) Proposed construction methodology along with details of foot prints of construction machinery on the ground: The PP informed that Cantilever Gantry" or "Cantilever Construction method" will be adopted. The berthing structure for handling 8000 DWT barges will include three open piled structures with 1 m diameter of piles. The Piles will be connected with a network of beams and deck slab. The berthing face will consist of R.C. Fender Wall supported on Piles. All engines/winches on the piling gantry will be acoustically protected to reduce noise. The piles on the berth approach will have span length of 17 m & 12 m to completely avoid underlying mangroves.
- **3.22.2 Observations and Recommendations:** The EAC after deliberation on the information provided by the PP recommended granting EC subject to the following specific conditions:
 - i) No mangroves shall be cut during project implementation and utmost care shall be taken to conserve them.
 - ii) There shall be no disposal of dredged material into the sea, it shall be reused for reclamation as well as for enrichment of the shore based on its characteristics, as committed.

- iii) Water shall not be abstracted from any surface or ground water body. The wastewater from the washing and other construction activity shall be treated to meet the prescribed norms and shall be reused. There shall no discharge of untreated effluents into the marine environment.
- iv) Adequate scour protection shall be applied to prevent damage due to scouring and bathymetric survey will be carried out to ensure that any accretion creates no risk to navigation/sediment transport at the Jetty.
- v) The PP shall undertake the environmental monitoring programme as committed in the EIA study. This shall also include continuous measurements of underwater vibration and noise levels by installing appropriate measuring instruments immediately at Piles and thereafter at a distance of 2Km from that Piles.
- vi) Necessary arrangements as committed under the EIA study 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/CRZ area.
- vii) Ships/barges will not be allowed to release any oily bilge waste or ballast water in the sea. Any effluents from the Jetty which have leachable characteristics shall be segregated and recycled/disposed as per MPCB guidelines.
- viii) Location of DG sets and other emission generating equipment shall be decided keeping in view the predominant wind direction so that emissions do not effect nearby residential areas. Installation and operation of DG sets shall comply with the guidelines of CPCB.
- ix) All the mechanized handling systems and other associated equipments such as hoppers, belt conveyors, stacker cum reclaimers shall have integrated dust suppression systems. Dust suppression systems shall be provided at all transfer point.
- x) A windshield of appropriate height shall be provided around the coal/other bulk stack yard for control of wind generated dust.
- 3.23 Development of proposed Shipyard-cum-Minor Port Complex at Kattupalli Village Thiruvallur District, Tamil Nadu by M/s L&T Ship Building Limited Amendment in Environmental and CRZ Clearance [F.No.10-130/2007-IA-III]
- **3.23.1** The PP (**M/s L&T Ship Building Limited**) made a presentation and informed that:
 - i) **Proposal:** The proposal is to seek amendment in Environmental/CRZ Clearance granted by erstwhile Ministry of Environment and Forest) vide Letter No. 10-130/2007-IA.III dated 3rd July, 2009. The validity of aforesaid clearance was extended for the facilities yet to be developed including future dredging and amendment for revised Port Traffic on December 17, 2014 along with amendment to handle revised cargo traffic at the Kattupalli Port. The proposed amendment is for extension of Dredge Spoil Disposal site towards deeper water to

- accommodate future dumping requirements supported with dredge spoil disposal. The proposed extended dumping ground dimension will be 4.2Km x 4.2Km.
- ii) **Location:** The existing dredge spoil disposal site, which has a size of 1.0 x 1.5 Km is located about 4Km NE of the project site. The water depth varies between 25 to 30 m. The site will be between 29m and 55 m contour at a distance of about 5.9 Km from Harbour area. The extended dumping site will have the following coordinates:
 - a. 13°19'00.17" N and 80°26'50.71" E
 - b. 13019'22.04" N and 80024'32.90" E
 - c. 13°21'37.00" N and 80°24'55.22" E
 - d. 13°21'15.13" N and 80°27'13.05" E
- iii) **Justification:** The development plan as envisaged during EIA study for which Environmental/CRZ Clearance was obtained has not been completely developed due to economic slowdown. Under the current business plan of PP, immediate Dredging of about 2.5 MCM in the MFF area up to (-12 m) is envisaged. The dredging of the rest of the areas will depend on the growth and business scenario. The dredged material is proposed to be disposed in the Offshore dumping site in a phased manner will be as under:
 - a. immediate dumping (2015) of about 2.5 MCM from dredging the MFF Area (from (-) 6 m to (-) 12 m);
 - b. dumping of 2.5 MCM (2016-17) from the dredging the same MFF Area (from (-) 12 m to (-) 15 m);
 - c. dumping of 5.0 MCM from dredging the Shipyard Area (from (-) 10 m to 15 m) in a phased manner depends on growth scenario and business requirement; and
 - d. dumping of another 6.0 MCM from dredging of Port areas from (-)14.0 m to (-)16.7 m and Navigation Channel from (-)14.0 m to (-)17.5 m as per Master Plan depends on growth scenario and business requirement.
- immediate iv) Considering the and future approved dumping requirement, PP has analyzed the adequacy of existing dumping site Accordingly Modelling studies were carried out and it is proposed to relocate the dumping site (East of existing dumping site) towards deeper water (between 30 m to 55 m contour) in order to maintain the natural depth with minimal variations. It has also been verified through the modelling studies that the dumping at the new location will not have any detrimental effect on Kamarajar Port. The new location is also better positioned from the navigational point of view for vessels approaching and leaving Kattupalli from the North. Hence, the proposal is to seek the amendment.
- v) Marine soil quality analysis of the material to be dumped has been carried out in terms o its toxicity (Cadmiuim. Mercury, Copper, Lead, Iron and Zinc). The concentration of these toxic metals is low and the material is safe or disposal.
- vi) There will be short term and localised impact on marine water quality. The sediment concentration will reach to ambient value in 2.5 hours after dumping.

- vii) Modelling reveals that the coarse materials, which comprise the major portion of he dumped sediments, settle within dumping ground with thickness less than 0.3 meter.
- viii) There is no spreading of dredge spoil towards the navigation channel of Kattupalli Port/ Kamarajar Port or the coastline due to the dumping of dredged spoil at the proposed dumping site.
- **3.23.2 Observations and Recommendations:** The EAC after deliberating on the information provided by PP deferred decision and suggested PP to submit the following additional information:
 - a) Explore the possibility of disposal on the port instead of disposal on the existing dumping site by the way of its extension;
 - b) Identify the location likely to have more erosion and explore the dumping of dredged spoil there;
 - c) Whether previous dumping was as per the plan committed at the time of obtaining the EC/ CRZ clearance for the project; and
 - d) Data for pre-dumping and post dumping marine water quality, marine sediment quality and quality of marine ecology.
- 3.24 Common Hazardous Waste Treatment Storage & Disposal Facility located at Kutch, Gujarat by M/s Saurashtra Enviro Projects Private Limited –Expansion in ToR [F.No.10-45/2007-IA-III]
- **3.24.1** The PP made a presentation before the EAC and informed that:
 - Saurashtra Enviro Project Limited (SEPPL) has developed an Integrated Common Hazardous Waste Treatment Storage & Disposal facility with incineration plant having capacity of 10 Million Kcal/hour, Secured Landfill cell with 1.2 Million Metric Ton (MMT), 500 KLD Forced Evaporation System and Allied Infrastructure facility at Village: Juna Kataria and Lakadia, taluka: Bhachau, District: Kutch, State: Gujarat.
 - ii. The existing project, company has already obtained EC vide MoEF letter no. EC-10-45/2007-IA-III dated 15th April 2008.
 - iii. SEPPL has now proposed to develop additional 5MMT of secured land fill cell on remaining 128 acres of land.
 - iv. Against expectations of 250000 MT disposal in 5 years, company has received around 500000 MT for disposal in secured landfill at existing facility. Hence company proposes to develop additional capacity of 5 MMT secured landfill facility.
 - v. Proposed project is only for expansion of landfill facility.
 - vi. The source of water is existing GWIL/tanker water and no additional water consumption due to proposed expansion.
 - vii. Waste water mainly generate in the form of leachate from the operation of landfill cell. The same shall be treated in the forced evaporation system or utilized for sprinkling on landfill cell. The total quantity of leachate generation will not increase. Domestic

