Minutes of the 19th Meeting of Expert Appraisal Committee (Infra-2) for Projects related to All Ship Breaking Yard including Ship Breaking Unit, Airport, Common Hazardous Waste Treatment, Storage and Disposal Facilities, Ports and Harbours, Aerial Ropeways, CETPs, Common Municipal Solid Waste Management Facility, Building/Construction Projects, Townships and Area Development Projects held on 27th to 29th June, 2017 in the Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, New Delhi – 3.

Day 1: Tuesday, 27th June, 2017

19.1 Opening Remarks of the Chairman

At the outset, Chairman welcomed the members of the Expert Appraisal Committee (Infra-2). Thereafter, agenda items were taken up for discussion. The deliberations held and decisions taken are as under.

19.2 Confirmation of the Minutes of the 18th Meeting of the EAC held on 25th – 27th May, 2017 at New Delhi.

The minutes of the 18th Expert Appraisal Committee (Infra-2) meeting held during 25th – 27th May were confirmed with the following corrections.

19.2.1 Development of LNG storage and regasification terminal at village Chhara Taluka Kodinar, District Gir Somnath, Gujarat by M/s HPCL Shapoorji Energy Ltd (Agenda 18.3.10) the following corrections were confirmed:

<table>
<thead>
<tr>
<th>Agenda No. 18.3.10</th>
<th>Minuting</th>
<th>Correction/To be read as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of LNG storage and regasification terminal at village Chhara Taluka Kodinar, District Gir Somnath, Gujarat by M/s HPCL Shapoorji Energy Ltd</td>
<td>(i). The Environment and CRZ Clearance for the construction of Chhara port was granted on 6th January 2014. The proposed project is for the setting up a 5 MMTPA LNG Terminal at Chhara port. As observed from the Google Earth images the east side of the project site shows the presence of coastal sand dunes. As you are aware, sand dunes are protected by the CRZ Notification, 2011. The construction of breakwater will cause erosion of the sand dunes. The project proponent has not mentioned the presence of the dunes in any of the</td>
<td>The proposed project is for setting up a 5 MMTPA LNG Terminal within the area of proposed Chhara port.</td>
</tr>
</tbody>
</table>
documents uploaded on MoEF&CC website.

(ii). The proposed port will handle coal, oil, petroleum, lubricants, and LNG. Spillage of any materials will impact the marine biodiversity of the area, thereby impacting the livelihoods of the fisherfolk communities.

The Environmental and CRZ Clearance for the construction of Chhara port was granted on 6th January 2014.

The EAC, on being satisfied with the submissions of the project proponent in response to its earlier observations, recommended the project for grant of environmental and CRZ clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance.

Comments received from M/s Conservation Action Trust vide email dated 24th May, 2017 were handed over to the Project Proponent for response during the meeting also submit in writing. The EAC, on being satisfied with the submissions of the project proponent in response to its observations, recommended the project for grant of environmental and CRZ clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

<table>
<thead>
<tr>
<th>Agenda No. 18.5.11</th>
<th>Minuting</th>
<th>Correction/To be read as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Housing Project ‘Gulshan Botnia’ at GH-03C, Sector-144, Gautam Budh Nagar (U.P.) by M/s Gulshan Homes and Infrastructure Pvt. Ltd (Agenda 18.5.11) the following correction was confirmed:</td>
<td>(x) Cost of the project is Rs. 87.64 Crore.</td>
<td>(x) Cost of the project is Rs. 340.0 Crore.</td>
</tr>
</tbody>
</table>
19.3. Consideration of Proposals:

**19.3.1 Proposed Group Housing Complex (S+9) at Aishbagh, Lucknow for Lucknow Development Authority, U.P. by M/s Lucknow Development Authority - Environmental Clearance (IA/UP/NCP/64566/2017; F. No. 21-174/2017-IA-III)**

The project proponent made a presentation and provided the following information to the Committee:-

(i) Lucknow Development Authority proposes for Group Housing Complex (S+9) at Aishbagh, Lucknow, U.P. on a total plot area of 15121.81 sqm and total built up area is 30645.2 sqm.

(ii) Proposed project is construction of residential with community facilities. Adequate parking 460 ECS is proposed on surface and stilt for visitors as well as residents. Community facilities include community hall, parks and gardens. A total of 2960.7 sqm is to be developed as landscape area.

(iii) The project envisages construction of 6(5+1) towers including 5 residential towers + 1 community hall of ST+9 floors.

(iv) Total population of the proposed project will be 1514 which include the population of residents, community and visitors.

(v) The total water requirement for the project has been estimated to be 120 KLD. This includes domestic water requirement, flushing, D.G. cooling and landscaping. The total fresh water requirement is 82 KLD which includes domestic water requirement. The water requirement for flushing, D.G. Cooling and landscaping will be met through treated water from STP.

(vi) Total waste water generated is 95 KLD, which will be treated in onsite STP. The treated water will be recycled and re-used for flushing, D.G. cooling and landscaping. Excess treated water will be discharged into Municipal sewer with prior permission.

(vii) Hazardous waste: 1.1 liters/day (of waste oil will be generated and sold to authorized recyclers.

(viii) E-Waste: The e-waste, about 4.4 kg/day, generated from the proposed project, will be stored at a designated place. Waste will be disposed as per E waste management and handling rules, 2016.

(ix) The domestic solid waste will be generated by the occupants of the residents, visitors and people coming to community area will pertain to the two categories, Bio-degradable and Non-biodegradable. It is estimated that maximum solid waste generation would be about 0.66 TPD for the proposed project and 76 kg of sludge will be generated from the proposed project.

(x) The total electrical load demand has been estimated to be 1000 KW for the proposed project. The source of power will be from Uttar Pradesh Bijli Vitaran Nigam Limited (UPBVNL).

(xi) In case of power failure, DG sets of total capacity of 1000 KVA (4X250) for the proposed project will be provided as power back-up.

(i) Parking facility of 460 No. is proposed to be provided for four wheelers as per byelaws. Reserved car parking for physically handicapped shall be
provided in front of the each tower.

(xii) **Investment/Cost** of the project is Rs. 93.0 Crore.

(xiii) **Employment potential**: During operational phase of Group Housing, persons will get employment opportunities as staff for management, maintenance and security. As an estimate, during operation phase, persons will get marginal employment opportunities from the residents of Group Housing who would work as domestic helpers. This will help in improving the quality of life of economically weaker sections of the local area.

(xiv) **Benefits of the project**: The proposed project will provide good quality housing with all the amenities and waste processing / recycling facilities. The project will generate employment (Labour employment of household activity) during operational phase which will benefit the local population in getting work opportunities. It will create long term employment in activities such as maintenance of the buildings and ancillary services.

After detailed deliberations, the Committee recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per
the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated shall be discharged into Municipal sewer as per CPCB norms.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 nos. of rain water recharge pits (volume 23 cum each) shall be provided as per CGWB guidelines for recharging the ground water.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 100 m² of space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction
and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow blocks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with
these basic criteria.
- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. **Operational Phase**

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from Municipal Water Supply shall not exceed 82 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed green belt area of 2960.7 sqm shall be provided.

(i) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.3.2 Extension of Runway 26 at Vijayawada Airport, Tehsil Gannavaram, Dist Krishna, Andhra Pradesh by M/s Airport Authority of India - Environmental Clearance (IA/AP/MIS/63249/2016; F. No. 10-59/2016-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) Vijayawada Airport is located at 16° 32’ 0.94719” North, 80° 48’ 11.85123” East, at an average field elevation of 22.730 m above mean sea level. The airport is well connected to a 4 lane road (NH-5), located at about 17.5 km east of Vijayawada.

(ii) The Vijayawada airport assumed significance after the bifurcation of the state and location of the capital city near Vijayawada. With entire capital city related air traffic depending on Vijayawada airport, it is proposed to expand the airport. To meet the growing demands of the traffic and to facilitate bigger aircrafts like B-777, B747 type of aircrafts at Vijayawada airport, the runway is proposed to be extended.

(iii) The existing airport is currently handling about 40 operations per day (20 landings and 20 take-offs) and operating capacity of the airport is about 300 PAX. In annualized capacity, the airport capacity is 0.36 MPPA. After expansion, the airport capacity will be 0.75 MPPA. The additional facilities such as passenger terminal building will be developed within the existing airport complex.

(iv) **Land requirement:** Presently, the airport is situated on 531.65 acres of land. Additionally, 698 acres of land is required for the expansion which was already allotted for the extension of runway project by Government of Andhra Pradesh. The proposed land acquired doesn’t involve any major displacement of people. The total land after runway extension will be 1229.65 acres.

(v) The proposed project is a runway extension project involving the following:

- Extension of runway towards rwy26 by 1074m to make runway from 2286m to 3360m suitable to cater for B-747-400, B-777-300 ER type of aircraft with load penalty.
- To make provision of 950m for CAT-1 approach lighting system for runway-26.
- Provision of turnpad at RWY 26 with suitable strength for B-747-400, B-777-300 ER type of aircraft.
- Strengthening of existing runway and turnpad at 08 end of runway for critical aircraft B-747-400, B-777-300ER.
- Provision of 7.5m wide shoulder on both side of Runway in shoulder.
strength in the extended portion suitable for B-747-400, B-777-300 ER type of aircraft.

- Storm-water drainage and rain-harvesting works in Operational area.
- Grading of the 300m basic strip area as per DGCA.
- An isolation bay of size 110mX120m to be constructed.
- A link taxiway from runway to isolation bay of size 261.6mX23m with 7.5m wide shoulders to be constructed.
- Construction of DVOR building and electrical connection of desired load.
- Construction of 2.4m high operational boundary wall with concertina coil all around the operational area of the newly acquired land. Non-operational boundary wall in the newly acquired land to be constructed towards city side.
- Construction of perimeter road of 3.5m width with electrification, all along the perimeter boundary wall inside operational area.
- Construction of security watch towers.

(v) Total water consumption in the operating airport is about 50 KLD and after extension of it may increase to 150 KLD. As part of the extension of the runway and construction of new terminal building, only construction water will be required which will be about 30 KLD.

(vi) The total wastewater generation from the domestic activities at the existing airport is about 24 KLD being sent to septic tank and soak pits. The make-up water from the AC plant results in evaporation losses and no waste water is generated. STP of 200 KLD capacity is installed for treatment of domestic wastewater. As a part of water conservation, treated waste water is being utilised for gardening, landscaping and flushing purposes. No waste water shall be disposed outside the premises of the airport.

(vii) The existing total waste generation at Vijayawada airport is about 150 kg per day. Solid waste generated from the proposed runway extension of the airport and new terminal building mainly comprises of food waste and garbage waste. Further, small quantities of sludge from STP (50 kg/day) and other waste will sum up to 425 kg/day will be generated. Collection and handling of domestic solid waste would be done in line with the provisions of the Municipal Solid Waste Rules 2000 (as amended).

(viii) Hazardous wastes generated at the airport are collected and stored at designated locations and are being disposed to APPCB authorised agencies for disposal agencies / recycling. Used oil from the DG sets will be stored as per Hazardous Storage & Management Rules and will be given to APPCB authorized agencies.

(ix) Current peak demand is about 750 KVA which is being met from the sanctioned 750 KVA from Andhra Pradesh State Electricity Board. Proposal for additional 500 KVA shall be projected on completion of the project. The total of 1250 KVA of power will be required after proposed run way extension and construction of new terminal building.

(x) **Project Cost:** Total project cost is Rs. 144.93 Crore.

(xi) **Terms of Reference (ToR):** Terms of Reference (ToR) for the proposal was
(xii) **Baseline EIA Study:** Baseline study of environmental quality was carried out during post-monsoon season 2016 to determine the existing conditions of various environmental attributes within the study area (10 km radius). Ambient air quality parameters were observed to be within prescribed standards. Also, the noise levels were observed to be within the CPCB limits. The ground and surface water quality in the study area does not indicate any industrial contamination.

With regard to the ecological study, it is observed that there are neither rare and endangered and vulnerable species of fishes in the study area, nor the presence of Schedule-I animals or Schedule-I birds found in the study area or reptilian and amphibian species in the study area. Incidentally, there is no presence of endangered botanical flora in the study area, which is listed in the Schedule VI of the Indian Wildlife Protection Act, 1972.

(xiii) **Public Hearing:** Public hearing of the project was carried out by Andhra Pradesh Pollution Control Board on 9th January 2017 under the Chairmanship of the Shri. Gandham Chandrudu, Joint Collector-II and Additional District Magistrate, Krishna District at airport site in accordance with the procedures of the EIA Notification.

(xiv) **Project Benefits:**

(i) Vijayawada has experienced rapid growth in passenger volumes, approximately to the tune of 125% (July 2015), especially after the bifurcation of the state and will continue to realize significant growth over the next 30 year period. Continued robust growth in the region and broader Indian economy are expected to be the primary drivers of domestic air travel at Vijayawada.

(ii) The proposed project will lead to direct and indirect benefits to the overall socio-economic status of the region also. During construction phase, there will be opportunities for local skilled and unskilled workers to be employed in the various construction related activities like material handling, operation of construction machinery, actual construction, painting, installation of plant machinery, etc.

(iii) Thus, in view of considerable benefits from the project, the runway extension project is most advantageous to the region as well as to the nation.

The EAC deliberated upon the issues raised during the Public Hearing/Public Consultation meeting conducted by the Andhra Pradesh Pollution Control Board on 9th January 2017. The issues were raised regarding adequate fund under CSR activities for development of the surrounding panchayats, solid waste management facilities, skill development training to the local and unemployed youth, compensation to farmers for land acquisition, rainwater harvesting system, control measures to reduce air and noise pollution etc. The Committee noted that issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report. The Committee asked project proponent to provide the breakup of land use, details of CSR activities and action plan for issues raised in public hearing. Project proponent give details.
information during the meeting and also submitted vide letter dated 30.6.2017.

The EAC, on being satisfied with the submissions of the project proponent in response to its observations, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

i. As proposed, environmental clearance is for Extension of Runway 26 at Vijayawada Airport, Tehsil Gannavaram, Dist Krishna, Andhra Pradesh.

ii. PP shall obtain clearance from DGCA and AAI for safety and project facilities.

iii. Construction site should be adequately barricaded before the construction begins.

iv. Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet.

v. The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

vi. The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.

vii. Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimised. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical). Top soil shall be separately stored and used in the development of green belt.

viii. A detailed drainage plan for rain water shall be drawn up and implemented.

ix. Ground water abstraction and rain water recharge shall be as may be prescribed by the CGWA. A clearance of the CGWA shall be obtained in this regards.

x. Noise from vehicles and power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

xi. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

xii. Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Management Rules, 2016.

xiii. Diesel power generating sets proposed as source of backup 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 of low sulphur diesel. The location of the DG sets may be decided with in
| xxiv. | Traffic congestion near the entry and exit points from the roads adjoining the Airport shall be avoided. Parking should be fully internalized and no public space should be utilized. |
| xxv. | Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be locate conveniently near arrival and departure gates. |
| xxvi. | An assessment of the cumulative impact of all activities being carried out or proposed to be carried out by the project, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an consultation with State Pollution Control Board. |
| xiv. | Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported. |
| xv. | Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc shall be provided. |
| xvi. | The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures. |
| xvii. | Storm water drains are to be built for discharging storm water from the airfield to avoid flooding/water logging in project area during monsoon season / cloud bursts. |
| xviii. | Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. |
| xix. | Total fresh water requirement from ground water shall not exceed 150 KLD, for which PP shall obtain permission from Ground Water Department. |
| xx. | As proposed wastewater generation shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology (with tertiary treatment i.e. Ultra Filtration). Treated sewage shall be recycled/reused for cooling tower make up, flushing and horticulture. |
| xxi. | Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources. |
| xxii. | During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport. |
| xxiii. | The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. |
organisation of repute and specialising in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

xxvii. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

xxviii. An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.

xxix. The concerns of the Public hearing panel shall be suitably addressed to and the recommendations adopted as part of the Environmental Management Plan and in the plan for C.S.R. as applicable.

xxx. A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities

19.3.3 Proposed Common Effluent Treatment Plant (CETP - 5MLD) Project at Village-Pandoga Tehsil Haroli, District - Una, Himachal Pradesh by M/s Himachal Pradesh State Industrial Development Corporation Limited - Environmental Clearance (IA/HP/MIS/64520/2017; F. No. 10-30/2017-IA-III)

The Committee noted that this is a duplicate proposal. While applying online for grant of environmental clearance, the project proponent uploaded the proposal twice first on 6th May, 2017 vide online proposal No. IA/HP/MIS/64520/2017 and then on 15th May, 2017 vide online proposal No. IA/HP/MIS/30340/2015 (mentioned at Agenda No. 19.3.6) for which ToR was granted on 29th February, 2016. Accordingly, proposal was not considered and the project proponent asked to withdraw proposal No. IA/HP/MIS/64520/2017.


The project proponent made a presentation and provided the following information to the Committee:-

(i) The project is located at 19°14'02.98"N Latitude and 72°59'21.77"E Longitude.

(ii) The project is Modernization/Expansion, in EC of Residential cum Commercial Project at Village Balkum, Dhokali & Kolshet Thane (W). The Project comes within the municipal limits of Thane Municipal Corporation

(iii) Prior Environmental Clearance was granted by MoEF&CC vide letter No. F.No. 21-65/2014-IA.III dated 15th April 2015 for the total construction area of 18,42,837.37 sqm. As of today construction on 203742.32 sqm area has
Due to change in planning of part of layout & scheme of the project the layout plan has been revised. Thus, the total construction area is reduced by 4,32,317.62 sqm. The total plot area is 3,55,704.6 sqm. The project will comprise of 63 nos. of Residential Buildings, 5 Commercial building, 2 MLCP & 3 No. of Club house. FSI area is 7,39,599.32 sqm and total construction area of 14,10,519.75 sqm. Total 11,506 flats & Commercial area shall be developed. Maximum height of the building is 99.80 m.