- waste water generated shall be treated in the existing sewage treatment plant and later shall be reused for gardening purpose.
- viii. 100% area converted into green belt after development of secured landfill cell.
 - ix. No Eco- sensitive areas in the study area. However Son-River approximately 1.0km East (this river is flowing from south to north)
 - x. Investment/Cost: The project cost is 40 Crores
 - xi. Wildlife issues: There are no National Parks, Wildlife sanctuary, biosphere reserves found in the 10km buffer zone.
- xii. Forest Land: No forest land is involved in the project.
- xiii. There are no court cases/violations pending with the project proponent.
- xiv. The 1st Public hearing was held on 04.01.2008. During the development of the existing project, PP has done the public hearing for total area of 190 acres, from which 62 acres land is considered for existing project. Therefore PP sought exemption from PH for the proposed expansion.
- **3.24.2** The EAC after detailed deliberations recommended the project for grant of standard TOR as per **Annexure-II**. As regards exemption from public hearing, the EAC was of the view that Public Hearing is necessary in view of the four time increase in land fill capacity.
- 3.25 Setting up of Marine facilities at Salaya, Khambhalia, Gujarat by M/s Essar Bulk Terminal Salaya Limited Amendment in Environmental and CRZ Clearance [F.No.10-52/2007-IA-III]
- **3.25.1** The PP (M/s Essar Bulk Terminal Salaya Limited) made a presentation and informed that:
 - i) **Proposal:** The Ministry vide letter No. 10-52/2007-IA.III dated 17.08.2009 and 25.11.209 has granted EC to Essar Bulk Terminal Salaya Limited (EBTSL) for setting up Marine Terminal as under:
 - a) Dry Bulk Cargo Jetty as well as drawl of seawater and release of return seawater;
 - b) Liquid Cargo Jetty;
 - c) Single Point Mooring (SPM) with associated Crude Pipelines. The proposal is for bifurcation of the aforesaid Environmental & CRZ Clearance.
 - ii) **Justification:** The Kandla Port Trust (KPT) has mandated that project be executed by a Special Purpose Company (SPC) where the user of the facility i.e. Essar Oil Limited must be member of consortium/ SPC. As per the requirement of KPT, a SPC was formed by the Vadinal Liquid Terminals Limited for executing the SPM and associated Cruse Pipelines project. VLTL has signed an agreement with KP for SPM-2 and associated Crude Pipelines on 16.04.2015. There is no change in the location of SPM-2. Thus, it is proposed to

| | bifurcate the EC and CRZ Clearance between M/s ESSAR Bulk Terminal (Salaya) Limited and M/s Vadinar Liquid Terminals Limited (VLTL) as explained above. Only change in ownership is sought as there is no change in location, technology, process and environmental impacts as approved by the Ministry while granting EC in August, 2009. | | | | | |
|--------|---|--|--|--|--|--|
| 3.25.2 | Observation and Recommendations: The EAC opined that the proposed taker i.e. M/s Vadinar Liquid Terminals Limited was neither present nor has submitted proposal before the Ministry. Thus, the request for bifurcation is not accepted. Further, it is an administrative issue. The Ministry may take appropriate decision on the receipt of request from M/s Vadinar Liquid Terminals Limited along with NOC from the KPT. | | | | | |
| 3.26 | Construction of 4th container terminal and marine container terminal at JN Port by M/s JNPT – Amendment in the Environmental Clearance [F.No.10-81/2008-IA-III] | | | | | |
| 3.26.1 | The Committee deferred decision on the item since the proponent did not attend the meeting. | | | | | |
| 3.27 | Development of multi-product SEZ at Khed District Pune, Maharashtra by M/s. Khed Economic Infrastructure Private Ltd. – Extension of validity of Environmental Clearance – [F. No.21-944/2007-IA.III] | | | | | |
| 3.27.1 | The PP made a presentation before the EAC and informed that: | | | | | |
| | i. The Proposal is for Development of Multi Product SEZ at Khed, District Pune, Maharashtra by M/s Khed Economic Infrastructure Private Limited- Extension of Validity of Environmental. | | | | | |
| | ii. The project is located in Taluka Khed and Shirur, District Pune, Maharashtra (Latitude 18º49'49" N and Longitude 73º59'28" E). iii. The Ministry of Environment and Forest, Government of India (GoI) had granted Environmental Clearance (21-944/2007-I-A. III, Dated 20/05/2010) to the Project and on basis of which the Maharashtra Pollution Control Board has accorded Consent to Establish the Project. | | | | | |
| | iv. Due to economic slowdown since 2008, demand for industrial land was very low and accordingly investment in the development activity of the project was rationalized and being taken up in phased manner. | | | | | |
| | v. During the recent past, there has been considerable improvement in the economy thereby entrepreneurs are looking for land | | | | | |
| | parcels for their expansions plans. | | | | | |

| | further period of 5 years. | | | | | |
|--------|--|--|--|--|--|--|
| 3.27.2 | The EAC after detailed deliberations recommended the extension of validity of Environment Clearance for 5 years i.e., up to May 2020. | | | | | |
| 3.28 | Development of Six lane SPUR - Phase II starting from km 26.320 of Vadodara - Mumbai Expressway and terminates at km 24.416 of NH-4B in the State of Maharashtra (total length of 94.390 Km) by M/s NHAI- Extension of validity of ToR - [F. No.10-4/2013-IA.III] | | | | | |
| 3.28.1 | The PP made a presentation before the EAC and informed that: | | | | | |
| | MoEFCC vide letter dated 21.02.2013 finalised the ToR during 120th Meeting of EAC held on 28th – 29th January, 2013 for SPUR project of total length of 94.390km. | | | | | |
| | ii. The said project is a Greenfield alignment involving diversion of forest land, falls within 10km from the boundary of Tungareshwar WLS and Larnala WLS and is passing through Matheran Eco- sensitive zone. | | | | | |
| | iii. The draft EIA has been submitted to the concerned Regional Offices of the Pollution Control Board for conducting of Public Hearing. | | | | | |
| | iv. The land acquisition is also under process as per NH Act. v. The Matheran Eco-sensitive Zone Committee has granted NOC for development of SPUR vide letter dated 16th April, 2013 | | | | | |
| | vi. All the proposals for obtaining statutory clearance were submitted to the concerned authorities and are under process as per respective acts. | | | | | |
| | vii. The present request is for extending the validity of ToR so that various statutory clearances are obtained from the concerned authorities. | | | | | |
| 3.28.2 | The EAC on the basis of information presented by the PP appraised the proposal and recommended the Extension of validity of ToR up to 20 th February, 2017. | | | | | |
| 3.29 | Rehabilitation and upgradation of existing carriageway to 6-laning of Kanpur (Chakeri) to Allahabad (Km 483.687 to km 630.000) section of NH-2 in the State of Uttar Pradesh by M/s NHAI-Extension of validity of ToR – [F. No.10-12/2013-IA.III] | | | | | |
| 3.29.1 | The PP made the presentation before the EAC and informed that: | | | | | |
| | i. MoEF&CC vide letter dated 29.04.2013 finalised the ToR for the above mentioned project during 121st Meeting of the EAC held on 18-19 Feb, 2013 and issued additional ToR to be complied within two years. However these additional ToR could not be complied with as the Govt. of India had considered this project not to be six | | | | | |

- laned.
- ii. Govt. Of India, Ministry of Finance, Dept of Economic Affairs vide letter dated 13.08.2012 informed that the said project may not be considered as approved by the PPPAC as PCU is not over 25000 in this stretch of GQ. Accordingly, NHAI could not proceed for preconstruction activities, eg. Environmental Clearance, Forest Clearance, land acquisition, utility shifting and other statutory permissions for implementation of the project.
- iii. However, Govt. of India, Ministry of Finance, Dept of Economic Affairs vide letter dated 2nd January 2015 conveyed the grant of approval of PPPAC for this project. Thereafter the NHAI has initiated the process for pre-construction activities eg. Environmental Clearance, Forest clearance, Land acquisition, utility shifting and other statutory permissions for implementation of the project.
- iv. Draft EIA, EMP is already prepared and same has already submitted to the State Pollution Control Board for conducting Public Hearing as per EIA Notification, 2006. The dates for public hearings are scheduled in the first week of August 2015.
- v. The forest proposal has already been initiated and part 2 completed. Part 3 is under consideration by respective DFOs.
- vi. PP has requested for grant of extension of additional ToR for amending the Draft EIA/EMP after public hearing and submit the same to MoEFCC for EC for another one year ie. 29th April 2016.
- **3.29.2** The EAC on the basis of information presented by the PP appraised the proposal and recommended the Extension of validity of ToR up to 28 April, 2016.
- 3.30 Development of Nargol Port at Valsad District, Gujarat by M/s Cargo Motors Pvt. Ltd. Extension of validity of ToR [F.No.11-4/2013-IA.III]
- **3.30.1** The PP (M/s Cargo Motors Pvt. Ltd.)made a presentation and informed that:
 - i) **Proposal:** The Ministry has granted TOR to PP fordevelopment of Nargol Port at Valsad District, Gujarat vide Letter no. 11-4/2013-IA-III dated August 22, 2013. The proposal is to seek extension of validity o the TOR by one year.
 - ii) **Justification:** The EIA studies have been initiated according to the approved ToRs. The detailed project Report for the development of Port at Nargol is completed recently along with other necessary studies for Rail and Road Corridor. LNG was foreseen as a major commodity, a terminal was planned in the initial phase layout during the scoping stage and ToR was obtained from MoEF to handle LNG along with other cargos. However, the present study has shown that the foreseeable benefits of the LNG terminal will not be in the initial phases of development and therefore will be taken

- up at a later stage and necessary Environmental Clearance (EC) also will be obtained separately. Accordingly, LNG has excluded for the present Phase 1 and Phase 1A development of Nargol Port.
- iii) Based on the detailed studies on Rail/Road corridor development, it was concluded that existing road will be sufficient to cater Phase 1 and 1A port traffic and hence the dedicated road corridor for the Nargol Port will be developed in future.
- iv) Only the Rail line will be developed as a part of Phase 1 and 1 A development and the associated studies are in progress. As the development of rail line doesn't attract EIA notification, necessary clearances from the relevant authorities such as Department of Railways etc., will be carried out.
- v) The other additional studies for the project as required in the approved ToR and preparation of Draft EIA is under progress. In order to complete the additional studies as per ToR, to conduct public hearing and to submit the Final EIA to EAC, MoEF for CRZ/Environmental Clearance, PP has requests MoEF to grant extension of validity of ToR for another one year.
- vi) PP informed that mathematical model studies and other Studies as per approved ToR are nearing completion. The preparation of draft EIA is under progress. The extension of validity of ToR for another one year is required to complete the additional studies as per ToR, to conduct public hearing and to submit the final EIA for getting the requite clearance.
- **3.30.2** The EAC on the basis of information presented by the PP appraised the proposal and recommended the Extension of validity of ToR for one year ie. August 2016
- 3. 31 Mining of naturally deposited rare mineral at Vanagiri Village, Sirkali Taluk, Nagapattinam, Tamil Nadu by M/s Yes Yes Minerals Extension of validity of ToR [F.No. 11-67/2011-IA.III]
- **3.31.1** The PP (M/s Yes Yes Minerals) made a presentation and informed that:
 - i. **Proposal:** The Ministry has granted TOR vide letter No. 11-67/2011-IA.II dated 31.05.2012 to PP formining of naturally deposited rare mineral Vanogiri Village, Sirkoli Taluk, Nagapattinam, Tamil Nadu. The validity was extended further for one year. The proposal is to seek extension of validity of the TOR by one and half year so as to conduct Public Hearing and submit the final EIA for obtaining Environmental Clearance.
 - ii. **Justification:** The erstwhile MOEF vide letter dated 24.04.2012 granted ToR during 110th Meeting of EAC held on 5 7 March, 2012 for mining of naturally deposited rare mineral at Vanagiri village with one o the conditions to conduct public consultation. The Public hearing could not be conducted due to legal issues and the committee in the 134th EAC meeting held on 21-22 April, 2014 recommended the extension of ToR for a period of 1 year i.e. up to 20.04.2015.

- iii. Draft EIA report along with Executive Summary has been submitted to the office of District Environmental Engineer, TN PCB-Nagapattinam District in December, 2014 for conducting Public Hearing. The proposed mining has been approved by Indian Bureau of Mines, GoI vide dated 29.05.2007 and 05.06.2007. The Hon'ble High Court has ordered to proceed with the process of obtaining approval for mining the heavy mineral beach sand
- iv. PP has also obtained order from High court to proceed with the process of obtaining approvals for mining the heavy minerals beach sand.
- v. It was also informed that the request for extension was made on 05.04.2015 i.e., before the expiry of the validity of ToR
- **3.31.2** The EAC on the basis of information presented by the PP granted extension of validity of ToR up to 20.04.2016
- 3.32 Development of Municipal Solid Waste Management and Landfill site at Mouza -Bhuasuni, Daruthenga, Bhubaneswar, Odisha by M/s MSW Bhubaneswar Ltd. Finalization of ToR [F.No.10-18/2015-IA.III]
- **3.32.1** The PP made a presentation before the EAC and informed that:
 - i. The Municipal Solid Waste Management & Landfill site at Bhuasuni, Bhubaneshwar Dist. Khurda, Odisha is Located at 20°23'30.28" N 85°47'18.20"E
 - ii. The total area of the project is 61.485 acres.
 - iii. Water requirement is 150 KLD provided by Public Health Departments existing raw water pipeline from Munduli (Mahanadi River) to Khurda for which application has been submitted for clearance.
 - iv. 150 KWH of Power is required.
 - v. Investment/Cost of the project will be Rs. 12 Crore
 - vi. Employment potential is 35 persons
 - vii. Till date there is no notified eco-sensitive zone, but a draft notification has been given on 01.05.2015 regarding Chandaka-Dampara wild sanctuary eco-sensitive boundary. The site is 1.5 Km away from eco-sensitive boundary.
 - viii. Forest Land: No forest land is involved in the project.
 - ix. There are a litigation in high court
 - x. Benefits of the Project is Municipal Solid Waste Management & Cleanliness of the total commanding area of Bhubaneshwar & Cuttack Municipal Corporations.
- **3.32.2** The EAC after detailed deliberation recommended the grant of ToR subject to the following specific ToR in addition to the standard ToR at **Annexure II**:
 - i. The site is very close to Chandaka-Dampara Wildlife Sanctuary

- (1.5 km); so the impact of the project need to be examined carefully in terms of environmental sensitiveness of the area.
- ii. In the event of a cyclone, which is not uncommon in the area, what would be the backlash and impact on the protected area. While assessing the impact, the experience from the 1998 super cyclone should also be taken into account as the worst case scenario.
- iii. Justification for selection of proposed site and possibility for alternative site.
- iv. The PP should submit the map showing natural drainage pattern of the area to ascertain the possibility of leachate flow towards the wildlife sanctuary.
- v. Details of existing dumpsite in the area and status of pollution level. The same may also be ascertained from the SPCB.