During construction phase, total water requirement is expected to be 150 KLD which is supplied by tanker water. During the construction phase soak pits and septic tanks are provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

During operational phase, total water demand of the project is expected to be 8,246 KLD and the same will be met by fresh water from Thane Municipal Corporation (TMC) and recycled water. Wastewater generated (7,648 KLD) will be treated in 3 STPs of total 8,000 KLD capacity. 4,012 KLD of treated wastewater will be recycled (2,864 KLD for flushing, 557 KLD for gardening and 592 KLD HVAC makeup). About 3,559 KLD will be disposed in to municipal drain.

About 30,599 kg/d solid waste will be generated in the project. The biodegradable waste (18,359 kg/d) will be processed in Organic waste converter (OWC) and the non-biodegradable waste generated (12,240 kg/d) will be handed over to authorized local vendor.

The total power requirement during construction phase is 2,000 kVA and will be met from MSEDCL and total power requirement during operation phase is 42.5 MW and will be met from MSEDCL.

Rooftop rainwater of buildings will be collected in 25 RWH tanks of total 2779 m³ capacity for harvesting after filtration.

Parking facility for 12,297 four wheelers and 12,746 two wheelers is proposed to be provided against the requirement of 11,516 and 12,746 respectively (according to local norms).

Proposed energy saving measures would save about 22.4% of power requirement.

It is located within 10 km of Sanjay Gandhi National park & Tungareshwar Wildlife Sanctuary. We have obtained the NBWL Clearance vide letter No. WLP 12.15/C.R.406/F-1 dated 17.12.2015. As per the ESZ notification of SGNP, vide no. S. O. 3645 (E) dated 05.12.2016, our project site is outside of ESZ i.e. (100 m).

There is no court case pending against the project.

Investment /cost of the project is Rs. 2,131 Crore.

Employment potential : 14,200 Nos.

Benefits of the project: The project will generate employment (IT employment for IT buildings, Labour employment of household activity, services, maintenance, plumbing, electricians) during operational phase which will benefit the local population in getting work opportunities. It will create long term employment in activities such as maintenance of the
buildings and ancillary services.

The EAC deliberated on the certified compliance report letter F. No. EC/376/RON/2017-NGP dated 23.06.2017 issued by the MoEF&CC’s Regional Office (WCZ), Nagpur and reply given by the project proponent to non-compliance of EC conditions. During deliberation, the Committee noted that total built up area as proposed after modernization/expansion has been reduced. However, total built up area including FSI and Non-FSI given during the presentation and mentioned in Form I & IA have different values. Committee also noted that the proposal was earlier applied in the name of M/s Ishwar Reality & technologies Pvt. Ltd. However, now applicant name has been changed to M/s Lodha Developers Thane Pvt. Ltd. Accordingly, Committee asked project proponent to submit Revised Form I & IA and the reason/documents related to change in name of Project Proponent.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

19.3.5 Proposed CETPs - 7MLD project at Kandrori by M/s Himachal Pradesh State Industrial Development Corporation Limited - Environmental Clearance (IA/HP/MIS/30305/2015; F. No. 10-24/2015-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s HPSIDC proposed a Greenfield project for combined Common Effluent Treatment Plant (CETP) at Khasra No. Malot-490, Bari-221/172/3, Kandrori-429/1, 430/4, 430/5 Village-Kandrori, Tehsil-Indora, District-Kangra, Himachal Pradesh. Total site area is 3.4771 Hect. (34771 sqm). Nearest railway station is Kandrori about 1.8 SW directions and Ghiala Railway Station about 5.71 km SW (Aerial distance) from project site. The nearest National Highway is (NH-1) at a distance of 3.8 km in the west direction. As per the EIA Notification dated 14th September, 2006, as amended till date, the proposed project falls under the Project 7(h) - Common Effluent Treatment Plants (CETPs). The project shall be treated as category “A”.

(ii) M/s MITCON Consultancy and Engineering service limited (Pune) is the environmental consultant to conduct the Environmental Impact Assessment (EIA) studies as per the Terms of Reference (ToR) prescribed by MoEF&CC, New Delhi for assessing the impact of the proposed Greenfield project for combined Common Effluent Treatment Plant (CETP) on various environmental parameters in the study area of 10 km radius. The studies were conducted during February, 2016 to April, 2016.

(iii) Total Water Requirement will be 15 KLD and will be sourced from ground water

(iv) Total Waste water will be 7000 cum/day. The treated water from the ZLD based CETP plant can be used in horticultural activity and also can be sell it back to the individual industrial unit or builders to minimize the use of bore well water for horticulture and flushing purpose by Pipelines.

(v) The rain water harvesting system will be provided at the site as per norms.

(vi) Power supply of 2,000 kW will be required and will be supplied by 132 KVA
Substation of Himachal Pradesh State Electricity Board. Two DG sets of 1000 kVA capacity will be installed for emergency backup supply.

(vii) ToR was granted to the project vide F.No.10-24/2015-IA.III dated 29.02.2016.

(viii) Public hearing (consultation) was conducted on 15.02.2017 at project site.

(ix) **Investment/cost of the project is** Rs. 48.83 Crore.

(x) **Employment potential:** During Construction phase 150 workers and during operational phase 30 workers will work. Indirect Employment is about 25000.

(xi) **Benefits of the project:** Positive impact on environment in terms of better management of waste water in the region, More employment opportunities will be created and Aesthetics of the area will improve.

**After detailed deliberations, Committee sought following additional information:**

(i) As per the MoEF&CC standards for CETP’s, seek the inlet quality standards from the State Pollution Control Board and put up before the EAC.

(ii) NOC from ground water department for use of groundwater.

(iii) Details of water balance to be provided.

(iv) Issues raised and commitments made by the project proponent during the Public hearing to be provided in the form of tabular chart with action plan for complying with the commitments made.

(v) Details of member industries, their production capacity, waste generation, effluents characteristic and primary treatment provided by the member units.

(vi) Details design of green belt to be provided.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

**19.3.6**


The project proponent made a presentation and provided the following information to the Committee:-

(i) Common Effluent Treatment Plant (CETP) of 5 MLD is proposed at Khasra No.1244,1257,1263,3214/1265,3215/1265,1432,1433,1434,1435, Kita-9,2832 of Village Pandoga, Tehsil Haroli, District Una (Himachal Pradesh).

(ii) Total site area is 2.511 Hect. (25112 sqm). The nearest National Highway is (NH-22) at a distance of 500m in the south direction and state highway (SH-25) at distance of 6.88 Km in the NE direction. Nearest railway station is Panoh about 7.88 NE direction and UNA Railway Station about 12.80 km SE (Aerial distance) from project site.
(xii) **ToR** was granted to the project vide F.No.10-25/2015-IA.III dated 29.02.2016.

(iii) **Public hearing** (consultation) was conducted on 03.01.2017 at project site.

(iv) Water Requirement will be 15 KLD and will be met out through bore Well

(v) Waste water quantity will be 5 MLD. The treated water from the ZLD based CETP plant can be used in horticultural activity and also can be sell it back to the individual industrial unit or builders to minimize the use of bore well water for horticulture and flushing purpose by Pipelines.

(vi) Bio sludge can be used as manure. The chemical inorganic hazardous sludge will be sent to the solid waste management facility for final disposal. Used oil will be sold to the registered dealer/vendor. Discarded containers will be decontaminated and given to the state authorized vendor.

(vii) Power requirement will be 2,000 kW and will be supplied by 132 KVA Substation. It will be sourced from Himachal Pradesh State Electricity Board. Two DG sets of 1000 kVA capacity will be installed for emergency backup supply.

(viii) **Investment/cost of the project is Rs.** 33.89 Crore.

(ix) **Employment potential:** During Construction 150 workers and during operational phase 30 workers will work. Indirect Employment is about 12300.

(x) **Benefits of the project:** Positive impact on environment in terms of better management of waste water in the region, More employment opportunities will be created and Aesthetics of the area will improve.

---

After detailed deliberations, Committee sought following additional information:

(vii) As per the MoEF&CC standards for CETP’s, seek the inlet quality standards from the State Pollution Control Board and put up before the EAC.

(viii) NOC from ground water department for use of groundwater.

(ix) Details of water balance to be provided.

(x) Issues raised and commitments made by the project proponent during the Public hearing to be provided in the form of tabular chart with action plan for complying with the commitments made.

(xi) Details of member industries, their production capacity, waste generation, effluents characteristic and primary treatment provided by the member units.

(xii) Details design of green belt to be provided.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

---

19.3.7 **Construction of Proposed Group Housing and Staff Quarters at UPSRTC Campus, Vikas Nagar, Kanpur, Uttar Pradesh by M/s Kanpur Development Authority - Environmental Clearance (IA/UP/MIS/64738/2017; F. No. 21-**
The project proponent made a presentation and provided the following information to the Committee:-

i. M/s. Kanpur Development Authority (KDA) has proposed “Construction of Group Housing and Staff Quarters at UPSRTC Campus, Vikas Nagar, Kanpur, Uttar Pradesh.

ii. The project is located at 26° 30' 15.78"N Latitude and 80° 17' 55.47"E longitude. Site is vacant open land earmarked for construction of 1, 2 and 3-BHK flats with 1208 units and 26 towers.

iii. The total plot area is 47682.72 sqm (11.78 Acres) with Basement area-34333 sqm, Stilt area-11089 sqm. FSI area is 2.84 and total construction area of 135813.01 sqm. The project will comprise of 26 Buildings. Total 1208 flats shall be developed. Maximum height of the building is 42.21 m.

iv. During construction phase, total water requirement is expected about 50 KLD which will be met by the CSTP tankers after tertiary treatment at the site/tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

v. During operational phase, total water demand of the project is expected to be 668 KLD and the same will be met by Kanpur Jalkal Sansthan water supply. 478 KLD will be the total waste water generation and will be disposed off to the existing municipal sewer line for further treatment with permission from the Kanpur Jalkal Sansthan.

vi. About 2.5 TPD solid wastes will be generated in the project. NOC has been obtained from Kanpur Nagar Nigam for the safe disposal.

vii. The total power requirement during construction phase is 100 kVA and will be met from Uttar Pradesh State Electricity Board and total power requirement during operation phase is 6000 kVA and will be met from Uttar Pradesh State Electricity Board.

viii. Rooftop rainwater of buildings will be collected in 13 RWH tanks of total 3.4 MLD capacities for harvesting after filtration.

ix. Parking facility for four wheelers and two wheelers is proposed to be provided against the requirement and respectively (according to local norms) is about 45422 sqm.

x. Proposed energy saving measures would be adopted and solar lighting is proposed for water heating, street lights & common areas.

xi. There is no/court case pending against the project.-NGT case is pending

xii. **Investment/Cost** of the project is Rs.420 Crore.

xiii. **Employment potential:** Approx. 200.

xiv. **Benefits of the project** - Residential facilities, Job opportunity, landscaped area, increase in land value, wider economic growth, Corporate Social Responsibility etc, Improvement & Infrastructure & amenities will be developing in the surroundings.
The Committee noted that Project proponent has already started the construction works and about 35% construction work has been completed. Being a violation case, the Committee suggested Project Proponent to apply under violation case as per S.O. 804(E) dated 14.03.2017.

19.3.8 Development of Multipurpose Terminal by replacement of existing EQ-2 to EQ-5 berths to cater to 14.00 M draft vessels in Inner Harbor of Visakhapatnam Port Trust on DBFOT basis by M/s Visakhapatnam Port Trust - Environmental and CRZ Clearance (IA/AP/MIS/28607/2015; F. No. 11-19/2015-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for Development of Multipurpose Terminal by replacement of existing EQ-2 to EQ-5 Berths to cater to 14.50 M draft vessels in Inner Harbor of Visakhapatnam Port Trust. The work includes:
   a. Demolition of the existing berths which are of monolithic type construction
   b. Construction of a single straight 522 m quay with 2 nos. berths each capable of berthing a ship up to 230 m long & 14.0 m draft.
   c. Existing approach channels and area off proposed berths will be deepened from existing 12.10 m to 16.10 m to cater to 14.0 m draft vessels.
   d. Replacement of existing cranes with higher capacity ones and deployment of additional cargo handling equipment.

(ii) The proposed Multipurpose Terminal, when fully operational, is expected to handle 6.45 million tonnes per year (Mt/yr) of cargo including 1,00,000 TEU of containers.

(iii) Water demand will be 201894 m³/month of fresh water + 165000 m³/month of treated sewage for dust suppression. ~149620 m³/month of fresh water supplied by GVMC; 52274 m³/month of fresh water drawn from VPT’s own wells & galleries. For future projects additional 120,000 m³/month of fresh water + 30,000 m³/month treated sewage will be required. Fresh water will be provided by GVMC; treated sewage to be drawn from 300000 m³ cap.

(iv) Berth demolition wastes (comprising blocks of steel reinforced concrete) and dredge spoils. Sludge, garbage and other solid & other liquid wastes may be discharged from ships. Berth demolition wastes will be dumped in low lying area in western part of the port. Dredge spoils will be dumped far offshore in area identified by Central Water and Power Research Station, Khadakvasla. Wastes discharged from ships will be handed over to the port’s licensed contractors who have appropriate waste handling and disposal facilities.

(v) The proposed project is directly related to Waterfront and hence is a permissible activity as per Clause 3(i)(a) of the CRZ Notification, 2011. The area is an existing berth with all necessary infrastructures i.e. “The area has been developed up to the shoreline”. Therefore the area can be
classified as CRZ-II.

(vi) ToR was granted to the project vide letter no. 11-19/2015-IA.III dated 1st October, 2015.

(vii) Investment/Cost of the project is Rs. 537.48 Crores.

(viii) Andhra Pradesh Coastal Zone Management Authority has recommended the project vide letter No. 33/AP/APCZMA/2017 dated 20.03.2.017.

(ix) Employment potential: The project will generate direct as well as indirect employment and open up opportunities for new businesses and industries. However since the proposed project is a modernization project, the employment generation and economic effects will be small in comparison to the already thriving economy of the area.

(x) Benefits of the project: A number of benefits are inherently ingrained in the proposed project which are as follows:

- Efficiency of cargo handling operations will increase by way of larger parcel sizes and deployment new higher capacity cargo handling equipment with much improved serviceability.

- The cargo mix will also change. The proportion of dry bulk cargo, whose handling leads to fugitive dust generation, will decrease. Thus although cargo handling will increase from ~2 Mt/yr to 6.45 Mt/yr, dust levels at the nearest receptors will increase by only ~2 µg/m$^3$, which will hardly have any impact on the existing air quality.

After detailed deliberations, Committee sought following additional information:

(a) Copy of certified compliance report (latest) issued by the Regional Office, Chennai/Bangalore on the environmental conditions stipulated in the earlier ECs issued.

(b) Tabular statement indicating details of (a) existing facilities as per existing ECs obtained; (b) proposed additional facilities; (c) total capacity after expansion to be provided.

(c) Prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(d) Details of solid waste management plan.

(e) Details of water balance.

(f) Details design of green belt to be provided.

The proposal was deferred till the desired information sought by the Committee is submitted through online. The above information shall be provided with the uploading of minutes on the website.
Proposed office building for Custom & Central Excise Department at Vibhuti Khand, Gomti Nagar, Lucknow, U. P. by M/s CPWD Lucknow - Environmental Clearance (IA/UP/NCP/65127/2017; F. No. 21-211/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) Central Public Works Department, Lucknow proposes for office building for Custom & Central Excise Department at Vibhuti Khand, Gomti Nagar, Lucknow, U. P. on a total plot area of 9768.00 sqm and total built up area is 28096.62 sqm.

(ii) Proposed project is construction of Govt. Office Building. It comprises of 01 number of building block. Total number of floors are 2B+G+7.

(iii) Adequate parking 373 ECS is proposed on surface & basements. A total of 981 m\(^2\) is to be developed as landscape area.

(iv) The project envisages construction of 1 tower only.

(v) Total population of the proposed project will be 2079 which include the population of residents & floating.

(vi) The total water requirement for the project has been estimated to be 129 KLD. The total fresh water requirement is 66 KLD which includes domestic water requirement. There is no ground water extraction for the construction of project. Water will be sourced through Tanker supplies treated water will be used after testing and confirmation of fitness for construction. During operation phase, water requirement shall be met through municipal supply.

(vii) The water requirement for flushing, DG Cooling, HVAC and landscaping will be met through treated water from STP.

(viii) Approximately 78 KLD of domestic waste water will be generated from the proposed facility. This effluent will be treated in Sewage Treatment Plant of 95 KLD based on MBBR Technology (with tertiary treatment i.e. Ultra Filtration). The total treated water from STP will be reused for flushing, D.G. cooling, HVAC, landscaping horticulture and maintenance activities. There will be no discharge of treated in sewer line as whole treated water will be re-used.

(ix) The total electrical load demand has been estimated to be 1250 KVA for the proposed project. The source of power will be from Uttar Pradesh Bijli Vitaran Nigam Limited (UPBVNL).

(x) In case of power failure, DG sets of total capacity of 725 KVA (1X125 + 1X600) for the proposed project will be provided as power back-up.

(xi) The domestic solid waste generated will pertain to the two categories, Bio-degradable and Non-biodegradable. It is estimated that maximum solid waste generation would be about 0.5 TPD for the proposed project and 28.1 kg of sludge will be generated from the proposed project. Solid waste generated from the Govt. Office building and other areas will be collected daily on door to door basis by the dedicated and trained housekeeping staff. Twin bin systems will also be provided for segregation at sources. Recyclable wastes will be sold to vendors and inert wastes will be disposed through authorized agency to municipal waste disposal site. Organic waste shall be handed over to authorized vendor for treatment. MSW including horticulture waste will be handled as per the Municipal Solid Waste Management & Handling Rules,
(xii) There is no/court case pending against the project.

(xiii) **Investment/Cost** of the project is Rs. 88 Crore.

(xiv) **Employment potential**: The project involves labour camp of during construction. During operational phase, persons will get employment opportunities as staff for management, maintenance and security. This will help in improving the quality of life of economically weaker sections of the local area.

(xv) **Benefits of the project**: During operational phase, persons will get employment opportunities as staff for management, maintenance and security.

*During the deliberation, the Committee noted that the proposal was earlier submitted to SEIAA/SEAC, Uttar Pradesh on 26th May 2016 and was appraised in 285th SEAC U.P. meeting dated 2nd August, 2016. There were some queries which were related to NOCs. Due to non availability of SEIAA/SEAC in U.P., the project submitted to EAC at Central Level for grant of Environment Clearance.*

*After detailed deliberations on the proposal the Committee recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:*

**PART A – SPECIFIC CONDITIONS:**

1. **Construction Phase**

   (i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

   (ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

   (iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

   (iv) All construction and demolition debris shall be stored at the site (and not
dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 3 nos. of rain water recharge pits (volume of each RWH pit is 27 cum) shall be provided as per CGWB guidelines for recharging the ground water.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 100 sqm of space shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting
shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and re applied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public,
and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from Municipal Water Supply shall not exceed 66 m$^3$/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for
(x) Recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed green belt area of 981 sqm shall be developed.

19.3.10 Development of Integrated facilities (stage-II) within the existing Kandla Port Trust Limit at Kutch district of Gujarat. (1.Setting up of Oil Jetty No.7. 2. Setting up of Barge jetty at Jafarwadi 3. Setting up of Barge port at Veera; 4. Administrative office building at Tuna Tekra; 5. Road connecting from Veera barge jetty to Tuna gate by M/s Kandla Port Trust -Re-consideration for Environmental and CRZ Clearance (IA/GJ/MIS/27227/2015; F. No.11-13/2015-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s Kandla Port Trust Limited has proposed for development of Integrated facilities (stage II) within the existing Kandla Port Trust Limit at Kutch district of Gujarat.

(ii) Dredging is envisaged during construction of Oil Jetty No-07 and Barge Jetty at Jafarwadi. Total quantity of capital dredging is 152000 m$^3$ and maintenance dredging is 22800 m$^3$. It is reported that no wildlife or national park or sanctuary is found in the nearby 10 km of study area. No R&R is envisaged as the project activities are within the existing land of Kandla Port Trust.

(iii) PP informed that KPT has achieved the milestone of handling 100.03 MT cargo in the year 2015-16, which shows that the current Rail-Road infrastructure is sufficient enough for the smooth and speedy evacuation of the cargo. The total land requirement will be 61.75 ha. which is available with KPT. It would be developed on undeveloped barren land. The project component wise land requires is as under:

a. Setting up of Oil Jetty No – 07: 1 Ha.

b. Setting up of Barge Jetty at Jafarwadi: 20 Ha.

c. Administrative office Building at Tuna Tekra: 1.5 Ha

d. Road connecting from Veera Barge jetty to Tuna Gate: 19.25 H.a

e. Setting up of Barge Port at Veera: 20 Ha.

(iv) As per EIA report, the proposed areas are under medium erosion category represent 10.6% of total coastline of Gujarat. It is reported that during construction of jetty piling will be done in the sea to make berths, which will have temporary impact on the micro flora and fauna of sea. PP informed that piling and dredging shall be done by advanced techniques so as to reduce the impact. Silt curtain shall be used to reduce the impact and turbidity and thus reducing the loss of primary productivity and subsequent impact on food chain. PP informed that area earmarked for greenbelt is 20.43 ha. out
of total plot area of 61.75 ha.

(v) Gujarat Coastal Zone Management Authority vide letter no. ENV-10-2015-231-E (T Cell) dated 29th June, 2016 has recommended the proposed facilities to MoEF&CC under the provisions of the CRZ Notification, 2011. As per the CRZ maps prepared by the IRS Anna University, Chennai proposed facilities fall in the CRZ (IB), CRZ (III) and CRZ (IV) category.

*The proposal was earlier considered by the EAC in its 8th meeting held on 28th -29th July, 2016, wherein the Committee sought following additional information.*

(i) Tabular statement indicating details of (a) existing facilities as per existing EC obtained/recommended for EC; (b) proposed additional facilities; (c) total capacity after expansion to be provided.

(ii) Dispersion modelling for the dumping of the capital and maintenance dredge materials shall be carried out. Location of dump site to be furnished.

(iii) Summary of traffic management report for cargo evacuation.

(iv) Representative AAQM stations to be identified around the proposed facilities considering upwind and downwind direction and AAQM data for PM10, PM2.5, SO2, NOx, CO, Benzene including VOCs should be furnished.

(v) Water balance chart for existing and proposed facilities.

(vi) Details of air pollution control measures to be undertaken for each activities/facilities.

(vii) Quantity of bilge and ballast water generation from existing and proposed facilities. Plan for transportation, treatment and disposal of bilge and ballast waters.

(viii) The Marine biodiversity management plan to deal with all micro, micro and mega biotic components and ecology within the area of influence.

(ix) Certified compliance report of the environmental conditions stipulated in the existing environment clearance as well as copy of six monthly compliance report submitted to the Regional Office, MoEF&CC.

(x) Details energy conservation measures to be taken for new administrative office building (all points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal).

(xi) Disaster Management Plan.

_Project Proponent has submitted the additional information vide letter dated 05.05.2017. Copy of additional Information is available on the website. The Project Proponent has also submitted Certified Compliance Report issued by the MoEF&CC, Regional Office, Bhopal vide letter dated 26.05.2017. The Committee deliberated on point wise submission of project proponent on earlier observations made. The Committee also deliberated on the Certified Compliance Report and noted some areas of non compliance or partial compliance. The Committee was not satisfied with the submission given by the Project Proponent._

*The Committee asked following additional information from the Project*
Proponent:

(i) Point wise clarification on non-compliances reported in the Regional Office Report and time bound action plan for corrective measures.

(ii) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(iii) Details of water balance chart for existing and proposed facilities.

(iv) Details design of green belt to be provided.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

19.3.11 Modification of existing iron ore terminal on "as is where is" basis to handle common user coal at Kamarajar port by M/s Kamarajar Port Ltd - Re-consideration for Environmental and CRZ Clearance (IA/TN/MIS/61697/2015; F. No. 10-28/2015-IA.III)

The project proponent made a presentation and provided the following information to the Committee:-

(i). Kamarajar Port (erstwhile Ennore Port) is the 12th Major Port and the only Corporate Major port in the country. It is located on the East coast of India in the State of Tamil Nadu.

(ii). Development of Ennore Port Project at a cost of Rs.1058.52 Crores was completed and commissioned in June 2001 with two Coal Berths in Phase-I to handle thermal coal for the Thermal Power Stations of Tamil Nadu.

(iii). After the commissioning of Ennore Port, keeping in view the trade demand to handle other cargo items like LPG, POL, Chemicals, Edible Oils, Containers, etc., the Phase II Expansion of Ennore Port was planned. Ministry of Environment and Forests had accorded Environmental Clearance vide letter No.10-28/2005-IA-III dated 19.05.2006 for the following projects including associated capital dredging of 15.5 million cubic meters.

   (i) Marine Liquid Terminal to handle 3 MTPA (BOT basis)
   (ii) Coal Terminal to handle 8 MTPA (BOT basis)
   (iii) Iron Ore Terminal to handle 12 MTPA (BOT basis)

(iv). Container Terminal to handle 12 MTPA (700 mtr quay length) and subsequently modified to handle 18 MTPA (1000 mtr quay length) vide MoEF&CC letter No.10-28/2005-IA-III dated 10.09.2007. The Marine Liquid terminal and coal terminal are in operation. The container terminal is yet to commence their operation.

(v). With regard to the Iron Ore Terminal, due to the ban on the Iron ore mining
(vi). From Bellary-Hospet region, the Iron ore terminal is lying idle without any operation.

**Present Modification Proposal**: The objective and nature of the present proposal is to modify the already approved Iron Ore terminal of 12 MTPA capacity to handle common user coal. The location of berths, conveyor belt system for the transport of cargo, stack yard, road and rail linkages remain unchanged and the already created facilities will be effectively utilized. No new construction of berths or any major buildings will be carried out. There are no issues of re-settlement / re-habilitation for the proposed project.

(vii). Details of existing facilities as per existing EC obtained and proposed additional facilities are as follows:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Existing Facility</th>
<th>Modifications proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Civil Structures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Main Berth 34.7m x 30m with Bollard, Fenders, Ladders etc.</td>
<td>No change</td>
</tr>
<tr>
<td>2</td>
<td>Approach to Main Berth 120m x 10m</td>
<td>No change</td>
</tr>
<tr>
<td>3</td>
<td>RoRo Berth 50m x 15m with Bollard, Fenders, Ladders etc</td>
<td>No change</td>
</tr>
<tr>
<td>4</td>
<td>Stockyard – 15Ha</td>
<td>No change</td>
</tr>
<tr>
<td>5</td>
<td>Roads about 3.5 kms</td>
<td>No change</td>
</tr>
<tr>
<td>6</td>
<td>Tippler House</td>
<td>No change</td>
</tr>
<tr>
<td>7</td>
<td>Railway siding about 5.8 kms</td>
<td>No change</td>
</tr>
<tr>
<td>8</td>
<td>Buildings</td>
<td>No change</td>
</tr>
<tr>
<td><strong>B. Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ship Loader – 5000 TPH rail mounted slewing type</td>
<td>Not used. To be replaced with 2 nos 2000 TPH gantry type Ship unloader</td>
<td></td>
</tr>
<tr>
<td>Stacker and Stacker-cum-Reclaimer</td>
<td>Reversing the machines to match the conveyor direction</td>
<td></td>
</tr>
<tr>
<td>Wagon Unloader – 1 No. along with Side Arm Charger</td>
<td>Not used. To be replaced with Wagon Loading System and Truck Loading System</td>
<td></td>
</tr>
<tr>
<td><strong>C. Conveyer System</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Conveyer BC-7 (~750m)</td>
<td>To be modified to handle coal</td>
</tr>
<tr>
<td>2</td>
<td>Conveyer BC-6 (~1100m)</td>
<td>Same as above</td>
</tr>
<tr>
<td>3</td>
<td>Conveyer BC-5 (~1100m)</td>
<td>Same as above</td>
</tr>
<tr>
<td></td>
<td>Conveyer BC-4 (~1700m)</td>
<td>Same as above</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>5</td>
<td>Conveyer BC-3 (~66m)</td>
<td>Same as above</td>
</tr>
<tr>
<td>6</td>
<td>Conveyer BC-2 (~740m)</td>
<td>Same as above</td>
</tr>
<tr>
<td>7</td>
<td>Conveyer BC-1 (~60m) Wagon Tippler Conveyer</td>
<td>Not to be used. The above conveyer including the transfer towers will be modified to facilitate handling of coal. The conveyers are covered with hoods to contain fugitive dust emanation. Transfer towers are fully enclosed and provided with Dry Fog Dust Suppression System.</td>
</tr>
<tr>
<td>8</td>
<td>Conveyer BC-8 (~300m)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Conveyer BC-9 (~170m)</td>
<td></td>
</tr>
</tbody>
</table>

**D Electrical System**

Electrical substation for 10.15 MVA at 110Kv  
No change

**E Pollution Control Measures**

<table>
<thead>
<tr>
<th></th>
<th>lined with LDPE sheet</th>
<th>No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Drain along with perimeter about 3 kms</td>
<td>No change</td>
</tr>
<tr>
<td>3</td>
<td>Sprinklers around the stockyard</td>
<td>No change</td>
</tr>
<tr>
<td>4</td>
<td>Settling Ponds 4500 cubic meter</td>
<td>No change</td>
</tr>
<tr>
<td>5</td>
<td>Underground water tank for dust suppression 2 x 180 cum capacity</td>
<td>No change</td>
</tr>
<tr>
<td>6</td>
<td>Greenery 15,000 sqm</td>
<td>Total greenery cover for 20,000 sqm</td>
</tr>
</tbody>
</table>

(viii). **ToR details:** ToR was granted on 28th January, 2016.
(ix). **Public Hearing:** Exempted as per Section 7 (ii) of EIA Notification, 2006 as PH was carried out for the existing project and there is no change in the approved capacity of the coal handling terminal i.e. 12 MTPA.
(x). **SCZMA Recommendation:** The Tamil Nadu Coastal Zone Management Authority has recommended the project vide letter No.3966/EC.3/2017-1 dated 16.03.2017.
(xi). **Components in CRZ area:** The proposed conversion of iron ore berth to
coal berth falls under CRZ III within LTL and inside the sea front. The proposed facilities fall under the limits of Kamarajar Port. As per CRZ notification 2011, both the proposed facilities are permissible activities under CRZ III.

The proposal was earlier considered by the EAC in its 15th meeting held on 12th-14th April, 2017, wherein some additional information was sought. Now, Project Proponent vide letter dated 9.05.2017 has submitted additional Information. Copy of additional Information is available on the website.

The EAC deliberated upon the issues raised during the last meeting. The Committee found additional information adequate. The EAC, on being satisfied with the submissions of the project proponent in response to its observations, recommended the project for grant of environmental and CRZ clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental and CRZ clearance:

(i) Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

(ii) All the recommendations and conditions specified by the Tamil Nadu Coastal Zone Management Authority vide letter No.3966/EC.3/2017-1 dated 16.03.2017 shall be complied with.

(iii) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.

(iv) Dredging shall not be carried out during the fish breeding season.

(v) Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.

(vi) Dredged material shall be disposed safely in the designated areas.

(vii) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.

(viii) The ground water shall not be tapped within the CRZ areas by the PP to meet with the water requirement in any case.

(ix) While carrying out dredging, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.

(x) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.

(xi) The project proponents would also draw up and implement a management plan for the prevention of fires due to handling of coal.

(xii) The project proponents would also inventories the floral composition of the
biota of marine and intertidal biotopes and draw up a detailed marine biodiversity conservation management plan based on possible impacts. The management plan shall be submitted also to the State Biodiversity Board and implemented to their satisfaction during the project cycle.

(xiii) Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life, particularly benthos. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.

(xiv) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.

(xv) All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.

(xvi) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.

(xvii) Necessary arrangement for general safety and occupational health of people should be done in letter and spirit.

(xviii) All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.

19.3.12 Integrated Exhibition cum Convention Centre (IECC) (Redevelopment of ITPO Complex at Pragati Maidan), New Delhi by M/s India Trade Promotion Organisation (ITPO) -Environmental Clearance (IA/DL/NCP/65382/2017; F. No.21-151/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

- The present proposal is for ‘Integrated Exhibition cum Convention Centre (IECC)’ (re-development of ITPO Complex at Pragati Maidan) at Pragati Maidan, New Delhi by India Trade Promotion Organisation (ITPO).

- The Geographical co-ordinates of the project site is as follows:

<table>
<thead>
<tr>
<th>Centre of the Plot</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corner-1</td>
<td>28°36'47.50&quot;N</td>
<td>77°14'52.64&quot;E</td>
</tr>
<tr>
<td>Corner-2</td>
<td>28°36'47.08&quot;N</td>
<td>77°14'26.39&quot;E</td>
</tr>
<tr>
<td>Corner-3</td>
<td>28°37'7.91&quot;N</td>
<td>77°14'26.95&quot;E</td>
</tr>
<tr>
<td>Corner-4</td>
<td>28°37'10.93&quot;N</td>
<td>77°14'44.46&quot;E</td>
</tr>
<tr>
<td>Corner-5</td>
<td>28°37'25.43&quot;N</td>
<td>77°14'34.90&quot;E</td>
</tr>
<tr>
<td>Corner-6</td>
<td>28°37'25.95&quot;N</td>
<td>77°14'26.18&quot;E</td>
</tr>
</tbody>
</table>

- The total plot area is 4,99,829.28 m² with proposed FAR is 2,51,079.25 m² and built up area is 4,77,598.8 m². The retained (existing) building having 7 No. of blocks (From Hall No. 7-13) with maximum height of G+1 (13.35
mtrs) however the proposed building is having 06 nos. of blocks with maximum height of G+5 (31.5 mtrs).

- The existing buildings were constructed and also became operational prior to the publication of EIA Notification 2006. Therefore, the existing buildings did not attract applicability to obtain Environmental Clearance from SEIAA/MoEF&CC and no environmental clearance was issued.

- During construction phase, total water requirement is expected to be 13.5 KLD which will be met by private water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.

- Total water requirement for redevelopment of IECC Project (Existing + Proposed) is 4,000 KLD. Fresh water requirement is approx 1,621 KLD. The main sources fresh water will be DJB and registered tube wells within ITPO Complex. Quantity of sewage generated during operational phase shall be 2,363 KLD. The sewage will be treated through sewage treatment plant of capacity 2,900 KLD based on Membrane Bioreactors (MBR) Technology. The treated sewage will be re-used for flushing (1,066 KLD) greenbelt development (185 KLD) and for HVAC (375 KLD) during Non Monsoon Season and 190 KLD during Monsoon Season from treated water from DJB).