3.33 Extension of Runway at Jammu Airport, Jammu & Kashmir by M/s Airports Authority of India – Finalization of ToR [F.No.10-19/2015IA.III]

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

- i. The proposal is for Extension of Runway at Jammu Airport, Jammu & Kashmir by M/s Airport Authority of India regarding Finalization of ToR. Located at Latitude 32°40'18.83" N to 32°41'58.57"N and Longitude 74°50'03.80"E to 74°50'32.32"E
 - ii. The total land requirement for extension of runway is 57 acres, out of which about 17 acres is under possession of army for which permission is being pursued. The remaining 40 acres of land is already under possession of Airport Authority of India (AAI).
- iii. Three water bodies. Niki Tawi River (0.2Km, NE), Wadi Tawi River (0.9 Km, NNW) and Rawi River (1.5 km, NE) are situated away from the project site.
- iv. 700 KVA of power is required and is provided by Power Distribution Department, J&K.
- v. The total water requirement for the entire airport is 193 KLD out of which 30 % is provided by Jammu Municipal Corporation (JMC) and the balance water requirement is met through two tube wells of AAI existing within the airport. As part of the extension only construction water will be required.
- vi. Investment/Cost of the project will be Rs. 92 Crore
- vii. A Reserve Forest near Dhinde Kalan village at about 6.5 Km, SW is situated away from the proposed project.

3.33.2 The EAC after detailed deliberation recommended the grant of ToR subject to the following specific conditions in addition to the standard ToR at Annexure- III:

i. The high tension electric line is passing through the proposed site. PP would insure that no operation is taken up before diversion of

- these power lines.
- ii. The PP would submit 'No objection Certificate' from Ministry of Defence.
- iii. The PP would submit details regarding existing water drainage pattern and possible blockage due to proposed activity.
- 3.34 Extension and widening of the Jetty at Neil Island, A&N Islands by M/s Andaman Lakshadweep Harbour Works Finalization of ToR [F.No.11-16/2015-IA.III]
- 3.34.1 The PP (Ministry of Shipping) while presenting their proposal listed at Agenda item No. 3.11 was informed by the members that the information/documents required for appraisal have not been received. The EAC deferred discussion on the item and suggested including this proposal in the agenda for the next meeting of EAC.
- 3.35 Development of multipurpose terminal with jetty (existing) for cargo handling, ship repairs using floating dry dock and ship breaking yard (small ships) at S.No. 42, H. No. 18 & 19, Village Katale (Jaigad Creek), Tal Guhagar, Dist Ratnagiri, Maharashtra by M/s Marine Syndicate Ltd. Finalization of ToR [F.No.11-17/2015-IA.III]
- **3.35.1** The PP (M/s Marine Syndicate Ltd.) made a presentation and informed that:
 - i) **Proposal:** The PP is proposing a multipurpose terminal with jetty (existing) for cargo handling, ship repairs using floating dry dock and ship breaking yard(small ships) at village Katale, Tal Guhagar, Dist Ratnagiri. The present proposal is to finalise the TOR for conducting EIA study for the proposed project.
 - ii) **Location:** The project site is at village Katale on north bank of Jaigad creek (Shastri River) in its inland waterways. This site is 3 nautical miles upstream from Jaigad harbour, and 4 nautical miles from sea mouth. The site is at 72 km from Ratnagiri and 52 km. from Chiplun city. This site is connected to Mumbai Goa National High Way No. 166 (old No. 17) at 42 km. near Sawarde towards Mumbai and at 52 km. at Niwali towards Goa. Sawarde Railway Station of Konkan Railway is at 40 km. from this site. Exact location of this multipurpose port terminal has Latitude and Longitude 170-17.40' N and 0730-16.60' E respectively.
 - iii) The proposed project has 3500 m^2 of water frontage for the use of cargo movement and ship repair work and will consist of development of following three types of facilities:- $\$
 - a. Cargo Shipment: Cargo shipment of Bauxite, Laterite, Coal, Fertilizers etc is planned. Total quantity for the same will be 0.2 million tons per year.
 - b. Ship repair work for small ships with Floating dry dock facility: Ship repair work by using steel floating Dry Dock will be carried out. Small ships, barges, tug etc upto 75 m length and 5 m

- draft will be docked on this floating dry dock. Around 24 to 30 ships every year will be attended.
- c. Ship breaking facility upto 150 m length & 5 m draft: The ship breaking facility for small ships upto 150 m length & 5 m draft is planned in separate zone very close to water frontage. Around 10-15 nos. of ships will be dismantled every year.
- iv) The PP has its own fore-shore land at village Katale, Tal Guhagar, Dist. - Ratnagiri on north bank of Jaigad creek. Total area 29030 sq.m. Approximately 7.25 acres is owned by PP and is included in the agreement signed with MMB for this multipurpose terminal. Total 3500m² water frontage having 100 m fore-shore length is already availed on lease from Maharashtra Maritime Board under five yearly agreements signed with MMB. This 3500m² water frontage is adjoining fore-shore land owned by the PP. This water frontage is granted by MMB to the company for use of multipurpose terminal for cargo movement and ship repair work. This water frontage is demarcated and covered in the agreement signed with MMB. The PP has asked for additional 5000m² water frontage with 140m fore-shore length for proposed ship breaking facility. Location of this new water frontage is very close to already availed 3500m² water frontage. This new 5000m² water frontage is also adjoining the fore-shore land owned by the company.
- **3.35.2 Observations and Recommendations:** The EAC observed that the validity of CTO mentioned in Lease letter is 30.06.2014. The PP made a statement that it has been extended up 2016. The EAC observed that lease letter produced before the Committee is time barred. The Committee further observed that the proposed project is near a Creek and therefore has potential for water blockage. EAC enquired about the conditions of the lease agreement with respect to the activities permissible under the lease agreement. The EAC deferred decision on this item and suggested PP to submit the Lease document.
- 3.36 Development of International Airport at Aranmula, Mazhuppaserry and Kidaganoo Villages, Kerala by M/s KGS Aranmula International Airport Ltd Finalization of ToR Further consideration [F.No.10-32/2014-IA-II]
- 3.36.1 The PP made a presentation before the EAC and informed that:
 - i. The EAC during its 147th meeting deliberated upon the proposal in light of the NGT Order dated 28.05.2014 and counter facts presented by the PP. After deliberations the committee advised the project proponent to submit point wise clarification on the issues raised by Aranmula Heritage Village Action Council, Central Office, Thekkenada, Aranmula, Kerala for consideration by EAC. The point- wise response is as follows:
 - a. National Green Tribunal in its judgment dated 28.05.2014 has set

aside the Environmental Clearance given to the KGS Group. The Tribunal made it clear unequivocally that the proposed project for International Airport at Aranmula will affect the ecosystem and social life of people adversely. The Tribunal observed that the Project site is a Paddy field and a Wetland. The new (Revised) proposal is also situated in the same area and the Survey numbers of the land remain same. Thus, the observations of the Green Tribunal against the use of the project site holds.

Response: The NGT Order has to be appreciated in it's proper perspective. It only invalidated the Consultant, Enviro Care India Pvt. Ltd, due to non adherence of Accreditation Process. The NGT also held that the Public Hearing stood vitiated on grounds of procedure, i.e, non-adherence to Notice Period for the hearing. In respect of all other issues raised by the appellants, including AHVAC, the Tribunal dismissed the appeals. Hence, the contention of AHVA regarding Eco-System and social life being the subject matter of NGT judgment is not part of the judgment. None of Kerala Government's Approvals/Orders were set aside by the National Green Tribunal. It was further informed that the PP has currently engaged SGS India Ltd (QCI-NABET accredited for Category A Project) who is on the MOEF approved list for EIA related requirements. Public Hearing will be conducted by Kerala State Pollution Control Board, as per norms.

b. The Hon'ble Supreme Court of India summarily dismissed the appeal filed by M/s. KGS Aranmula International Airport Ltd., against the Green Tribunal Judgment on 21/11/2014 on the ground that the appeal has no merit.