- Maximum solid waste generation would be about 26,325.91 kg/day. Biodegradable waste will be subjected to the compost/resultant will be used as manure. Recyclable and non-recyclable wastes will be disposed through Govt. approved agency.

- The power shall be supplied by BSES Delhi. The total demand load for the project (Retained Building + Proposed) will be 16.76 MVA. It is proposed to install 2 Electrical subs - Station named MRS-1 and MRS-2.

- A total of 10 rain water harvesting storage tanks will be constructed.

- Total 5025 ECS are proposed. Two wheeler - 1000, Buses - 52 and cars - 4343.

- Provision of 50% solar PV panel with LED Street lighting for the external area with 50% based on conventional LED Street lighting to be subjected to GRIHA Consultant advice.

- Project site is approx. 9.65 km away from Okhla bird sanctuary.

- There is no/court case pending against the project.

- ToR was granted during the EAC (Infra-2) meeting held on 15.05.2017 and issued vide letter F. No.21-151/2017-IA-III dated 19.05.2017.

- Investment/Cost of the project is Rs. 1677.00 Crores.

- Employment potential 250-300 during construction phase.

- Benefits of the project:
  - Attract new investments and boost economic activity in the region.
  - Would be able to host international level large exhibitions to the size of 1, 00,000 m².
  - Would be venue to host Government to Government (G-G) events, host
The EAC, after detailed deliberation on the proposal, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

**I. Construction Phase**

(i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building
envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Membrane Bioreactors (MBR) Technology. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rooftop rainwater of buildings shall be collected in 10 RWH tanks for harvesting after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 1000 sqm of space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed
concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPF), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
   - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
   - Traffic calming measures
   - Proper design of entry and exit points.
   - Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building
<table>
<thead>
<tr>
<th>Code of India.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(iii) Fresh water requirement from Delhi Jal Board Water Supply and registered tube well within ITPO Complex shall not exceed 1621 m³/day.</td>
</tr>
<tr>
<td>(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&amp;CC along with six monthly Monitoring reports.</td>
</tr>
<tr>
<td>(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.</td>
</tr>
<tr>
<td>(vi) No sewage or untreated effluent water would be discharged through storm water drains.</td>
</tr>
<tr>
<td>(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.</td>
</tr>
<tr>
<td>(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.</td>
</tr>
<tr>
<td>(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.</td>
</tr>
<tr>
<td>(xi) A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed total green area of 1,85,272.31 sqm (37.06 % of Plot Area) shall be provided.</td>
</tr>
<tr>
<td>(xii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and</td>
</tr>
</tbody>
</table>
Transport Department shall also include the consent of all the concerned implementing agencies.

(xiii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

19.3.13 Proposed LNG and LPG import facilities with Captive Jetty & Breakwaters, Andhra Pradesh by M/s Hindustan LNG Limited - Terms of Reference (IA/AP/MIS/63767/2017; F. No. 10-22/2017-IA-III)

Project Proponent has requested to withdraw the proposal. Accordingly, proposal was not considered.

19.3.14 Common Effluent Treatment Plant, Paonta Sahib, Himachal Pradesh by M/s Sirmour Green Environ Ltd - Terms of Reference (IA/HP/MIS/63811/2017; F. No. 10-23/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The Proposed Common Effluent Treatment Plant at Gondpur Industrial Area near Paonta Sahib falls in district Sirmaur of Himachal Pradesh. The Sirmaur district lies between 77°01’12” and 77°49’40” East longitude and 33°22’30” and 31°01’20” North latitude in the outer Himalayan ranges commonly called as Shivaliks. Total Plot Area is 4500 sqm.

(ii) The Common Effluent Treatment Plant (CETP) is listed at serial no. 7(h) of the Schedule of EIA Notification 2006 and falls under Category ‘A’ due to the location of CETP coming within 10 km of Simbaiwada Wild Life Sanctuary. The project is not interlinked with any other project.

(iii) The proposed CETP is expected to treat around 2 MLD industrial effluents including Sewage component.

(iv) The water requirement will be around 5 KLD during construction. This will be made available from piped water supply.

(v) Generated solid waste would be transported to authorized TSDF site. No liquid waste would be required to be disposed of in inland surface water due to Zero Liquid Discharge ZLD System. The waste water after treatment shall be recycled for industrial & agriculture purpose.

(vi) Power requirement will be 2 X 630 KVA = 1260 KVA. Power supply will be sourced from Grid Power Supply and Captive Power Plant. For Power Backup 1 No D.G Sets of 200 KVA will be installed.

(vii) Investment/cost of the project is Rs.10.7 Crore

(viii) Employment potential: Approx. 25 to 30 skilled and unskilled labours will
be engaged during construction of CETP project.

(ix) **Benefits of the project:** Positive impact on environment in terms of better management of effluent waste in the region. More employment opportunities will be created. Aesthetics of the area will improve.

*After detailed deliberations on the proposal, the EAC recommended for grant of Terms of Reference (ToR) as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:*

- i. Importance and benefits of the project.
- ii. A chapter on Quantification and Characterization of inlet characteristic including methodology adopted.
- iii. NBWL clearance is required for the project.
- iv. Process flow diagram of the proposed CETP.
- v. Layout plan of CETP.
- vi. Cost of project and time of completion.
- vii. Area earmarked for CETP.
- viii. Method for conveyance of effluent from the individual industrial unit to CETP.
- ix. Explore the option to recycle the treated effluent to individual industrial unit instead or discharging outside.
- x. Reuse and Recycle option of treated effluent.
- xi. List of hazardous waste to be handled and their source along with mode of transportation.
- xii. Other chemicals and materials required with quantities and storage capacities.
- xiii. Details of temporary storage facility for storage of hazardous waste at project site.
- xiv. Details of pre-treatment facility of hazardous waste at proposed incinerator site.
- xv. Details of air Emission, effluents, hazardous/solid waste generation and their management.
- xvi. Hazard identification and details of proposed safety systems.
- xvii. Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
- xix. Status of court case pending against the project.
- xx. A tabular chart with index for point wise compliance of above TOR.

*It was recommended that ‘TOR’ prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA / EMP*
report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The Committee exempted Public hearing as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.

19.3.15 Installation of Material Ropeways 5 nos. for the construction of Deothal Chanju 30 MW in Chaurah Tehsil of District Chamba, Himachal Pradesh by M/s Himachal Pradesh Power Corporation Ltd. - Terms of Reference (IA/HP/MIS/62371/2017; F. No. 10-24/2017-IA-III)

*Project Proponent did not attend meeting.*

19.3.16 Installation of Material Ropeways 6 nos for the construction of Chanju-III 48MW HEP in Chaurah Tehsil of District Chamba, Himachal Pradesh by M/s Himachal Pradesh Power Corporation Limited - Terms of Reference (IA/HP/MIS/62364/2017; F. No. 10-25/2017-IA-III)

*Project Proponent did not attend meeting.*

19.3.17 E Nano Incintech – Common Hazardous Waste Incineration Facility, Karnataka M/s E Nano Incitech – Terms of Reference (IA/KA/MIS/62543/2017; F. No. 10-26/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i). M/s. E- NANO INCINTECH was Established in Harohalli Industrial area, Kanakpura (Tq.), Ramanagara (Dist) on 2011 by Mr. Yogananda. Located in designated KIADB Harohalli Industrial area as per EC clearance No.SEIAA:5:IND:2013, dated on 22nd August 2013 by Karnataka Industrial Area Development Board (KIADB)

(ii). Earlier Environmental was obtained on 10th May 2012 from Ministry of Environment and Forest, New Delhi vide File no. 10-88/2010-IA.III for the activity Common Hazardous Waste Incinerator Facility of capacity 500 kg/hr and to incinerate 1,200 MT/A.

(iii). It is proposed to increase in operational hours from 8 to 16 hr, having base capacity 500 Kg/hr and total cumulative thermal destruction capacity 2,500 MT/A

(iv). E- Nano IncinTech has achieved 100% compliance to the Environmental Clearance issued as well as to State permit like Consent for establishment, Consent for Operation, Hazardous waste Authorization.

(v). The Proposal was approved for hazardous waste incinerator having capacity of 500kg/hr with land area of 4043 sqm.

(vi). The industry is into service facility provider for scientific disposal of incinerable waste in accordance to Hazardous Waste Management Rules 2008 and 2016 Notification.

(vii). The proposal was approved for operation of Incinerators only for 8 hrs. Where in the capacity of incinerator can scientifically dispose Hazardous waste of 500 Kg/hr. Hence the existing incinerator can be allowed to operate for Whole day.
(viii). Environmental impact analysis submitted during grant of earlier was conducted considering pollution aspect and impact for 24 Hour operation.

(ix). The proposal doesn't lead to increasing pollution load or any other attributes given under Environmental Clearance and also CFE/CFO/HWA.

(x). The facility is existing from 2012 and in continual operation without any breach of environmental parameters either under Air act and Water act.

(xi). The proposed modification and amendment sought doesn't have any additional land requirement, ground water drawl and certain other environmental features and community resource, in addition to the fact that the modification of the project would not result in additional pollution load/Pressure on the local Infrastructure.

(xii). There is no increase in detrimental impact or pressure on the local infrastructure like road, electricity of civil supplies, natural resources and on social impact/environment.

(xiii). Industry is well established with all necessity infrastructure available as per CPCB guidelines and committed for continual improvement.

(xiv). This proposal doesn't lead to additional activities or alternation of plant, with available built in infrastructure.

(xv). The existing facility hourly/daily quantative or qualitative operational environmental attributes will remain the same. The pollution load in context of air, water, solid and hazardous waste, which has direct reflection on surrounding environment will remain the same as well as 24 hr operation.

During deliberation, the project proponent has made request before the Committee to for amendment in the existing EC by allowing him to increase the operational hours from 8 to 16 hours having base capacity 500 Kg/hr, as sanctioned earlier. However the Committee noted that the increase in operational hours wills double the incineration capacity of the plant. The Committee treated the instant proposal as an expansion project. After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) To carry out a sensitivity analysis of alternative sites as per the “Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in 2003.”

(iii) Project proponents would also submit a write up on how their project proposals conform to the stipulations made in the “Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators”, published by the CPCB on May 24, 2010.


(v) Compliance to the conditions of the consent to operate and authorization
(vi) Details of various waste management units with capacities for the proposed project.
(vii) List of waste to be handled and their source along with mode of transportation.
(viii) Other chemicals and materials required with quantities and storage capacities.
(ix) Details of temporary storage facility for storage of hazardous waste at project site.
(x) Details of pre-treatment facility of hazardous waste at TSDF.
(xi) Details of air emissions, effluents, hazardous/solid waste generation and their management.
(xii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
(xiii) Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided.
(xiv) Hazard identification and details of proposed safety systems.
(xv) Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.
(xvi) Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
(xvii) Ground water quality monitoring in and around the project site.
(xviii) Status of the land purchases in terms of land acquisition Act and study the impact.
(xix) Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
(xx) R&R details in respect of land in line with state Government policy.
(xxi) Details of effluent treatment and recycling process.
(xxii) Leachate study report and detailed leachate management plan to be incorporated.
(xxiii) Action plan for measures to be taken for excessive leachate generation during monsoon period.
(xxiv) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.
(xxv) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.
(xxvi) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water
Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

(xxvii) A tabular chart with index for point wise compliance of above ToR.

It was recommended that ‘TOR’ prescribed by the Expert Appraisal Committee (Infrastrucute- 2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The Committee exempted Public hearing as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.

19.3.18 Establishment of 75 KLD capacity Common Effluent Treatment Plant (CETP) by Industrial Area Lakanpur Small Electro Plating Association, Agra, Uttar Pradesh by M/s Industrial Area Lakanpur Small Electroplating Association - Terms of Reference (IA/UP/MIS/63458/2017; F. No. 10-27/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) Industrial Area Lakanpur Small Electro Plating Association, Agra has proposed to Establish a 75 KLD capacity Common Effluent Treatment Plant (CETP) at Industrial Area Lakanpur in a plot having Khasra No. 151/1 & 151/2, in Agra, Uttar Pradesh State.

(ii) This CETP will be established and operated by “Industrial Area Lakanpur Small Electro Plating Association”. The industrial effluents from its member Electroplating units will be treated in the proposed CETP.

(iii) The treated effluent after conforming to the specified/notified standards will be reused and recycled to the maximum extent. A portion of treated effluent will be used for tree plantation for green belt development and sprinkling. If any quantity is left over, it will be evaporated by installing an evaporator to achieve Zero Liquid discharge (ZLD).

(iv) The land area acquired for the said CETP along with member Electroplating units is 5630.83 or says 5630 sqm in total.

(v) Out of total land of 5630 sqm, 201 sqm of area has been taken for establishment of CETP, 3216 sqm will be kept for member electroplating units, 618 sqm of land will be used for plantation and green belt development and 1595 sqm of land will used for Road.

(vi) Suitable indigenous plant species will be taken for plantation all along the internal road side. It is planned to plant further saplings considering the parameters as type, height, leaf area, crown area, growing nature, water requirement etc. Green belt will be progressively developed on land.

(vii) The estimated Capital Cost for establishment of CETP is of Rs. 358.54 Lacks that includes the machinery cost for installation of pollution control equipments. Total manpower for operating and maintaining the CETP will be 10. It will be operational on shift (8 Hrs) basis for 24X7 for 365 days in a Year.

(viii) The electricity load of 25 KVA will be required for operating and maintaining the CETP. One number of 50 KVA capacity DG set will be provided for the
(ix) Fuel consumption for the DG Set would be 0.01 KLD of HSD. The total water requirement mainly for potable use at CETP will be approximately 200 Ltr/day. Bore Well Water will be used for the said purpose with required permission from CGWA if any.

*After detailed deliberations on the proposal, the EAC recommended for grant of Terms of Reference (ToR) as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>Importance and benefits of the project.</td>
</tr>
<tr>
<td>ii.</td>
<td>A chapter on Quantification and Characterization of inlet characteristic including methodology adopted.</td>
</tr>
<tr>
<td>iii.</td>
<td>Process flow diagram of the proposed CETP.</td>
</tr>
<tr>
<td>iv.</td>
<td>Layout plan of CETP.</td>
</tr>
<tr>
<td>v.</td>
<td>Cost of project and time of completion.</td>
</tr>
<tr>
<td>vi.</td>
<td>Area earmarked for CETP.</td>
</tr>
<tr>
<td>vii.</td>
<td>Method for conveyance of effluent from the individual industrial unit to CETP.</td>
</tr>
<tr>
<td>viii.</td>
<td>Explore the option to recycle the treated effluent to individual industrial unit instead or discharging outside.</td>
</tr>
<tr>
<td>ix.</td>
<td>Reuse and Recycle option of treated effluent.</td>
</tr>
<tr>
<td>x.</td>
<td>List of hazardous waste to be handled and their source along with mode of transportation.</td>
</tr>
<tr>
<td>xi.</td>
<td>Other chemicals and materials required with quantities and storage capacities.</td>
</tr>
<tr>
<td>xii.</td>
<td>Details of temporary storage facility for storage of hazardous waste at project site.</td>
</tr>
<tr>
<td>xiii.</td>
<td>Details of pre-treatment facility of hazardous waste at proposed incinerator site.</td>
</tr>
<tr>
<td>xiv.</td>
<td>Details of air Emission, effluents, hazardous/solid waste generation and their management.</td>
</tr>
<tr>
<td>xv.</td>
<td>Hazard identification and details of proposed safety systems.</td>
</tr>
<tr>
<td>xvi.</td>
<td>Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.</td>
</tr>
<tr>
<td>xvii.</td>
<td>Disaster Management Plan.</td>
</tr>
<tr>
<td>xviii.</td>
<td>Status of court case pending against the project.</td>
</tr>
<tr>
<td>xix.</td>
<td>Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.</td>
</tr>
</tbody>
</table>
xx. A tabular chart with index for point wise compliance of above TORs.

It was recommended that ‘TOR’ along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructures-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

19.3.19 Development of captive jetty at Village Dhunay, along Kori Creek, Kutch, Gujarat by M/s Satyesh Brinechem Private Limited - Terms of Reference (IA/GJ/MIS/64384/2017; F. No. 10-28/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for Development of captive jetty of Satyesh Brinechem Private Limited at Village Dhunay, along Kori Creek, Kutch. The location of the plant is finalized near Luna to the northwest of Lakhpat in Kutch, Gujarat. For exporting this cargo, a captive jetty facility is proposed to be developed at a location accessible from the plant.

(ii) The project components will include Construction of following

- Jetty - 285m X 20m
- Approach trestle – 800m X 10m
- Back up yard - 562m X 290m
- Admin building, Custom building and other associated facilities

(iii) Approach road of 7 meter bottom width and length 5.5 Km (3.85 Hectares) would be constructed between Village Kanoj to back up land. Approach road will pass through reserve forest.

(iv) The project is 3.5 km from Narayan Sarovar Bird Sanctuary.

(v) The cargo (4.5 MMTPA) will be transported from the plant through trucks to the jetty and loaded onto the barges. These barges will be taken to the anchorage location for transferring the salt onto the bulk carriers (50,000 DWT i.e. Handymax size). The salt cargo will be transported in trucks by road to the facility. It will be conveyed from the yard at the facility to the barge jetty and loaded onto the barges. The barges will carry the salt up to the bulk carrier at the anchorage location outside Kori Creek for transferring the salt onto the vessels. During the monsoon period, it is proposed that the cargo will be conveyed by road to Mundra port and exported from there.

(vi) During Operational Phase water requirement will be 4 KLD which will be met through tankers.