Response: The Hon'ble Supreme Court of India dismissed the appeal at the Admission Stage itself. It was only a Summary Dismissal.

c. The information provided in Form I regarding the nature of the land is incorrect. The area comprise paddy fields, Purumboke land (Village Common Land). Natural Perennial Fresh water Streams and a Rivulet. The Paddy fields otherwise act as Flood Plain of the River Pampa during Monsoon Season. The flood water from the hilly areas and upper reaches collect in the vast Paddy field as well as hold the flood water from the River Pampa.

Response: The Project area comprises of barren waste land which has seen no cultivation in the last thirty years. There is a rivulet (Kozhithodu) which is crossing the proposed runway. Due to poor maintenance of the said land by the previous owners, thick weeds have grown which at places have blocked the flow of water, thus creating small water bodies. This rivulet has been dredged, at our expense, by the Minor Irrigation Dept., Govt of Kerala right upto Pampa river. There are Peramboke lands in the Project Area which the Govt. has notified through the Gazette, to transfer to us at prevailing

market prices. There is no paddy land in the Project Area nor any paddy cultivation taking place. The said land is barren, devoid of any productivity. Govt. of Kerala, Environment (B) Dept. vide their letters 565/B1/12/Envt dated 2.108.2013, 565/B1/12/Envt dated 13.09.2013 and 565/B1/12/Envt dated 01.06.2013 have reiterated our stand.

d. The land with the Airport Company is 313.48 Acres only. Many of the Survey Numbers mentioned in supporting documents are incorrect and verification to find out the ground truth will reveal the false claims.

Response: The Survey Numbers mentioned in Annexure 3 of Form 1 dated 17.12.14 have been furnished diligently under three categories, covering three villages. The categories are:

- i. Purchased land
- ii. Land to be purchased
- iii. Peramboke Land (All lands in Pathanamthitta Dist.)

The Villages are:

- i. Aranmula
- ii. Kidangannur
- iii. Mallapuzhaserry

Balance Land will be purchased at market rates and the Govt. Peramboke Lands will be registered in our favour as per Gazette Notification 04/2013/Trans dated 16th Jan 2013.

e. The document claimed to be NOC from the Kerala State Government is in fact the "In Principle Approval" of the then Cabinet. The application by the KGS Group to the Government clearly state that they require an NOC from the State Government. Many facts are concealed by the Proponent in Form.

Response:The Project has received Cabinet Clearance. The Govt of Kerala, vide the numerous Gazette Notifications/ Orders passed by them have cleared the Project. The very fact that the Project is a joint venture between the Project proponent and the Govt. of Kerala authenticates their clearance of the Project.

- i. G.O. No. 1262/2010 dated 08/09/2010 granting Go Ahead to the project.
- ii. LDF State Govt. directive to District Collector, Pathanamthitta on 12.11.2010 to expedite registration of Project Airport Land in favour of the Project Proponent.
- iii. G.O. P/54/11/ID dated 24/02/2011 Notifying 500 acres of Project Land as Industrial Land and establishing Single Window for clearance of State Govt. Approvals through this Window.
- iv. G.O. (Ms) No. 04/2013/Trans dated 16/01/2013. Wherein the Govt. undertook to pick up 10% Equity in the company and nominate a Director.

- v. UDF Chief Minister of Kerala, Shri.Oomen Chandy, letter to Union Environment Minister, DO.273/VIP/CM/2013 dated 16.09.13, requesting for expeditious grant of Environment Clearance.
- f. Various legal cases are pending in different Courts of Law against the KGS Aranmula International Airport Ltd., on land holdings and land conversion/Reclamation issues, which are not available in Public Domain, though links are given in FORM 1. The details and status of cases could not be corroborated due to non-availability.

Response: All the Court cases have been listed as Annexure 5 in Form 1. The cases are being suitably countered by the Central Govt., State Govt., and the Project Proponent.

g. The World famous Aranmula Sree Parthasarathy Temple (Sri Krishna Temple) is situated in the close vicinity (less than 500 Meters) of the proposed Aranmula Airport. The take- off path is directly over the Temple and reduction in the height of the Temple Flag Mast/Pole was suggested in the Airport Authority of India Report and in the Obstruction studies. The Dewasom (Temple) Ombudsman raised questions on any change in the Temple structures by the proposed Airport. The noise pollution and the vibration emanating from the Airport will be a threat to the very existence of the 1800-2000 years old archeological monument.

Response: The Aranmula Sree Parthasarathy Temple is at a distance of 900 metres from the Airport Perimeter Compound Wall. Regarding the Temple Mast, there has never been any request on our part to decrease the height or otherwise interfere with any structure of the temple.

The Company conducted an extensive Obstacle Survey utilizing the services of an Airport Authority of India's empanelled Surveyor. As per their report as well as recommendations of Airport Authority of India's Inspection Team which visited the site on 02.07.2012, the company has to displace the Runway No.16 by 285 m.

It is not uncommon throughout the world for aircraft to fly over temples, churches etc which are in the Approach Funnel. The Steering Committee, convened by the Ministry of Civil Aviation, had given approval to the Project only after considering all these aspects.

The Parthasarathy temple will not be affected by the operation of the airport or the aircraft. On the contrary, the airport will bring more devotees to the temple's fold, as the access becomes more convenient.

h. 73 MLAs of the Kerala Legislative Assembly and prominent citizens of Kerala were signatories of a memorandum (dated

13.07.2013) addressed to the then Hon'ble Prime Minister against establishing an Airport in the Heritage Village of Aranmula.

Response: Based on the aforesaid memorandum, the comments on the above representations/issues were sought from the Project Proponent and the State Government of Kerala. This Project Proponent replied vide letter dated 20.06.2011, 01.03.2012 and 23.08.2012. The comments were received from the Principal Secretary, Environment Department, Government of Kerala vide letters dated 26.06.2012, 01.06.2013 and 21.08.2013 and from the Additional Chief Secretary, Environment Department, Govt of Kerala vide letter dated 13.09.2013. As a matter of fact, the previous LDF Government have given various orders for establishment of this Airport including Industrial area notification.

Moreover, of the 73 MLAs, almost 69 were MLAs in the previous LDF Govt. which approved the Airport project. More importantly, some of the above cited MLAs were Cabinet Ministers which took the decision to grant approval.

The LDF Govt. was keen to announce the Airport Project during their 4th Anniversary celebrations.

i. The Report of the 13th Kerala Legislative Assembly Committee on Environment 2011-2014 dated 09.07.2012 raised serious questions on the conversion of wetland/paddy land and its ecological consequences. It recommended proper enquiry on various violations of Law involved in the Project.

Response:The Committee consisting of 8 Members of the Legislative Assembly under the chairmanship of Shri C.P.Mohammed, examined the environmental issues raised by the Airport and submitted their report on 12.06.2012. The Report has not expressed reservation about the Project. It dwells more on the Kerala Government not conducting sufficient studies before granting 'In Principle Clearance'.

The previous land owner Abraham Kalamannil had partially developed the land even before the passage of Kerala Conservation of Paddy Land & Wet Land Act, 2008. We have not done any development/construction on the Project Land after we purchased it. Moreover, recently Kerala Govt. has liberalized the regulations regarding regularization of paddy lands filled up before 2008, when the Kerala Conservation of Paddy Land Wetland Act was enacted.

j. The Report of the Comptroller and Auditor General of India on irregularities in Land Management by the Govt. of Kerala (Report No.6 of the year 2014) pointed out several serious irregularities in land allocation, illegal encroachment of a Natural Stream to the River Pampa and listed the violations

committed by various Departments of the Kerala State and the Central Government.

Response: The Company has purchased the Project Land at Market related prices. There has been no land acquisition by the Govt.

The Company has taken every care and caution to protect and preserve the natural habitat, flora and fauna, rivulets and such other natural features, in the best possible form, with least interference during the implementation of the Airport Project. The Government of Kerala after evaluating the whole project in toto, including developmental contribution, employment potential, better connectivity have granted 'In Principle Approval' and have taken a 10% stake in the company.

The property was purchased by us as completely reclaimed land, with no agricultural operations for the last 3 decades, as is certified by the Principal Agricultural Officer, besides the dry land and Rubber Plantations. The Principal Agricultural Officer has stated that it is not possible to convert or reclaim the land to its original position and agricultural activities cannot be started.

Regarding the stream 'Kozhithodu', the company has taken initiative, at its' expense, to restore the stream so that it flows freely into the River Pampa. The Minor Irrigation dept., Govt, of Kerala dredged the stream upto a length of 8 km.

Based on the various submissions made by the Company and reports from concerned officials regarding true state of facts, the Government of Kerala affirmed the decision regarding the necessity of establishment of Airport at Aranmula. It is also fully understood that the State has fully clarified the issue and that there were no irregularities whatsoever.

k. The Audit Report of the Comptroller and Auditor General of India on Revenue Sector for the year ended March 2014 (Report No.8 to Government of Kerala), unambiguously states that, Action taken explanatory notes not received from the Kerala Government on the irregularities in Land Management raised by the CAG in its report No.6 of the year 2014(item No.10). The punitive and remedial measures suggested were not accepted by the Government. This validate our stand that several illegalities and violations of law are committed by the Government in giving various sanctions and approvals to the KGS group.

Response:There are no illegalities and violations of law committed by both Governments (LDF & UDF) in giving sanctions and approvals to the KGS Group. We understand that all the issues raised by the CAG

has been suitably addressed by the State Govt. As a Policy decision and also from the various orders obtained from the State. Central Governments and also Government of Kerala's decision to take 10% equity in the project have already legitimized the project. The Government also agreed to transfer the Government Land within the Project area to the Company after levying the market Price as per the above said G.O. (Ms) No. 04/2013/Trans dated 16/01/2013. The Government of Kerala including the Chief Minister of Kerala requested the Central Government to proceed with the Airport Project, since the said Project is a major infrastructure Project and will boost the economy of the State. As a matter of fact, the Company has purchased the property from various land owners at market prize. After purchasing the land, the Company had not converted or reclaimed any part of land in its possession or made any attempt to fill up the land. The Company will start the implementation of the Project only after getting statutory clearances.

1. Kerala State Biodiversity Board in its Report recorded the problems of conversion of wetland and the resultant loss of biodiversity in Aranmula.

Response: The Company has purchased certain lands, which was already converted prior to enactment of Conservation of Paddy Land and Wet Land Act, 2008. Paddy lands can be reclaimed for public purposes as per the provisions of Kerala Conservation of Paddy Land and Wetland Act, 2008. Part of the said land has become degraded land, with water logging and invasive plant species affecting native bio diversity. The project site has no ecological or geographical significance other than it was a paddy field more than 30 years ago; and now a fallow water logged land unfit for Paddy cultivation, as is evident from the report of Principal Agricultural Officer. There are no Wet Lands in the Project Area. As per the Act, paddy land does not include wet land. Certain areas of the paddy field are lying as fallow and certain fallow land is lying as degraded water logged area. A paddy land, which is not cultivable cannot be left unutilized and would not ensure any benefit either to the Public or the State.

m. Salim Ali Foundation, Thrissur, Kerala in its Report studied in detail the ecological impact of project of the Flora and Fauna of the area. They oppose any conversion of wetland and paddy land in Aranmula.

Response: The recommendations made by the Salim Ali Foundation report do not reflect the actual prevailing environmental situation of Aranmula. It depends largely upon certain suppositions and conjectures in arriving at the conclusion and highly arbitrary and without any proper scientific basis.

Salim Ali Foundation appears to have taken up the study about the

environmental impact of Aranmula Airport suo-moto. Unfortunately, it is not a competent agency recognized by any of the Statutory Authorities. The Report by Salim Ali Foundation on the whole is too vague, superficial, incomplete and most unscientific. The report per se reflects distorted background of the project, whims and fancies of the researchers and does not explain the research methodology, which has been adopted for this study. This very fact makes this project report totally unscientific, biased and hence cannot be relied upon. The list of flora and fauna recorded as part of the study is all of generic nature, which is available throughout the State of Kerala and hence have no preservative value. The Salim Ali Foundation report does not disclose the size of the population, sample collected, sampling technique adopted and the reasoning for arriving at any definite conclusion, which are most crucial to any scientific report.

n. The displacement of people from the areas selected for the Project is inevitable and is evident from the Census and demographic data. The statement of the proponent that there is no displacement due to the project is not factual.

Response: The allegation to to the effect that displacement of people from the project area are totally baseless, false and far from truth. Not a single person has been evicted so far. The major portions of the land are rubber plantations and fallow lands. There will not be any forcible eviction, acquisition or displacement of any houses. If any displacement is envisaged, it will be through negotiation with the householder concerned. As directed by the Government, this Proponent is negotiating with land owners and land will be purchased in conformity with the prevailing market value in the locality. The Proposed Airport Area is limited to 490 Acres.

The Topography Map of the Master Plan will establish that displacement will be minimal and without any inconvenience to the displaced.

o. The benefits of the project are exaggerated and incorrect. For example, the annual pilgrimage season at Sabarimala is just for two (2) Months in a year. Maramon Convention, and other church related activities mentioned span one week only. After the global recession, the number of people opting for foreign jobs are declining, especially para medical hands.

Response: This project is an International Airport project for Public Purpose and is being set up in Aranmula, Pathanamthitta District, the Pilgrimage and Tourism Capital of Kerala situated between Kochi and Thiruvananthapuram. This project will boost a quantum jump in the field of tourism, pilgrimage, trade and industry and other spheres, thereby bringing sizable sum of revenue income to the State and Local Self Government departments, and shall be advantageous to the

numerous expatriates who are hailing from the Central Travancore. Airport location is close to multiple tourism destinations such as Kumarakom, the backwaters of Alappuzha and high ranges. This proposed Airport is only one hour drive from Sabarimala, the second largest pilgrim centre in India and fourth largest in the world with annual pilgrims of around Rs.5 Crores.

Sabarimala Temple is now open 140 days in a year. With the commissioning of the airport, pilgrims can complete darshan within a day. Devotees from any part of the country can fly in and fly out the same day.

This Airport facility will considerably reduce the traffic conjunction, road accidents etc pollution during the peak season. The majority of NRI passengers and NRK passengers of Trivandrum & Kochi Airport originate within 50Kms radius of this site. 40% of the Kerala air traffic is hailing from the influential zone of the airport. In the Budget Economic Survey 2014-15, Presented by the Hon'ble Finance Minister has highlighted our Aranmula airport as a Major Initiative of the Government of India. Recently, Cabinet Secretariat, Government of India, under the Honourable Prime Minister has placed this KGS Aranmula International Airport Project (PPP) as 149th item on the list of 650 projects in Project Monitoring Group (PMG) under Major Infrastructure for speedy implementation of the said Projects. The proposed Airport has got good connectivity from Allappuzha, Kottayam and Idukki districts. The Company has conducted a detailed study regarding the Traffic Analysis, Financial Analysis and Cost review report through Ernst & Young, reputed International Financial Consultants.

The Master Plan and Airport Consultancy is being provided by Naco of Netherlands, world leaders in Airport Design having designed and commissioned more than 550 airports throughout the world.