(vii) Court cases if any: Nil

(viii) Investment/Cost of the project is Rs. 134 Cr.

(ix) Employment potential: Nearly 50 persons

(x) Benefits of the project: Captive jetty construction at selected location will reduce vehicular traffic and emissions between jetty site and...
Mundra/Kandla port.

After detailed deliberations on the proposal, the EAC recommended for grant of Terms of Reference (ToR) as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

i. Importance and benefits of the project.

ii. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

iii. Recommendation of the SCZMA.

iv. Stage – I forest clearance to be submitted.

v. NBWL clearance is required.

vi. Various Dock and shipbuilding facilities with capacities for existing and proposed project.

vii. Study the impact of dredging on the shore line.

viii. A detailed impact analysis of rock dredging.

ix. Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.

x. A detailed analysis of the physico-chemical and biotic components in the highly turbid waters round the project site (as exhibited in the Google map shown during the presentation), compare it with the physico-chemical and biotic components in the adjacent clearer (blue) waters both in terms of baseline and impact assessment and draw up a management plan.

xi. Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.

xii. The existing project should avail of and submit consent to operate from the State Pollution Control Board.

xiii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

xiv. Wastewater management plan.

xv. Details of Environmental Monitoring Plan.

xvi. To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

xvii. Disaster Management Plan for the above terminal.

xviii. Layout plan of existing and proposed Greenbelt.
xix. Status of court case pending against the project.
xx. A tabular chart with index for point wise compliance of above TORs.
xxi. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

*It was recommended that ‘TOR’ along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.*

19.3.20 Proposed Smart Industrial Port City (SIPC) at green Field Site 2 (KPT Complex, 850 Acres), Gandhidham, Kutch - Gujarat by M/s Kandla Port Trust - Terms of Reference (IA/GJ/NCP/63962/2017; F. No. 21-169/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) Proposed Smart Industrial Port City (SIPC) at green Field Site 2 (KPT Complex, 850 Acres), Gandhidham, Kutch - Gujrat The proposal fall under category 8(b) Townships and Area Development projects. Plot area of the project is 4,39,827.5 m² and Built up area is 50,59,153 m² ha. There will be construction of maximum G+ 2 floors. Excavation for basement.

(ii) There is construction of Residential, Commercial (District Centre), Multi Modal Logistic Hub, Community centre, Police Post, Petrol Filling station, Fire Station, Furniture industry, Edible oil, Engineering & Fabrication etc and basement for parking.

(iii) Temporary sites will be used for construction yards, labour camps, construction camps which shall be demolished after the work and site shall be restored.

(iv) Solid waste generated in proposed project will be mainly of domestic nature. The 19 tonne/day of solid wastes generated will be segregated into biodegradable and non-biodegradable wastes and collected in separate bins. The non-biodegradable wastes will be sold to recyclers or users and the biodegradable wastes will be collected and convert into manure. Hazardous and Other Wastes if any will be handed over to authorized vendor.

(v) During construction phase fresh water requirement 90 KLD will be met through the Tankers. During operational phase fresh water requirement of 6.3 MLD will be met through GWSSB.

(vi) During construction phase, 1000 workers will be employed temporarily and hired from local area. Project would be developed phase wise. There will be influx of more than 1,17,591 (1,07,591 permanent, 10,000 visitors) people during full fledge operation.

(vii) Construction phase Maximum Quantity: 90 (KLD) Source: Tankers
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Operation phase Maximum Quantity: 16.96 MLD (Potable-6.33 MLD &amp; 10.63 MLD) Source: GWSSB.</td>
</tr>
<tr>
<td>(viii)</td>
<td>Construction materials such as stone, cement, sand, bricks, marble, paints, tiles, electric ware, sanitary ware, glass will be used. All the above materials will be purchased from the local market and from nearest quarries, as and when required. It will be stored temporarily at the site. Specific details will be incorporated with EIA Report.</td>
</tr>
<tr>
<td>(ix)</td>
<td>Expected electricity demand shall be ~79 MVA which will be sourced from: PGVCL D.G. set of 1200 KVA will be installed in case of power failure (dedicated for fire only)</td>
</tr>
<tr>
<td>(x)</td>
<td>The municipal solid wastes generated during operation phase will consist of: Organic waste: Waste vegetables and foods Inorganic waste: Papers, cartons, Thermocol, plastics, polythene bags, Glass, etc. Solid waste storage Adequate number of collection bins, separately for biodegradable and non-biodegradable waste will be provided as per Municipal Solid Waste (Management and Handling) Rules. Waste from such bins will be collected separately on daily basis and will be disposed off as per guide.</td>
</tr>
<tr>
<td>(xi)</td>
<td>Hazardous and Other Wastes will be handed over to authorized vendor and will be managed as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.</td>
</tr>
<tr>
<td>(xii)</td>
<td>Dust generated during construction will be suppressed by water sprinkling. On site sanitation facilities (septic tank) will be provided. Temporary Solid waste storage will be provided at site and recyclable material will be sold to recyclers. Operation Phase: Project would be developed phase wise. It is estimated that about 11.76 MLD of total wastewater will be generated during operation phase and will be treated in STP and reused.</td>
</tr>
</tbody>
</table>

**The Committee deliberated upon the proposal and recommended grant of additional ToR on the proposals as submitted through Form 1 and the standard ToR as presented by the Project Proponent who indicated that they have already collected base level data from the month of December, 2016 to February, 2017 (after the submission of Form 1 by the project proponent) and would like to use these data. The Committee allowed to use the data.**

**After detailed deliberations, the EAC recommended for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:**

1. Importance and benefits of the project.
2. The data collection and impact assessment shall be as per standard survey methods.
3. 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.
4. Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.
5. Recommendation of the SCZMA.
(vi) Present land use of the proposed project site.

(vii) Copy of project sanction plan.

(viii) Details of project configurations and built up area.

(ix) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.

(x) All construction and demolition debris shall be stored at the site (and not dumped at the road are open spaces outside) before they are properly disposed. All demolition and construction wastes shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016.

(xi) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(xii) An estimation of the extent of dewatering for basements, description of the methodology used and assessment of impacts shall be submitted along with a plan for reutilisation of Water as per the CGWA Guidelines.

(xiii) Details of source of water supply along with permission to be submitted.

(xiv) Quantification of various effluent streams such as sewage, restaurant effluent, Laundry effluent etc.

(xv) Treatment scheme for effluent and its recycling mode.

(xvi) The details of the treated sewage disposal and its impact on the recipient system shall be studied.

(xvii) Action plan to prevent pollution from discharge of surface runoff into water bodies.

(xviii) Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

(xix) Details of DG sets. Prediction of ground level concentration due to emissions from DG sets.

(xx) Details of arrangement for meeting standby power from solar energy.

(xxi) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.

(xxii) Since the ground water level is shallow and not suited to recharge, the EIA would suggest means to alternatively harvest rain water.

(xxiii) A management plan be submitted for not using fresh water for HVAC and irrigation.

(xxiv) Electro-mechanical doors to be explored for the toilets meant for disabled persons.

(xxv) Calculation on sizing of solar water heating systems to be furnished.

(xxvi) A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.
(xxvii) Solid waste management plan along with area earmarked for solid waste management scheme.

(xxviii) Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble/stone cutting.

(xxix) Layout plan indicating Greenbelt along with area earmarked to be provided.

(xxx) Disaster Management plan including onsite and offsite plan.

(xxi) The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

(xiv) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(xxxii) Traffic Impact Analysis (TIA) shall be carried out engaging services of an organisation specialising in Transport Planning and Traffic engineering to assess the impact of proposed redevelopment of the complex in terms of impact on traffic intensities, road capacities, intersection capacities and related delays on the bounding network of the site. The TIA report shall explicitly detail out the method of estimating the additional traffic demand owing to redevelopment process including the impact on passenger/visitor footfalls, parking demand and other access/dispersal hired transport system within the complex. The TIA shall also indicate the impact of proposed redevelopment on the level of service of the primary road network falling in the immediate catchment area of the complex within an area of at least 5 sq km. The TIA shall be followed by preparation of detailed Traffic Management Plan (TMP) detailing various implementable measures for traffic impact mitigation to be submitted along with the EIA. The recommended TMP proposed to be implemented should preferably be approved by bodies such as UTTIPEC comprising expert officials from PWD, Traffic Police, Transport Department etc.

It was recommended that ‘ToR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.

Day 2: Wednesday, 28th June, 2017

19.4.1 Proposed premium housing and commercial development at Survey no.12/1(part), 13/1- A(part), 13/1- B (part), Panelim, North Goa by M/s IN-OORBIT Malls (India) Pvt. Ltd - Amendment in Environmental Clearance
The project proponent made a presentation and provided the following information to the Committee:-

(i) This is a new project located at 15.492882° latitude and 73.892880° longitude.

(ii) Earlier Environmental Clearance was received vide Letter No. 3-181-2010/STE-DIR/Part-II/EIA-Goa/135 dated 27.07.2015

(iii) No construction activity has been initiated on project site under consideration for Environmental Clearance.

(iv) The total plot area is 68,012 sqm. FSI area is 41424.00 sqm and total construction area of 62850.41 sqm. The project will comprise of 33 Nos. of row houses, 11 apartments, 1 institutional block and 1 commercial block. Total flats: 444 nos., 1 commercial block and 1 institutional block will be developed. Maximum height of the building is 18m.

(v) During construction phase, total water requirement is expected to be 107 KLD which will be met by tanker. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water.

(vi) During operational phase, total water demand of the project is expected to be 525 KLD and out of the total 253 KLD is for drinking water which will be met by Local Body (village panchayat). Waste water generated (347KLD) will be treated in Zone wise separate STP’S of total capacity 350KLD of treated waste water will be recycled (146 for flushing, 96 for gardening). About 70KLD will be disposed into village panchayat drain.

(vii) About 1645 kg/day solid waste will be generated in the project. The biodegradable waste (659 kg/day) will be processed in common solid waste management plant and then on- biodegradable waste generated (986 kg/day) will be handed over to local body/village panchayat.

(viii) The total power requirement during construction phase is about 60 KW and will be met from State Electricity Board and total power requirement during operation phase will be met by State Electricity Board.

(ix) Rooftop rainwater of buildings will be collected in 16 nos. of recharge pits with bore wells of size 3m dia and 5m depth to recharge ground water.

(x) Parking facility of 689 nos. for cars and 92 nos. for two wheelers is proposed to be provided against the requirement of 599 nos. of cars and two wheelers not applicable respectively (according to local norms).

(xi) The details of Court cases are as below,

- Special civil suit no.14/2008/A filed in the court of Civil Judge, Senior Division at Panaji, by Wides Properties and Holdings (Plaintiff) against In-orbit Malls Pvt. Ltd.(Defendant)

- By order dated 18.06.2013, the Injunction Application of Wides seeking interim relief (for temporary injunction against construction) has been dismissed. SCS 14/2008 Wides Vs. Inorbit is adjourned to 28/06/2017 for reply/arguments on the Amendment Application.

- Special Civil suit no.20/2008/A filed by Dattaram Xavier Fernandes and Yashodi Dattaram Kunkolkar against Irena Periera and others
(including Inorbit Malls Pvt. Ltd.) SCS 20/2008 matter is adjourned to 21/06/2017 for filing affidavit of evidence by the plaintiff.

(xii) **Investment/Cost** of the project is Rs.168.0 Crore

(xiii) **Employment potential**: Will create job opportunity for IT Personals, support staff like Security, Maintenance, etc.

(xiv) **Benefits of the project**: Enhancement of the infrastructural facilities in the area and will create job opportunity for IT Personals, support staff like Security, Maintenance, etc.

*After detailed deliberations on the proposal, The EAC recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:*

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) Permission from forest department shall be taken before felling the trees.

(iii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iv) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(v) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(vi) At least 20% of the open spaces as required by the local building bye-laws
shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(ix) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(x) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xi) Sewage shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rooftop rainwater of buildings shall be collected in 16 nos. of RWH recharge pits for harvesting after filtration as per CGWB guidelines.

(xiii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 60 m² of space shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xiv) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xvi) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during
plantation of the proposed vegetation on site.

(xvii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xviii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xix) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xx) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xxi) Approval of the CGWA require before any dewatering for basements.

(xxii) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxiii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvi) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
|   | • Proper design of entry and exit points.  
|   | • Parking norms as per local regulation  

### II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from Village Panchayat Water Supply shall not exceed 253 m$^3$/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut,
compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed green belt area of 11938.27 sqm shall be provided.

(xii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(ii) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.4.2 Expansion sought in Environmental Clearance of SRA Project for Residential Cum Commercial Development at Plot bearing C.T.S. No. 198,199,213,214 & 215(Par) at village Mogra, Andheri (East), District Mumbai, Maharashtra by M/s Starwing Developers Pvt. Ltd - Environmental Clearance (IA/MH/NCP/62075/2017; F. No. 21-28/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The Project is located at Plot bearing CTS No.198, 199, 213, 214 & 215(part) at village Mogra, Parsi Panchayat Road, Andheri(E), district- Mumbai, Maharashtra. Latitude 19°7'35.49"N and Longitude 72°51'12.08"E. The project is for amendment in Environmental Clearance of SRA project for Residential cum Commercial Development by M/s Starwing Developers Pvt. Ltd.

(ii) The total plot area is 7208.80 sqm, total built up area as per EC is 40498.00 sqm and total built up area proposed now is 47524.03 sqm. The project comprising of 1 Sale Building and 1 Rehab building. The maximum height of the building is 69.9m. The configurations are as:

- 1 Sale Building: Tower 2: 2 basement+G+6podiums+17floors, Tower 1: G/stilt+23 floors
- 1 Rehab Building: G/Stilt+22 floors
- Shops: G/Stilt+1 (in Rehab building)
- Amenity: 543 sqm

(iii) During construction phase, total water requirement is expected to be 384 kld which will be met by MCGM. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

(iv) During operational phase, total water demand of the project is expected to be 384 m³/day and the same will be met by the MCGM OR Recycled Water. Wastewater generated (298 m³/day) uses will be treated in STPs of total 310 m³/day capacity. 162 m³/day of treated wastewater will be
reycled (125 m\(^3\)/day for flushing, 12 m\(^3\)/day for gardening, 25 m\(^3\)/day for Vehicle washing). About 127 m\(^3\)/day will be disposed into municipal drain.

(v) About 1,415 kg/day solid waste will be generated in the project. The biodegradable waste (566 kg/day) will be processed in OWC and the non-biodegradable waste generated (848 kg/day) will be disposed off through recyclers.

(vi) The total power requirement for the project is 1871 kW and will be met from Reliance.

(vii) 9 nos. of Percolation wells are proposed for rainwater harvesting.

(viii) Parking facility for 343 four wheelers is proposed to be provided. Parking is provided in lower and upper basement, ground floor and 1-5\(^{th}\) Podium floors in the Sale component and mechanical stack parking is provided in Rehab Component.

(ix) Proposed energy saving measures would save about 14.78 % (common area, basements & parking lighting) of power.

(x) It is located within 10 km of Eco Sensitive areas. Sanjay Gandhi National Park-4.8km.

(xi) Court case pending against the project – Nil.

(xii) **Total cost** of the project is Rs. 262 crore.

(xiii) **Employment Potential**: For skilled and no skilled construction workers during construction phase and security, cleaning staff during operation phase.

(xiv) **Benefits of the project**: The project comprising of Rehab building, Sale building and shops in Rehab building has got the benefits in many folds. It helps in improving the standard of living, hygienic condition for the slum dwellers. Lots of jobs are created for unskilled, skilled & qualified personals.

The proposal was earlier considered by the EAC in its 14\(^{th}\) meeting held on 13\(^{th}\) -15\(^{th}\) February, 2017, wherein the Committee sought some additional information.

Project Proponent has submitted the additional information vide letter dated 16.03.2017. Copy of additional Information is available on the website. The Committee deliberated on point wise submission of project proponent on earlier observations made. The EAC, on being satisfied with the submissions of the project proponent, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance
(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation
lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 9 nos. of rain water recharge pit shall be provided for harvesting after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed 132 sqm of space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals.
of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFi), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from MCGM and Water Supply shall not exceed 247 m$^3$/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical
|   | monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP. (vi) No sewage or untreated effluent water would be discharged through storm water drains. (vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013. (viii) The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed. (ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible. (x) Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. (xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed Recreational ground area of 2052.84 sqm including 479.01 sqm for green belt shall be provided. (iii) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013. |

| 19.4.3 | **Proposed Amendment of Slum Rehabilitation Scheme at Jaldhara SRA CHS Goregaon (E), Mumbai by M/s VGS Realty Construction Pvt. Ltd - Environmental Clearance (IA/MH/NCP/61881/2017; F. No. 21-24/2017-IA-III)** The project proponent made a presentation and provided the following information to the Committee:- (i) The proposal is for Expansion of Proposed SRA Project on plot bearing C.T.S. NO.-827 D/1 (pt) & 827 D/2 (pt) of Village Malad (E), at Shri Krishna Nagar, Gen. Arun Kumar Vaidya Marg, P/North ward of MCGM, Mumbai for “Jaldhara SRA CHS” & “Shri Ganesh Krupa SRA CHS” (Prop). (ii) Project was granted Environmental Clearance vide letter No. SEAC 2010/CR. 844/TC.2 dated 1st October, 2011. (iii) 1st Amendment in EC was obtained in 2015 vide letter no. SEAC 2010/CR844/TC-2 dated 16th July, 2015 & 2nd Amendment in EC was |

(iv) The proposal is for an Amendment & Expansion of the scheme with the adjacent plot having CTS No. 827 D/2 (pt) & thus addition of floors in Rehab wing A (9 upper floors) and two additional wings D&E in Rehab building Gr+5 (pt) floors & Gr+1 upper floors respectively.