The Engineering/ Procurement/ Construction contract (EPC) is being entrusted to L& T Construction, leaders in Airport Construction.

p. The traditional Snake boat regatta during Onam festival and the Geo-tagged "Aranmula Metal Mirror" (Aranmula Kannadi) will be lost to the humanity with the destruction of the Aranmula Village.

Response: The Proposed Airport is not on the banks of River Pampa. The said Airport is situated at a distance of 900 m from the Pampa River and will be located at Aranmula, Kidanganoor and Mallapuzhassery Villages, Kozhencherry Taluk, Pathanamthitta District. Aranmula was declared by the UNDP as a "Heritage Village" due to traditional Snake boat regatta during Onam festival and Aranmula Mirror which are unique of this Village and not based on

environmental or physical features. This Airport project once commenced will showcase these unique cultural aspects globally and will ensure international visibility, ensuring tourist flow.

q. The River Pampa which caters the fresh water/drinking water needs of people downstream and kuttanadu (Paddy cultivating, low lying areas) of Kerala will have to bear the pollution load. The boring of Deep Wells and filling up of hectares of wetland which act as natural water reservoirs will aggravate the drinking water availability problem in the area.

Response:Kerala State has 44 rivers and all infrastructure projects are planned keeping the flow of river in mind. Pampa river is 176 km long. Since it flows through Aranmula town, these issues are being raised, without factual basis.

When the land was purchased from the original owner, the whole area was a wasteland with patches of water bodies and a portion of Kozhithodu (rivulet) partially blocked. After the land acquisition, it has been ensured minimum interference with the environment and topography of the area. To ensure smooth flow of water through Kozhithodu (rivulet), Minor Irrigation Department of Government of Kerala conducted a study of the topography, water flow, to ensure that the accumulated water in the project site is systematically collected and smoothly flows through the Kozhithodu (rivulet) down to Pampa River. This will increase the water table in the vicinity. Accordingly, they have devised ways and means to ensure smooth flow of water to Pampa River and to avoid flooding of the area during monsoon. The expenses required, will be met by the Company as per Government norms. This Project design will be put in place during the implementation of the Project. In order to protect and preserve the natural flow of Kozhithodu (rivulet), which will be cutting across our runway, the Company has designed the runway in such a way that this Kozhithodu (rivulet) passes right under the runway without any hindrance. The Company has also planned excellent drainage system along the runway and around the terminal building, using Dutch Polder Technology, to ensure traffic safety coupled with protection of environmental factors. These measures will ensure a comprehensive conservation plan for the water flow in the area and a systematic drainage system so that there is no flooding in and around the Airport, which is an imperative security prerequisite. Certain portion of our Airport Project site is water logged land, the Company shall fill only minimum area required for runway, apron, taxiway etc and the remaining area will be preserved in its natural form as committed. The rest of the Project area is either dry land/rubber plantation or fallow land. The property purchased by this Project Proponent had no agricultural operation, for the last 3 decades, as is certified by the Principal Agricultural Officer. It is submitted that the Company has taken care and caution to protect and preserve the natural habitat, flora and fauna, rivulets and such other natural features, in the best possible form, with least interference during the implementation of the Project.

r. On enquiring by the EAC it was stated by the PP that the Ministry of Defence has withdrawn in-principle approval for not obtaining of Environment Clearance. This is an issue which will need to be verified by the MoEFCC, being an inter-ministerial issue.

3.36.2 The EAC noted the clarification submitted by the PP and decided to grant ToR subject to the following additional ToR and condition:

- i. There a natural rivulet is passing through the proposed runway. The PP to submit design as said to insure the uninterrupted flow of the water body.
- ii. All environmental and social issues raised will be adequately addressed in the EIA/EMP reports.
- iii. All issues related to Public concern which have been raised would be addressed during the Public Hearing.
- iv. The Ministry of Defence has withdrawn in-principle approval. The PP to provide fresh consent of Ministry of Defence before proceeding further. MoEFCC to also verify the reasons for withdrawal before grant of ToR.
- 3.37 Deepening of Approach Channel for Capesize vessels at Mormugao Port Trust, Goa by M/s Mormugao Port Trust Amendment in ToR [F.No.10-23/2014-IA-III]
- 3.37.1 The PP (M/s Mormugao Port Trust.) informed that the proposal to get the TOR finalized by EAC for the proposed project amended by the way of getting the exemption from the condition for conducting public consultation. The PP informed that the matter was taken up with Minister or Environment, Forest and Climate Change in a High level meeting held in the Ministry of Shipping. The MEFCC has agreed granting exemption from the conduct of public hearing. The EAC deferred decision and suggested PP to substantiate their claim by providing the minutes of the meeting and participants of the meeting. The PP was advised to submit this information to the Ministry, based on which MOEFCC may take appropriate decision in the matter.
- 3.38 Sea water intake & outfall system and rail line for coal transportation at Palavalasa, Vishakhapatnam, Andhra Pradesh by M/s Hinduja National Power Corporation Limited-Amendment in CRZ Clearance[11-58/2011-IA.III]
- 3.38.1 The PP (M/s Hinduja National Power Corporation Limited) made a presentation and informed that:
 - i) **Proposal:** TheHinduja National Power Corporation Ltd (HNPCL) is developing a coal based 1040 MW (2x520 MW) thermal power plant at

Palavalasa, Visakhapatnam Dist, in the state of Andhra Pradesh. Sea water of quantity 180,000 m³/hour is to be used for condenser cooling with proposed seawater drawl and discharge at 900 meter in sea by means two 3.6m dia intake pipe lines laid on a pile supported jetty. The erstwhile MOEF had granted approval for the above development vide letter No 11-58/2011-IA.III dated 3rd January, 2014. The site has encountered cyclone Hudhud directly on 12.10.2014 where wind speeds and sea waves parameters were in excess of designed provisions. The damage due to HudHud has forced PP to reroute outfall beyond 444 Meters as the original corridor became unusable. So it is proposed to re-route & re-design the outfall discharge scheme due to Technical constraints. It is proposed to have an outfall chamber (maintenance chamber) located at 444m chainage of existing outfall jetty. From here, 6 x 1.6m dia outfall pipelines will be laid on the seabed at water depths more than 14m. Each of the diffuser pipelines will have 10 diffusers of 550mm diameter spaced at 6m c/c for effective discharge of warm water (at 7 locations with 3 double ports at the beginning and 4 single ports). The corresponding diffuser configuration is similar to the original proposal as approved by the Ministry. Based on the revised scheme, PP has requested amendment to the CRZ Clearance already granted dated 3rd January, 2014.

- ii) Justification: The PP has undertaken Pile integrity test to ascertain the healthiness of piles so as to help in decision making process regarding construction of outfall diffusing/maintenance chamber. The Bathymetry survey was also conducted to ascertain change in sea bed levels in order to work out the way forward for further construction activities in the outfall jetty starting from 600m. Based on the findings of the pile integrity test, it has been concluded that the piles beyond 444m to 624m are damaged from pile bents 37 onwards (i.e. 444m) till the end of outfall jetty. M/s. Gammon India (Existing contractor executing the sea water works) and M/s Tata Consulting engineer (Consultant for the project) expressed difficulty in re-construction of the jetty in the original corridor due to Technical constraints due to reconstruction, constraints in erecting construction equipments, difficulty in diversion due to diameter of the Outfall discharge pipe line. Alternative were explored with design change to construct the outfall system which is technically feasible without compromising on environmental aspects. The mathematical model studies have confirmed that effective dilution of outfall effluent will take place i.e. 100 dilutions will be at about 50-60m distance and 600 dilutions at about 300-350m. Hence it is proposed to create the outfall Chamber at 444mm from shoreline instead of 900m originally proposed and re-route/lay the outfall discharge and diffuser pipeline in sea based on the revised scheme.
- iii) After detailed discussion the PP also indicated that he is formulating alternative proposals which should be scrutinised and appraised by the Andhra Pradesh Coastal Zone Management Authority; as the

State was keen to utilize power plant urgently.