(v) Total Plot Area is 13496.17 sqm with Net Plot area 13241.57 sqm. Total Construction Built up Area is 92858.14 sqm.

(vi) Total water requirement will be 701 KLD (Rehab = 451 KLD, Sale = 250 KLD) which will be sourced from MCGM & recycled water.

(vii) Total 641 KLD (Rehab - 414 KLD, Sale - 227 KLD) Sewage shall be Treated in STP for 650 KLD (Rehab- 420 KLD & Sale - 230 KLD) capacity. Recycled water is total 244 KLD (Rehab - 156 KLD & Sale -88 KLD), wherein for Rehab (flushing148KLD) gardening (7.5 KLD) & sale (flushing 81 KLD) gardening (7.25 KLD). Excess treated water total - 333 KLD (Rehab - 217 KLD, Sale - 116 KLD) will be sent to municipal sewer drain.

(viii) Biodegradable waste 1524 Kg/Day (Rehab -984 Kg/day, Sale-540 Kg/day) will be treated in OWC and the manure will be used for landscaping at site and as replacement for saw dust in OWC. Non-biodegradable waste 1022 Kg/Day (Rehab- 662 Kg/day, Sale- 360 Kg/day) will be handed over to local recyclers.

(ix) **Investment / cost** of the project will be Rs. 130 Crore.

(x) **Employment potential**: Construction phase employment is expected to be 100 nos./day.

(xi) **Benefits of the project**: It will be beneficial in the following ways:

- It will initiate redevelopment of surrounding area which consists of slums.
- It will provide employment opportunities to the local people in terms of labour during construction and services personnel during operational phase.
- Modern sanitation and infrastructure facilities will improve the living conditions of slum tenants.
- The project will improve living standard and welfare of the area and local people

>The proposal was earlier considered by the EAC in its 14th meeting held on 13th -15th February, 2017, wherein the Committee sought some additional information.

*Project Proponent has submitted the additional information vide letter dated 29.04.2017. Copy of additional Information is available on the website. The EAC deliberated on the certified compliance report letter F. No. 18-C-43/2012(SEAC) dated 24.04.2017 issued by the MoEF&CC’s Regional Office (WCZ), Nagpur and reply given by the project proponent to non-compliance of EC conditions. The Committee deliberated on point wise submission of project proponent on earlier observations made. The EAC, on being satisfied with the submissions of the project proponent, recommended the project for grant of environmental clearance*
and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

   (i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

   (ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

   (iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

   (iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

   (v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

   (vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

   (vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.</td>
</tr>
<tr>
<td>(viii)</td>
<td>Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.</td>
</tr>
<tr>
<td>(ix)</td>
<td>Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.</td>
</tr>
<tr>
<td>(x)</td>
<td>Sewage shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture &amp; DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.</td>
</tr>
<tr>
<td>(xi)</td>
<td>The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 2 nos. of rain water harvesting tanks of total capacity of 174 m$^3$ shall be provided as per CGWB guidelines.</td>
</tr>
<tr>
<td>(xii)</td>
<td>Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.</td>
</tr>
<tr>
<td>(xiii)</td>
<td>Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.</td>
</tr>
<tr>
<td>(xiv)</td>
<td>A First Aid Room shall be provided in the project both during construction and operations of the project.</td>
</tr>
<tr>
<td>(xv)</td>
<td>Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.</td>
</tr>
<tr>
<td>(xvi)</td>
<td>Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.</td>
</tr>
<tr>
<td>(xvii)</td>
<td>The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.</td>
</tr>
<tr>
<td>(xviii)</td>
<td>Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.</td>
</tr>
<tr>
<td>(xix)</td>
<td>As proposed, no ground water shall be used during construction/ operation</td>
</tr>
</tbody>
</table>
phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from Municipal Corporation of Greater Mumbai
(vi) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 2946.81 sqm area shall be provided for green belt development.

(xiii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment
<table>
<thead>
<tr>
<th>19.4.4</th>
<th>Establishment of Common Effluent Treatment Plant (To be managed by The Ahmedabad Hand Screen Printing Association) by M/s Ahmedabad Hand Screen Printing Association - Re-consideration for Environmental Clearance (IA/GJ/MIS/38384/2016; F. No. 10-3/2016-I.A.III)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
<td></td>
</tr>
<tr>
<td>(i) CETP with design Capacity of 30 MLD, expandable to 45 MLD considering peak flow of 1.5 times is proposed at Block No.135/Part &amp; 154/Part, Behrampura, Ahmedabad. Project is for establishment of CETP for the effluent from various textile/hand screen printing industries units and small scale dyes &amp; blending manufacturing units located at Danilimda &amp; Behrampura area of Ahmedabad.</td>
<td></td>
</tr>
<tr>
<td>(ii) Total fresh water requirement for the CETP project will be only for domestic and plantation purpose and it will not exceed beyond about 16 KLD. It will be provided by AMC.</td>
<td></td>
</tr>
<tr>
<td>(iii) Approx. 25% of the land will be developed as green belt.</td>
<td></td>
</tr>
<tr>
<td>(iv) Investment/Cost of the project is Rs. 112.75 Crores</td>
<td></td>
</tr>
<tr>
<td>(xix) Employment potential is 50 local persons</td>
<td></td>
</tr>
<tr>
<td>(xx) Benefits of the project: Better compliance from small scale industrial unit.</td>
<td></td>
</tr>
</tbody>
</table>

*The proposal was earlier considered by the EAC (Infra-2) in its meeting held during 26th – 28th December, 2016. Wherein some additional information was sought. Now, Project Proponent vide letter dated 27.03.2017 has submitted additional Information. Copy of additional Information is available on the website.*

*The EAC, on being satisfied with the submissions of the project proponent in response to its observations, recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:*  

| (i) There shall be Flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged. | |
| (ii) The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the textile park/units, quantity of the treated effluent discharged. All the above information shall be provided on-line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP. |
(iii) Periodical monitoring shall be carried out for the functioning of CETP and outlet parameters.

(iv) The unit will strictly comply with the conditions stipulated by the Gujarat State Pollution Control Board through the consent to establish (CTE order No. 85025) issued on 27.03.2017.

(v) The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advise in the matter.

(vi) The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.

(vii) The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.

(viii) The unit shall maintain a robust system of conveyance for primary treated effluents from the member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.

(ix) The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.

(x) Any changes in the manufacturing process, installed capacity or the quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, will only be done after an approval of the Gujarat State Pollution Control Board in the matter.

(xi) The treated effluent from CETP shall be blended with treated sewage prior to its discharge in river.

(xii) Domestic water requirement is @ 16 KLD, which will be met through AMC water supply, whereas, the balance water requirement for chemical solution preparation shall be met through recycled treated effluent.

(xiii) The estimated quantity of hazardous waste i.e. ETP sludge to be generated from CETP facility @ 22.5 MT/day shall be handled and disposed to nearby authorized TSDF site as per HWM Rules, 2016.

(xiv) Non Hazardous solid wastes and sludges arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non Hazardous solid wastes and sludges shall not be mixed with Hazardous wastes.

(xv) The effluent from member units shall be transported through pipeline, as committed. In case the effluent is transported thorough road, it shall be
transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.

(xvi) Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.

(xvii) The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.

(xviii) 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 RO, MoEF&CC along with half yearly compliance report.

(xix) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.

(xx) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

(xxi) Project proponent should develop green belt all along the periphery of the site with plant species that are significant and used for the pollution abatement. Area earmarked for greenbelt is 4989.00 sqm.

19.4.5 Creation of water front facilities (Oil Jetties 8, 9, 10 & 11) and development of land (1432 acres) for associated facilities for storage at Old Kandla, Gandhidham, Kutch, Gujarat by M/s Kandla Port Trust – Terms of Reference (IA/GJ/MIS/61679/2017; F. No. 10-1/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for Creation of Water Front (Oil Jetties 8,9,10 &11) and Development of land for Associated Facilities. Latitude and longitude of the location are 23° 3'47.33"N, 70°11'50.30"E. The proposed site is within in the Kandla port limits and necessary infrastructure facilities like road, rail network are available.

(ii) The proposed project is creation of water front facilities for construction of oil jetties 8,9,10 & 11 and development of land for associated facilities. The total land area is 1432 acre. Each jetty will handle 3.5 MMTPA (Max) per annum of liquid cargo. The proposed project falls within the existing port area and existing road and other infrastructure network can be utilized efficiently.

(iii) Dredging quantity is 4,75,615 cum will be capital dredging.

(iv) The proposed project will handle edible oil, fertilizers and food grains.

(v) No fishing activity near the proposed site.

(vi) Water requirement will be 20 KLD and will be taken form Gujarat Water Supply and sewerage Board.

(vii) 1,41,69,564 cum of earth is required for creation of the facility. It falls under
The intertidal zone of 1B and MSL varies from 11-20 ft.

(viii) **Investment/cost of the project is Rs. 1505.74 crore.**

(ix) **Benefits of the project:** Development of infrastructure facilities for import and creation of employment.

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) The data collection and impact assessment shall be as per standards survey methods.

(iii) A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF&CC, a certified report by RO, MoEF&CC on status of compliance of conditions on existing port to be provided in EIA-EMP report.

(iv) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

(v) Recommendation of the SCZMA.

(vi) Stage – I forest clearance to be submitted.

(vii) Various Dock and shipbuilding facilities with capacities for existing and proposed project.

(viii) Study the impact of dredging on the shore line.

(ix) A detailed impact analysis of rock dredging.

(x) The EIA would also address to the Tuna Kandla road and provide an affidavit that the said road does not concern the project proponents and that there will be no impact of the project on the road or of the road on the project.

(xi) All biotic components like mudflats and mangroves etc. shall be quantitatively expressed and examined for impacts.

(xii) The buffer line of 50 meters from mangroves will have to be specified in the report and a specific management plan for minimizing the impacts on mangroves drawn up and submitted.

(xiii) Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.

(xiv) A detailed analysis of the physico-chemical and biotic components in the highly turbid waters round the project site (as exhibited in the Google map shown during the presentation), compare it with the physico-chemical and biotic components in the adjacent clearer (blue) waters both in terms of baseline and impact assessment and draw up a management plan.

(xv) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.

(xvi) Toxicity Factor to be carried out on treated trade effluent beside chemical
(xvii) The existing project should avail of and submit consent to operate from the State Pollution Control Board.

(xviii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

(xix) Wastewater management plan.

(xx) Details of Environmental Monitoring Plan.

(xxi) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(xxii) Disaster Management Plan for the above terminal.

(xxiii) Layout plan of existing and proposed Greenbelt.

(xxiv) The compliance to the conditions of consent issued by the State Pollution Control Board.

(xxv) The impact of the project, in its various phases, on the nearly villages specially the one shown as just 600 meters from the project site.

(xxvi) A response to any complaints that have been received by the project against the setting up of the project including the representation submitted by the Conservation Action plan.

(xxvii) The impact and management of using dredged material to raise the height of the proposed land of 39 HA.

(xxviii) The details of waste water disposal into the sea, its impacts and Management plan.

(xxix) Status of court case pending against the project.

(xxx) A tabular chart with index for point wise compliance of above TORs.

It was recommended that ‘TOR’ without Public Hearing (as it was held earlier in November, 2014 for the same area) prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

19.4.6 Hazardous Waste Management facility Phase-II of Integrated Waste Management Facility in Karnataka at village Madanhatti, Dist. Kolar, Karnataka by M/s SMS Infrastructure Limited - Environmental Clearance (IA/KA/MIS/142/2012; F. No. 10-19/2012-IA.III)
The Committee noted that the instant proposal has already recommended by the EAC (Infra-2) in its meeting held during December, 2015. However, proposal is still showing in ADS list. Accordingly, proposal was not considered.

19.4.7 Redevelopment of General Pool Residential Accommodation (GPRA) Colonies at Netaji Nagar, Delhi by M/s NBCC India Limited - Reconsideration for Terms of Reference (IA/DL/NCP/63718/2017; F. No. 21-150/2017-I-A-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i). The present proposal is for ‘Redevelopment of General Pool Residential Accommodation (GPRA) Colonies at Netaji Nagar, Delhi by NBCC India Limited’.

(ii). The project is located at Latitude 28°34'29.11"N and Longitude 77°11'8.36"E in Netaji Nagar of Africa Avenue Marg, Chanakyapuri Tehsil, New Delhi District with the total plot area of 4,42,404.80 sqm and having a built up area of 14,01,061.58 sqm.

(iii). The proposed site is categorized as Mix Residential Use by Delhi Metropolitan Development Authority. The project site is well connected by rail, road and air ways.

(iv). The expected population is 59,621 (including visitors). Total water requirement of 5,286 KLD, daily fresh water requirement of 3,141 KLD will be met through New Delhi Municipal Corporation (NDMC).

(v). The sewage generation of 4,227 KLD will be treated through STP of 4,227 and the treated sewage generation of 3,593 KLD will be recycled for toilet flushing (2,145 KLD), Green Belt Development (764 KLD) & HVAC (684 KLD).

(vi). Solid Waste generation has been projected as 19,863 Kg/day out of which 9,333 Kg/day of Biodegradable waste will be decomposed using Organic waste converter (OWC), 10,528 Kg/day of Non-Biodegradable waste including Recyclable will be handed over to Authorized Recyclers. The Bio-Sludge of 609 Kg/day from STP will be used as manure for gardening and green belt development.

(vii). A rainwater harvesting system comprises components of various stages - transporting rainwater through pipes or drains, filtration, and recharging the ground water through tanks. Percolation pits of 62 Nos. are constructed for ground water recharge.

(viii). The total power required for the proposed project is 48,041 KW which will be availed from New Delhi Municipal Council (NDMC). The backup power for residential purpose is 13 x 500 KVA with stack height and diameter of 33 m from ground level and 0.15 m respectively. The backup power for Office is 15 x 1500 KVA and 1 x 750 KVA and 1 x 500 KVA with stack dia of 0.15 m and height of 33 m each from Ground Level.

(ix). Parking facilities are provided as per the norms to accommodate 17,928 ECS.

(x). The total cost of the project is about Rs. 4,267 Crores.
The proposal was earlier considered by the EAC (Infra-2) in its meeting held on 15.05.2017. During deliberation the EAC noted that a Court Case (O.A. No. 553 of 2016) is pending against 07 redevelopment sites (Government Residential Colonies) in Delhi in the Hon'ble National Green Tribunal, New Delhi including the instant proposal regarding cutting/destruction of trees and plants in huge numbers. The Committee advised the project proponent to give details of the Court case along with present status for further deliberation. After deliberation, the Committee deferred the proposal as matter is sub-judice.

Now, Project Proponent vide letter dated 12.06.2017 has submitted additional Information. Copy of additional Information is available on the website. The Committee noted that it is a re-development project and not a greenfield project. Further, the Committee was also informed by the project proponent that no directions apart from filing affidavits have been given by the Hon'ble NGT in the matter.

During deliberation the Project Proponent informed that they have already collected base level data from the month of April, 2017 to June, 2017 (after the submission of Form 1 by the project proponent) and requested to the Committee to allow them to use the data. The Committee allowed the same.

After detailed deliberations, the EAC recommended for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report subject to the decision of Hon'ble NGT in O.A. No. 553 of 2016:

1. The ToR is subject to the final decision of the Hon'ble National Green Tribunal in O.A. No. 553 of 2016.
2. Importance and benefits of the project.
3. The data collection and impact assessment shall be as per standard survey methods.
4. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) biodiversity, (f) noise and vibrations, (g) socio economic and health.
5. Present land use of the proposed project site.
6. Copy of project sanction plan.
7. Details of project configurations and built up area.
8. The project proponents will give a latest status of the legal case (s) being considered (as related to the project) in various courts along with direction if any received and the status of compliance.
9. The project proponents will provide an impact analysis on the neighboring reserve forest (stated to be 2.5 kms from site) and discuss the regulation requirements for reserve forests in the EIA report.
10. The EIA will include an acceptance from the NDMC on proposals to source water along with a certificate from the NDMC that they have the necessary CGWA clearance for the same.
11. Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour
(xii) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(xiii) An assessment of the impact of the proposed redevelopment should be carried for traffic densities and parking capabilities in a 2 kms radius from the site

(xiv) An estimation of the extent of dewatering for basements, description of the methodology used and assessment of impacts shall be submitted along with a plan for reutilisation of Water as per the CGWA Guidelines.

(xv) Details of source of water supply along with permission to be submitted.

(xvi) Quantification of various effluent streams such as sewage, restaurant effluent, Laundry effluent etc.

(xvii) Treatment scheme for effluent and its recycling mode.

(xviii) The details of the treated sewage disposal and its impact on the recipient system shall be studied.

(xix) Action plan to prevent pollution from discharge of surface runoff into water bodies.

(xx) Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

(xxi) Details of DG sets. Prediction of ground level concentration due to emissions from DG sets.

(xxii) Details of arrangement for meeting standby power from solar energy.

(xxiii) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.

(xxiv) Calculation on sizing of solar water heating systems to be furnished.

(xxv) A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.

(xxvi) Solid waste management plan along with area earmarked for solid waste management scheme.

(xxvii) Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble /stone cutting.

(xxviii) Layout plan indicating Greenbelt along with area earmarked to be provided.

(xxix) Disaster Management plan including onsite and offsite plan.