3.38.2 EAC Observations and Recommendations: The EAC after deliberation enquired about the reasons for not using originally proposed corridor. The PP informed that the originally proposed corridor cannot be used unless existing piles are removed from the bed, which would be difficult and not advisable certainly not during the monsoon season. The Committee observed that the PP should explore the possibility of using originally proposed corridor by doing piling in parallel/ adjacent to existing piles or changing he span of the pile foot prints. The Committee sought an analysis of possible options / alternatives of design for the outfall, and any new alternative in the given conditions. It deferred discussion on the proposals till the next meeting EAC.

List of the Members who attended the 149th EAC meeting on June 24-26, 2015.

- 1. Shri Anil Razdan, IAS (Retd.), Chairman, C-6, Friends Colony East, New Delhi.
- 2. Dr. M.L. Sharma, IFS (Retd.), 79A, Sector-8, Gandhi Nagar 382008, Gujarat.
- 3. Sh. R. Radhakrishnan, 2/586, 1st Cross Street, SingaravelanSalai, Neelangarai, Chennai-600 041
- 4. Dr. M.V. Ramana Murthy, Project Director, (Scientist 'G'), Offshore Structures and Island Desalination, NIOT Campus, Pallikarai, Chennai 600 100.
- 5. Dr. R. Prabhakaran, No.1, Besent Road, Royapettah, Chennai.
- 6. Dr. Anuradha Shukla, Central Road Research Institute (CRRI), CRRI, Mathura Road, New Delhi-25
- 7. Shri S. Bhattacharya, Central Ground Water Authority, West Block 2, Wing 3, Sector 1, R.K. Puram, New Delhi
- 8. Dr. Ranjini Warrier, Director (IA-III), Ministry of Environment, Forests & Climate Change, Indira ParyavaranBhawan, 2ndFloor, Vayu Wing, JorBagh Road, Aliganj, New Delhi-110 003.

Model ToR for Township/ Area Development projects

- (i) Examine details of land use as per 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 as per 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.
- (xxi) 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/Townships".

Model ToR for Common Municipal Solid Waste Treatment and Disposal facility

- (i) The project should be designed based on the population projections as by Master Plan.
- (ii) Submit a 10 km. radius map (on survey of India toposheet) showing co-ordinates of project site, national highway, state highway, district road/approach road, river, canal, natural drainage; protected areas, under Wild Life (Protection) Act, archaeological site, natural lake, flood area, human settlements (with population), industries, high tension electric line, prominent wind direction (summer and winter), effluent drain, if any and ponds etc. should be presented and impacts assessed on the same.
- (iii) Examine and submit details of alternative technologies viz. RDF shall also be evolved.
- (iv) Examine and submit details of storm water/ leachate collection from the composted area.
- (v) Examine and submit details of monitoring of water quality around the landfill site. Water analysis shall also include for nitrate and phosphate.
- (vi) Examine and submit details of the odour control measures.
- (vii) Examine and submit details of impact on water bodies/rivers/ ponds and mitigative measures during rainy season.
- (viii) Submit the criteria for assessing waste generation.
- (ix) Submit a copy of the layout plan of project site showing solid waste storage, green belt (width & length, 33% of the project area), all roads, prominent wind direction, processing plant & buildings etc. should be provided.
- (x) Submit a copy of the land use certificate from the competent authority.
- (xi) Submit a copy of the status of ambient air quality and surface and ground water quality, soil type, cropping pattern, land use pattern, population, socioeconomic status, anticipated air and water pollution.
- (xii) Submit a copy of the topography of the area indicating whether the site requires any filling, if so, the details of filling, quantity of fill material required, its source and transportation, etc.
- (xiii) Examine and submit the details of impact on the drainage and nearby habitats/settlements (surroundings).
- (xiv) Examine and submit the details of surface hydrology and water regime and impact on the same.
- (xv) Examine and submit the details of one complete season AAQ data (except monsoon) with the dates of monitoring, impact of the project on the AAQ of the area (including H₂S, CH₄).
- (xvi) Submit a copy of detailed plan of waste management.
- (xvii) Submit the details of sanitary land fill site impermeability and whether it would be lined, if so details thereof.
- (xviii) Examine and submit the details of impact on environmental sensitive areas.
- (xix) Examine and submit the details of rehabilitation/compensation package for the project effected people, if any.
- (xx) Submit Environmental Management Plan and Environmental Monitoring Plan with costs and parameters.
- (xxi) Public hearing to 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.
- (xxii) 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.
- (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/Common Municipal Solid Wastes".

Model ToR for Airport

- (i) 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.
- (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/inter state 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 details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- (vii) Examine the impact of proposed project on the nearest settlements.
- (viii) Examine baseline environmental quality along with projected incremental load due to the proposed project/activities
- (ix) 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
- (x) 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.
- (xi) Submit details regarding R&R involved in the project
- (xii) 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.

- (xiii) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.
- (xiv) Examine details of Solid waste generation treatment and its disposal.
- (xv) Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- (xvi) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xvii) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- (xviii)Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
- (xix) The air quality monitoring should be carried out as per the notification issued on 16th November, 2009.
- (xx) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xxi) Submit details of corporate social responsibilities (CSR)
- (xxii) 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.
- (xxiii) 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.
- (xxiv) Public hearing to 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.
- (xxv)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.
- (xxvi) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Airport".

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Annexure-IV

- i. 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 damage, 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.
- ii. Submit the details of the land use break-up for the proposed project. Details of 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.
- iii. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- iv. Examine the impact of proposed project on the nearest settlements.
- v. Examine baseline environmental quality along with projected incremental load due to the project taking into account of the existing developments nearby.
- vi. 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.
- vii. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area.
- viii. Details regarding project boundary passing through any ecosensitive area and within 10 km from eco-sensitive area.
- ix. Green buffer in the form of green belt to a width of 15 meters should be provided all along the periphery of the industrial area. The individual units should keep 33% of the allotted area as a green area.
- x. Submit the details of the trees to be felled for the project.
- xi. Submit the details of the infrastructure to be developed.
- xii. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- xiii. Submit details regarding R&R involved in the project
- xiv. Zoning of the area in terms of 'type of industries' coming-up in the industrial area based on the resource requirement along with likely pollutants with quantity from the various industries.
- xv. The project boundary area and study area for which the base line data is generated should be indicated through a suitable map. Justification of the parameters, frequency and locations shall be discussed in the EIA.
- xvi. Submit Legal frame work for the implementation of Environmental Clearance conditions to be clearly spelt out in the EIA report.
- xvii. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.

- xviii. Site justification of the identified industry sectors from environmental angle and the details of the studies conducted if any.
- xix. Ground water classification as per the Central Ground Water Authority.
- xx. Submit the source of water, requirement vis-à-vis waste water to be generated along with treatment facilities, use of treated waste water along with water balance chart taking into account all forms of water use and management.
- xxi. 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.
- xxii. Examine soil characteristics and depth of ground water table for rainwater harvesting.
- xxiii. Examine details of solid waste generation treatment and its disposal.
- xxiv. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption.
- xxv. In case 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.
- xxvi. 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.
- xxvii. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- xxviii. Examine the details of transport of materials for construction which should include source and availability.
- xxix. Examine the details of National Highways/State Highways/ expressways falling along the corridor and the impact of the development on them.
- xxx. Examine noise levels present and future with noise abatement measures.
- xxxi. Identify, predict and assess the environmental and sociological impacts on account of the project. A detailed description with costs estimates of CSR should be incorporated in the EIA / EMP report.
- xxxii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- xxxiii. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- xxxiv. 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.
- xxxv. 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.
- xxxvi. 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/Industrial Estate".