(XXX) The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

(XXXI) Traffic Impact Analysis (TIA) shall be carried out engaging services of an organisation specialising in Transport Planning and Traffic engineering to
assess the impact of proposed redevelopment of the existing residential complex of AIIMS in terms of impact on traffic intensities, road capacities, intersection capacities and related delays on the bounding network of the site. The TIA report shall explicitly detail out the method of estimating the additional traffic demand owing to redevelopment process (residential and commercial activities) including the impact on parking demand within the complex. The TIA shall also indicate the impact of proposed redevelopment on the level of service of the primary road network falling in the immediate catchment area of the terminal complex within an area of at least 5 sq km. The TIA shall be followed by preparation of detailed Traffic Management Plan (TMP) detailing various implementable measures for traffic impact mitigation to be submitted along with the EIA. The recommended TMP proposed to be implemented should preferably be approved by bodies such as UTTIPEC comprising expert officials from PWD, Traffic Police, DTC, DIMTS, Transport Department etc.

It was recommended that ‘ToR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.

19.4.8 Redevelopment of General Pool Residential Accommodation (GPRA) at Nauroji Nagar, New Delhi by NBCC India Ltd- Re-consideration for Terms of Reference (IA/DL/NCP/63078/2017; F. No. 21-112/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

- The present proposal is for ‘Redevelopment of General Pool Residential Accommodation (GPRA)’ at Nauroji Nagar, New Delhi. This project falls under item No.8 (b) – Townships and Area Development Projects, under the category “A” (general conditions apply) as per the EIA notification 2006.
- The proposed project involves the modernization of GPRA with a built up area of 5,36,575 sqm.
- The proposed project is Modernisation of Residential Accommodation (GPRA) at Nauroji Nagar, New Delhi. Summary of the project details is as under:

<table>
<thead>
<tr>
<th>S.no</th>
<th>Project details</th>
<th>Proposed project details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>LAND AREA</td>
<td>1,01,010.125 sqm (24.96 Acres)</td>
</tr>
<tr>
<td>2.</td>
<td>PROJECT COST</td>
<td>Rs. 2694 Crore</td>
</tr>
<tr>
<td>3.</td>
<td>NUMBER OF BLOCKS / FLOORS</td>
<td>Sl. No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FOR CLUSTER - A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFFICE BUILDING</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Tower - A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Tower - B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>Tower - C</td>
<td>G+9</td>
</tr>
<tr>
<td>4</td>
<td>Tower - D</td>
<td>G+8</td>
</tr>
<tr>
<td>5</td>
<td>Tower - E</td>
<td>G+8</td>
</tr>
<tr>
<td>6</td>
<td>Tower - F</td>
<td>G+8</td>
</tr>
<tr>
<td>RETAIL SHOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>BLOCK 1</td>
<td>Ground Floor</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>At 9th floor of B &amp; C</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FOR CLUSTER - B**

**OFFICE BUILDING**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Tower - G</td>
<td>G+8</td>
</tr>
<tr>
<td>9</td>
<td>Tower - H</td>
<td>G+8</td>
</tr>
<tr>
<td>10</td>
<td>Tower - J</td>
<td>G+8</td>
</tr>
<tr>
<td>11</td>
<td>Tower - K</td>
<td>G+9</td>
</tr>
<tr>
<td>12</td>
<td>Tower - L</td>
<td>G+9</td>
</tr>
<tr>
<td>13</td>
<td>Tower - M</td>
<td>G+9</td>
</tr>
<tr>
<td>RETAIL SHOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>BLOCK 2</td>
<td>Ground Floor</td>
</tr>
<tr>
<td>15</td>
<td>Community facilities</td>
<td></td>
</tr>
</tbody>
</table>

4. LOCATION

28 34' 09.17" – 28 34' 09.54"N
77 11 23.39" – 77 11 51.32" E

- The fresh water requirement will be 1130 KLD. Water will be sourced from NDMC (New Delhi Municipal Council).
- The wastewater generated from the houses will be treated in STP and the treated water will be utilized for green belt development and flushing purposes.
- Solid Waste - Construction phase During the Construction phase, municipal solid waste of about 800 Kg/Day will be generated and disposed to Municipal Solid Waste dump yard. Construction waste generated will be about 35 kg/day which will be reused to the maximum possible and excess will be disposed through authorized vendors. Operation Phase During operation phase, total population expected is 31898 people, the Municipal Solid waste generated will be about 19,139 Kg/Day.
- **Employment Generation:** The Employment is around 4000 labourers
during Construction phase and approximately 32000 Staffs & Employees will be required for the Office, guards, restaurant, maintenance & other staffs for miscellaneous purposes.

The proposal was earlier considered by the EAC (Infra-2) in its meeting held on 1.05.2017. During deliberation the EAC noted that a Court Case (O.A. No. 553 of 2016) is pending against 07 redevelopment sites (Government Residential Colonies) in Delhi in the Hon’ble National Green Tribunal, New Delhi including the instant proposal regarding cutting/destruction of trees and plants in huge numbers. The Committee advised the project proponent to give details of the Court case along with present status for further deliberation. After deliberation, the Committee deferred the proposal as matter is sub-judice.

Now, Project Proponent vide letter dated 04.05.2017 has submitted additional Information. The Committee noted that it is a re-development project and not a greenfield project. Further, the Committee was also informed by the project proponent that no directions apart from filing affidavits have been given by the Hon’ble NGT in the matter.

During deliberation the Project Proponent informed that they have already collected base level data from the month of April, 2017 to June, 2017 (after the submission of Form 1 by the project proponent) and requested to the Committee to allow them to use the data. The Committee allowed the same.

After detailed deliberations, the EAC recommended for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report subject to the decision of Hon’ble NGT in O.A. No. 553 of 2016:

(i) The ToR is subject to the final decision of the Hon’ble National Green Tribunal in O.A. No. 553 of 2016.
(ii) Importance and benefits of the project.
(iii) The data collection and impact assessment shall be as per standard survey methods.
(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) Present land use of the proposed project site.
(vi) Copy of project sanction plan.
(vii) Details of project configurations and built up area.
(viii) The project proponents will give a latest status of the legal case (s) being considered (as related to the project) in various courts along with direction if any received and the status of compliance.
(ix) The EIA will include an acceptance from the NDMC on proposals to source water along with a certificate from the NDMC that they have the necessary CGWA clearance for the same.
(x) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.
(xi) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(xii) An assessment of the impact of the proposed redevelopment should be carried for traffic densities and parking capabilities in a 2 kms radius from the site.

(xiii) An estimation of the extent of dewatering for basements, description of the methodology used and assessment of impacts shall be submitted along with a plan for reutilisation of Water as per the CGWA Guidelines.

(xiv) Details of source of water supply along with permission to be submitted.

(xv) Quantification of various effluent streams such as sewage, restaurant effluent, Laundry effluent etc.

(xvi) Treatment scheme for effluent and its recycling mode.

(xvii) The details of the treated sewage disposal and its impact on the recipient system shall be studied.

(xviii) Action plan to prevent pollution from discharge of surface runoff into water bodies.

(xix) Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

(xx) Details of DG sets. Prediction of ground level concentration due to emissions from DG sets.

(xxi) Details of arrangement for meeting standby power from solar energy.

(xxii) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.

(xxiii) Calculation on sizing of solar water heating systems to be furnished.

(xxiv) A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.

(xxv) Solid waste management plan along with area earmarked for solid waste management scheme.

(xxvi) Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble/stone cutting.

(xxvii) Layout plan indicating Greenbelt along with area earmarked to be provided.

(xxviii) Disaster Management plan including onsite and offsite plan.

(xxix) The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

(*** Traffic Impact Analysis (TIA) shall be carried out engaging services of an organisation specialising in Transport Planning and Traffic engineering to assess the impact of proposed redevelopment of the existing residential...
complex of AIIMS in terms of impact on traffic intensities, road capacities, intersection capacities and related delays on the bounding network of the site. The TIA report shall explicitly detail out the method of estimating the additional traffic demand owing to redevelopment process (residential and commercial activities) including the impact on parking demand within the complex. The TIA shall also indicate the impact of proposed redevelopment on the level of service of the primary road network falling in the immediate catchment area of the terminal complex within an area of at least 5 sq km. The TIA shall be followed by preparation of detailed Traffic Management Plan (TMP) detailing various implementable measures for traffic impact mitigation to be submitted along with the EIA. The recommended TMP proposed to be implemented should preferably be approved by bodies such as UTTIPEC comprising expert officials from PWD, Traffic Police, DTC, DIMTS, Transport Department etc.

*It was recommended that ‘ToR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.*

### 19.4.9 Development of 18 hole Golf Course and an Eco Tourism Resort at Village Tiracol, Taluka Pernem, North Goa by M/s Leading Hotels Ltd - Reconsideration for Environmental Clearance (IA/GA/MIS/60977/2016; F. No. 21-8/2016-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for Development of 18 hole golf course and an Eco Tourism Resort at village Tiracol, Tal. Pernem, North Goa, on Survey No. 2-13 (part). The proposed development is located at village Tiracol, Tal. Pernem, North Goa, on Survey No. 2-13 (part) at 15° 43’33.88” N Latitude and 73° 41’02.05”E longitude

(ii) Total plot area is 9,90,00.00 sqm. Land has been converted to non-agriculture by the Collector- North Goa. Resort will be built on the non-agricultural land. Proposed Resort consists of 128 Standard Villas keys, 60 Premium Villas and an US PGA standard championship Golf Course spread over a built-up area of around 95,000 sqm.

(iii) TOR was granted in the 12th EAC (Infra-2) meeting of MoEF&CC, dated 19th January, 2017.

(iv) Tiracol village falls under CRZ-III. The proposal is to develop the villas and associated facilities forming part of the main hotel like entrance lobby, spa, restaurants etc within 200-500m of the HTL line, while the premium villas will be located beyond 500m.

(v) Recommendation of Coastal Zone Management Authority: As per extract of Minutes of the 81st meeting of GCZMA held on 21/03/2014, GCZMA forwarded the proposal to SEIAA for its Recommendations. Environment Clearance issued by the Goa State Environment Impact Assessment Authority EC granted vide letter No: 3-181-2010/STE-DIR/13, dated 12.04.2013. Layout on CRZ map of 1: 4000 scale prepared by an authorised
agency. CRZ delineation was undertaken by IRS, Chennai.

(vi) Total Water requirement will be 2550 m³. It will be source from Water Resource Department (WRD), Goa and Maharashtra Jeevan Pradhikaran Department, Maharashtra / recycled water from STP on site. WRD has sanctioned 1500 m³ raw water from Tilari Irrigation canal (Dam).

(vii) Waste water generation will be 500 m³. Treatment capacity will be Two Ultrafiltration Grey Water Plants: 350 m³ each and STP for black water 550 m³ will be provided.

(viii) Solid Waste generated will be 520 kg/day (Dry waste: 260 kg/day, Wet waste: 260 kg/day)

(ix) About 1966 Trees come in the path of the development and of these 1101 trees are endogenous to Konkan and shall be transplanted at a new location as per the master plan for the development. Balance trees will be cleared.

(x) Parking requirement with provision made for 660 vehicles.

(xi) Investment/Cost of the project is Rs. 505 crore.

(xii) Employment potential: Estimated direct employment from the Project is 704.

(xiii) Benefits of the project: High-end coastal protection measures to the otherwise eroding shoreline. Golf resort will offer exclusive lifestyle in natural environment. Propagate eco-friendly concepts in architecture & design utilities. Tiracol will be catapulted into a global destination.

During deliberation, the EAC noted that SEIAA, Goa vide letter no 3-181-2010/STE-DIR/13 dated 12.04.2013 had granted environmental clearance to M/s Leading Hotels Ltd for development of 18 hole Golf Course. Further, Hon’ble NGT vide order dated 29th November, 2016 has directed that:

i. “The EC dated 12.04.2013 is kept in abeyance for next 4 months.

ii. The Goa-SEAC shall appraise the project by considering all the materials on record within next 4 weeks and send the recommendation to SEIAA who shall further appraise the project for decision on grant of EC within 4 weeks from the date of the receipt of recommendations of SEAC. Both SEAC and SEIAA shall appraise project without any prejudice, without getting influenced by any of the observations in the judgment.”

Further, in compliance of Hon’ble NGT order dated 29th November, 2016, PP submitted online application to the Ministry for appraisal of the project as term of SEIAA/SEAC, Goa has expired on 8.12.2016. Due to absence of SEIAA/SEAC, Goa, project has been treated as category ‘A’ and appraised by the Expert Appraisal Committee (Infrastructure-II). The Committee noted that M/s Leading Hotels Ltd. has proposed for development of 18 hole Golf Course and an Eco Tourism Resort at Village Tiracol, Taluka Pernem, North Goa in a total plot area of 244.6 acres i.e. 99 ha. Since plot area is more than 50 ha, project falls under item no. 8 (b) i.e. Township and area development projects of the schedule of the EIA Notification, 2006. The Committee also noted that earlier SEIAA/SEAC, Goa has considered this project under item no. 8 (a) instead of 8 (b) of the schedule of EIA Notification, 2006. Proposal also attracts provision of CRZ Notification, 2011. MoEF&CC vide letter no F. 11-32/2014 IA III dated 9th December, 2014 has granted CRZ clearance to M/s Leading Hotels Ltd.
Proposal was earlier considered by the EAC in its meeting held on 26th-28th December, 2016. After detailed deliberations on the proposal, the Committee granted ToR for preparation of EIA-EMP report.

Further, proposal was considered by the EAC in its meeting held on 12th-14th April, 2017. The Committee decided that before further deliberation in the matter as directed by the Hon’ble NGT to ‘Appraise the project by considering all the materials on record’, MoEF&CC may write letter to Government of Goa to provide all files/materials relating to the project to the Ministry for further consideration of the EAC. Project proponent also requested to submit Certified compliance report issued by the Regional Office, MoEF&CC on the environmental conditions stipulated in earlier EC issued vide letter no. 3-181-2010/STE-DIR/13 dated 12.04.2013. The proposal was deferred.

Now, Project Proponent has submitted additional Information i.e. relevant project documents and records form the SEIAA/SEAC, Goa vide letter dated 03.5.2017 (uploaded on the website on 16.05.2017). Project proponent has also submitted Certified compliance report issued by the Regional Office (SZ), Bangalore vide letter No. EP/12.1/2014-15/Goa dated 15.6.2017.

The project proponents clarified that there is no difference on the proposals for which the earlier E.C. was issued and that the micro and macro project configuration remains the same. The project proponents also clarified that the only issue under consideration of the NGT was the propriety of grant of E.C. by the SEIAA/SEAC, Goa and that no environmental issues were raised or discussed before the Hon’ble NGT.

The issue related to a CRZ clearance was also discussed and it was clarified that a CRZ clearance has already been obtained. Under the circumstances the present appraisal is being made only from the point of view of an Environmental clearance and the revalidation of the earlier E.C. is being examined.

The committee recommended the project for grant of Environmental Clearance on the same terms and conditions as allowed in the earlier EC and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

**I. Construction Phase**

(i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The conditions stipulated in the CRZ clearance issued by the Ministry vide letter F. No. 11-32/2014 IA III dated 9th December, 2014 shall be strictly followed.

(iii) Prior permission from forest department shall be obtained for felling trees.

(iv) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-
swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(v) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(vi) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(vii) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(viii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(ix) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(x) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(xi) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xii) Sewage shall be treated in the STP based on MBR Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated
(xiii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, rain water from terraces and paved areas will be harvested by way of Ground Water Recharge (Soak Aways), Lakes (40,000 Cum) and underground tank (10,000 cum) as per CGWB guidelines.

(xiv) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, adequate space shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xv) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xvi) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xvii) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xviii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xix) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xx) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xxi) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xxii) Approval of the CGWA require before any dewatering for basements.

(xxiii) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxiv) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only
(xxvi) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.  

(xxvii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.  

(xxviii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.  

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.  
- Traffic calming measures  
- Proper design of entry and exit points.  
- Parking norms as per local regulation  

II. Operational Phase  

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.  

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.  

(iii) Fresh water requirement from Water Resource Department (WRD), Goa, Maharashtra Jeevan Pradhikaran, Maharashtra water supply and bore well shall not exceed 1750 m³/day.  

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.  

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
| (vi) | No sewage or untreated effluent water would be discharged through storm water drains. |
| (vii) | Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013. |
| (ix) | Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible. |
| (x) | Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. |
| (xi) | A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 186 acres or 76% of the project area shall be provided for green belt. |
| (i) | An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Department shall also include the consent of all the concerned implementing agencies. |
| (xii) | An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure. |
| (v) | The company shall draw up and implement a corporate social Responsibility |
### Proposed multi-storey residential complex at M/s JURS Country at the Vardhmar Developers Khasra No.-1081 to 1085, 1087,1103 to 1108 & 1112 to 1114, Village-Jwalapur District - Haridwar (Uttarakhand) by M/s Eko Pro Engineers Pvt. Ltd - Environmental Clearance (IA/UK/MIS/63815/2017; F. No. 21-187/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

1. **The project is located at Latitude-N 29° 54' 53.64" and Longitude - E 78° 05' 55.36".**
2. **The total plot area is 63800.02 sqm. FSI is 1.41 and total construction area of 71192 sqm. The project will comprise of 2 Buildings. Total 813 flats shall be developed. Maximum height of the building is 24 m.**
3. **During construction phase, total water requirement is expected to be 75KLD which will be met by Tankers / Bore well. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.**
4. **During operational phase, total water demand of the project is expected to be 722 KLD and the same will be met by the 250 KLKD Recycled Water. Wastewater generated (377KLD) will be treated in 1 STP of total 500 KLD capacity. 250 KLD of treated wastewater will be recycled (150 KLD for Road washing & 100 KLD for gardening). No treated water disposed in to municipal drain.**
5. **About 0.57 TPD solid wastes will be generated in the project during operation. The biodegradable waste (0.2TPD) will be processed in OWC and the non-biodegradable waste generated (0.28TPD) will be handed over to authorized local vendor.**
6. **The total power requirement during construction phase is 50 KVA and will be met from UPCL Haridwar and total power requirement during cooperation phase is 2600 KVA and will be met from UPCL Haridwar.**
7. **Rooftop rainwater of buildings will be collected in 7 RWH tanks of total 460 KL capacity for harvesting after filtration.**
8. **Parking facility for 1593 four wheelers and 1593 two wheelers is proposed to be provided against the requirement of 1489 and 1489 respectively (according to local norms).**
9. **Proposed energy saving measures would save about 10 % of power.**
10. **It is located within 10 km of Raja JI National Park Eco Sensitive areas.**
11. **There is no/court case pending against the project.**
12. **Investment/Cost of the project is Rs. 107.10 crore.**
13. **Employment potential 100.**
14. **Benefits of the project: 813 Families can reside in this area.**

*The committee was informed that approximately 19,500 sqm area of the project has already been constructed for which no E.C. was required earlier. The*
committee advised the project proponents to present the original letter of sanction and the details of the project therein, so that the facts could be verified.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

### 19.4.11


The project proponent made a presentation and provided the following information to the Committee:-

(i) The PP proposes a mixed project of Residential, Retail, and IT Towers & school developed by M/s. Larsen & Toubro Ltd at plot bearing CTS. Nos. 86, 87 Village Paspoli & CTS No 112, 115, 116/B of Village Tungwa, Saki Vihar Road, Powai, Mumbai.

(ii) The project was granted Environmental Clearance from SEIAA, Maharashtra vide their letter No. SEAC-2014/CR-151/C-I dated 28.01.2016 for total construction area of 1,49,618.70 sqm. No construction is been started on site. Only site clearance work has been started as per previous EC dated 28.01.2016. The total plot area is 2,36,919.00 sqm and total built-up area is 5,79,125.45 sqm. Total Nos. of Buildings will be 11. Maximum height of the buildings will be 102.4 m.

(iii) The details of the project is as follows:

<table>
<thead>
<tr>
<th>Particulars (sqm)</th>
<th>Details of previous EC dated 28th January, 2016 (sqm)</th>
<th>Details after proposed expansion (sqm)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Plot Area</td>
<td>2,34,831.00</td>
<td>2,36,919.00</td>
<td>Updation of PR card records for addition of plot area of 2088 sqm</td>
</tr>
<tr>
<td>Net Plot Area</td>
<td>2,18,463.77</td>
<td>2,05,752.2</td>
<td>After deductions of setback &amp; AOS.</td>
</tr>
<tr>
<td>Plot area taken for development as per I to R approval</td>
<td>--</td>
<td>53,436.96</td>
<td>Plot converted from: 53,436.96 sqm as per I to R</td>
</tr>
<tr>
<td>FSI Area (Existing Industry)</td>
<td>--</td>
<td>--</td>
<td>FSI for Existing Industry: 84,977.97 sqm</td>
</tr>
<tr>
<td>FSI Area (Proposed Expansion)</td>
<td>93,381.64</td>
<td>2,98,425.58</td>
<td>FSI as per previous EC: 93,381.64 sqm</td>
</tr>
<tr>
<td>Non FSI Area</td>
<td>56,237.06</td>
<td>2,80,699.89</td>
<td>Area as per previous EC: 56,237.06 sqm</td>
</tr>
</tbody>
</table>

87
(iv) Total water demand of the proposed expansion is expected to be 1174 KLD approximately and the water requirement will be met by the MCGM/Recycled Water.

(v) Waste water generation will be 1081 KLD. Sewage shall be treated in 6 STP’s of capacity 1134 KLD. Recycled water is of 1077 KLD, used for flushing & gardening within the plot and outside the plot.

(vi) Biodegradable waste of 2218 Kg/day will be treated in OWC and the manure will be used for landscaping at site and as replacement for saw dust in OWC. Non-biodegradable waste of 3309 Kg/Day will be handed over to authorized recyclers.

(vii) Total Green Area Provided will be 14320.05 sqm.

(viii) Investment / cost of the project will be Rs. 1682 Crore.

(ix) Employment potential: Labor Requirement approximately 773 Nos. including finishes and structures.

(x) Benefits of the project: Municipal Drainage system is well developed along the Saki Vihar Road. Storm water drains are designed considering the elevation profile. Due to the availability of infrastructure facilities near the project site people are willing to buy homes in powai area and nearby. Also there is immense job opportunities in Andheri and Kanjurmarg areas due to small scale industries and educational institutions in Powai area and IT offices nearby the site. Considering the socioeconomic condition of the people nearby the project, there shall be generation of employment opportunities during construction stage and also at operational phase development.

The Committee deliberated on the proposal and certified compliance report letter No. EC-271/RON/ 2017-NGP dated 10.04.2017 issued by the MoEF&CC’s Regional Office (WCZ), Nagpur. The Committee noted that construction work is yet to be start at site as per report of Regional Office of MoEF&CC.

On being satisfied with the submissions of the project proponent, the EAC recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

PART A – SPECIFIC CONDITIONS:

I. Construction Phase

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) All industries within the lands owned by the project proponents shall be made inoperative and not influence in any negative way the life or property of the residents/occupants of the proposed project.

(vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(viii) Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(ix) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
(x) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xi) Sewage shall be treated in the STP based on MBR Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 16 No. of recharge pits shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.

(xiii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 334 sqm space shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xiv) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xvi) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xviii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xix) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xx) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xxi) Approval of the CGWA require before any dewatering for basements.

(xxii) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxiii) Any hazardous waste generated during construction phase, shall be
disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvi) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from Municipal Corporation of Greater Mumbai (MCGM) water supply shall not exceed 878 m$^3$/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the
Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats. This study would be undertaken for all projects for which an E.C. has been granted earlier to Larsen and Toubro and which are currently operational. The report should be submitted within 03 months to the MoEF&CC and put on the public domain also on the website of the Company.

(vii) No sewage or untreated effluent water would be discharged through storm water drains.

(viii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(x) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(xi) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xii) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 14320.05 sqm area shall be provided for green belt development.

(xiii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be
implemented to the satisfaction of the State Urban Development and Transport Department. This shall also include the consent of all the concerned implementing agencies.

(xiv) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.4.12 Sports Village at Plot No. SC-02D, Near Sec-KP-V of Sector-27, Greater Noida, Uttar Pradesh by M/s Supertech Ltd - Environmental Clearance (IA/UP/NCP/64006/2015; F. No. 21-203/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s Supertech Limited is coming up with a new project “Sports Village” at Plot No. - SC-02, Near Sec-KP-V of Sector-27, Greater Noida, Uttar Pradesh. The project is offering development of sports, recreational & residential facilities. As per notification S.O. 1533 E dated 14 Sept, 2006, as amended in 2009, 2013, 2014 and 2016 issued by the MoEF&CC, the proposed scheme is scheduled under category A, schedule 8(b) (for Township and area development projects).

(ii) The Application for prior Environment Clearance was submitted in SEIAA, U.P on 14th December 2015 and letter for ToR was issued vide letter no. 3020/Parya/SEAC/3530/AD(S) on 11.03.2016. The EIA was performed on the basis of ToR and report was submitted to UP SEIAA/SEAC on 27.09.2016. Case was appraised in 300th SEAC meeting dated 24.12.2016. During deliberations it was found that the proposed built-up area of the project is 7,55,817.89 sqm, and committee was in the view that the case is now to be appraised by MoEF&CC as category “A” project as per the provisions of EIA notification dated 09.12.2016.

(iii) The total plot area is 2,51,371.32 sqm. FSI area is 4,81,059.21 (191.37%) sqm and total construction area is 7,55,817.89 sqm. The project will comprise of Recreational, Commercial, Residential Buildings. Total 4228 flats, 138 villas (Residential), 262 Villas (Recreational) shall be developed. Maximum height of the building is 121 m.

(iv) During construction phase, total water requirement is expected to be 20 KLD which will be met by Municipal supply/Private Tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(v)</td>
<td>During operational phase, total water demand of the project is expected to be 2306 KLD and the same will be met by the Municipal supply and Recycled Water. Wastewater generated (1680 KLD) uses will be treated in 03 STPs of total 3450 KLD capacity. 927 KLD of treated wastewater will be recycled (487KLD for flushing, 440KLD for Horticulture). About 585KLD will be disposed in to municipal drain.</td>
</tr>
<tr>
<td>(vi)</td>
<td>About 11 TPD solid wastes will be generated in the project. The biodegradable waste (7.15 TPD) will be processed in OWC and the non-biodegradable waste generated (3.85TPD) will be handed over to authorized local vendor.</td>
</tr>
<tr>
<td>(vii)</td>
<td>The total power requirement during construction phase is 62.5 KVA and will be met from D G Set and total power requirement during operation phase is 21800 KVA and will be met from NPCL.</td>
</tr>
<tr>
<td>(viii)</td>
<td>Rooftop rainwater of buildings will be collected in 7 Nos. RWH tanks of total 603 KLD capacity for harvesting after filtration.</td>
</tr>
<tr>
<td>(ix)</td>
<td>Parking facility for 7123 vehicle space four wheelers and two wheelers is proposed to be provided against the requirement of 7123 vehicle space respectively (according to local norms).</td>
</tr>
<tr>
<td>(x)</td>
<td>Proposed energy saving measures would save about 20% of power.</td>
</tr>
<tr>
<td>(xi)</td>
<td>It is not located within 10 km of Eco Sensitive areas.</td>
</tr>
<tr>
<td>(xii)</td>
<td>There is no/court case pending against the project.</td>
</tr>
<tr>
<td>(xiii)</td>
<td><strong>Investment/Cost</strong> of the project is Rs.1130.46 crore.</td>
</tr>
<tr>
<td>(xiv)</td>
<td><strong>Employment potential</strong>: 200 workers during construction.</td>
</tr>
<tr>
<td>(xv)</td>
<td><strong>Benefits of the project</strong>: Benefits of the project are Residential facilities, Employment opportunity to people, Increase in land value, Wider economic growth, Additional revenues for district government, Reduction in pollution by developing green area and improved quality of life for people.</td>
</tr>
</tbody>
</table>

*The EAC noted that the Application for prior Environment Clearance was submitted to SEIAA/SEAC, U.P on 14th December 2015 and letter for ToR was issued vide letter no. 3020/Parya/SEAC/3530/AD(S) on 11.03.2016. The EIA was performed on the basis of ToR and report was submitted to SEIAA/SEAC, U.P. on 27.09.2016. Case was appraised in 300th SEAC meeting held on 24.12.2016. During deliberations it was found that the proposed built-up area of the project is 7,55,817.89 sqm, and committee was in the view that the case is now to be appraised by MoEF&CC as category “A” project as per the provisions of the EIA Notification dated 09.12.2016.*

*After detailed deliberations, the EAC recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:*

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/ permission
from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) All industries within the lands owned by the project proponents shall be made inoperative and not influence in any negative way the life or property of the residents/occupants of the proposed project.

(vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(ix) Installation of dual pipe plumbing for supplying fresh water for drinking,
cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(x) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xi) Sewage shall be treated in the STP based on Fluidized Aerated Bioreactor (FAB) Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture, road washing & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 7 Nos. of rainwater harvesting tanks shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.

(xiii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 600 sqm spaces at two places shall be provided for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xiv) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xvi) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xviii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xix) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xx) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xxi) Approval of the CGWA require before any dewatering for basements.

(xxii) The approval of the Competent Authority shall be obtained for structural
safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxiii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvi) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from GNIDA shall not exceed 1379 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the
(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) The project proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats. This study would be undertaken for all projects for which an E.C. has been granted earlier to Larsen and Toubro and which are currently operational. The report should be submitted within 03 months to the MoEF&CC and put on the public domain also on the website of the Company.

(vii) No sewage or untreated effluent water would be discharged through storm water drains.

(viii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(x) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(xi) Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xii) A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 87,985 sqm area shall be provided for green belt development.

(xiii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and
parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Department. This shall also include the consent of all the concerned implementing agencies.

(xiv) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.4.13 **Group Housing Project “Green View Blossom” at Khasra No.- 517, 518 & 384 Dhoran Khas, Pargana Parwadoon, District Dehradun, Uttrakhand by M/s Phool Chand Infrastructure Pvt. Ltd - Environmental Clearance (IA/UK/NCP/64889/2017; F. No. 21-204/2017-IA-III)**

The project proponent made a presentation and provided the following information to the Committee:-

i. The project is located at 30°21’1.39”N Latitude and 78° 4’34.63”E longitude.

ii. The project is New/ redevelopment- New Project

iii. Earlier Clearance details, Construction status, if any- Not Applicable

iv. The total plot area is 8,820.00 sqm. FSI area is 20,542.12 sqm and total construction area of 32,750 sqm. The project will comprise of 3 blocks Buildings. Flats shall be developed. Maximum height of the building is 32m.

v. During construction phase, total water requirement may vary from 20-24 KLD which will be met by treated water from CSTP/Private water tankers. During the construction phase, Soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

vi. During operational phase, total water demand of the project is expected to be 134 KLD & fresh water 79 KLD and the same will be met by the Recycled Water. Wastewater generated (104 KLD) uses will be treated in one STPs of capacity 123 KLD of treated waste water will be recycled (40 KLD for flushing, 3 KLD for gardening). About 34 KLD will be disposed in to municipal drain in monsoon season.

vii. About 624 kg/day solid waste will be generated in the project.

viii. The total power requirement is 1000 KVA and will be met from Uttrakhand Power Corporation Limited
ix. Rooftop rainwater of buildings will be collected in RWH tanks of total 2 Nos.

x. The total parking proposed is 292 ECS.

xi. Proposed energy saving measures would save about 12% of power.

xii. It is located/not located within 10 km of Eco Sensitive areas

xiii. There is no/court case pending against the project.

xiv. Investment/Cost of the project is Rs.110 crore.

xv. Employment potential: 500 peoples.

xvi. Benefits of the project: Social, Economical and Environmental.

The Committee noted that Project proponent has already been constructed. Being a violation case, the Committee suggested Project Proponent to apply under violation case as per S.O. 804(E) dated 14.03.2017.


The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s Pinnacle Superstructures Private Limited proposes to develop a group housing “Sikka Kimaantra Greens at plot no SC-01/A1-Beta, village Shorkha, Jhidabad, Sector-79, Noida U.P. on a total plot area of 20,027 sqm and total built up area is 78,413.324 sqm.

(ii) Earlier the project was submitted in the SEAC, UP. The project was appraised in 269th SEAC meeting dated 13.05.2016. There were some queries raised in the meeting. The point wise reply for the queries has already been submitted to SEAC, UP.

(iii) Proposed project is construction of multi-storeyed residential with community facilities. Adequate parking of 725 ECS is proposed for visitors as well as residents. Community facilities include club house, parks, and gardens. A total of 8,644.122 sqm is to be developed as landscape area.

(iv) The project envisages construction of 4 numbers of towers along with community hall and villas of 2B+G/ST+25 floors.

(v) Total population of the proposed project will be 2364 which include the population of residents, community and visitors.

(vi) The total water requirement for the project has been estimated to be 242 KLD. This includes domestic water requirement, flushing, D.G. cooling and landscaping. The total fresh water requirement is 116 KLD which includes domestic water requirement. The water requirement for flushing and landscaping will be met through treated water from STP.

(vii) Total waste water generated is 143 KLD, which will be treated in onsite STP. The treated water will be recycled and re-used for flushing, D.G. cooling and landscaping.

(viii) The total electrical load demand has been estimated to be 3193.8 KVA for the proposed project. The source of power will be from Noida Power
Company Ltd.

(x) In case of power failure, DG sets of total capacity of 4500 KVA (3 x 1500) each for the proposed project will be provided as power back-up.

(x) The domestic solid waste will be generated by the occupants of the residents, visitors and people coming to community area will pertain to the two categories, Bio-degradable and Non-biodegradable. It is estimated that maximum solid waste generation would be about 943 kg/day for the proposed project.

(xi) **Investment/Cost** of the project is Rs. 158.15 Crore.

(xii) **Employment** potential: During operational phase of the project, persons will get employment opportunities as staff for management, maintenance and security. As an estimate, during operation phase, persons will get marginal employment opportunities, who would work as domestic helpers.

(xiii) **Benefits of the project:** This will help in improving the quality of life of economically weaker sections of the local area.

_During deliberation, the EAC noted that the project was earlier submitted to SEIAA/SEAC, UP. The project was appraised in 269th SEAC meeting dated 13.05.2016. There were some queries raised in the meeting. The project proponent presented the point wise reply of the queries. The Committee found the reply given by the Project Proponent satisfactory._

_After detailed deliberations, the EAC recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:_

**PART A – SPECIFIC CONDITIONS:**

_I. Construction Phase_

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site.
as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) All industries within the lands owned by the project proponents shall be made inoperative and not influence in any negative way the life or property of the residents/occupants of the proposed project.

(vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(ix) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(x) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xi) Sewage shall be treated in the STP based on MBBR Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 05 No. of recharge pits shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.
| (xiii) | Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 60 sqm spaces shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site. |
| (xiv) | Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power. |
| (xv) | A First Aid Room shall be provided in the project both during construction and operations of the project. |
| (xvi) | Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site. |
| (xvii) | Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. |
| (xviii) | The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards. |
| (xix) | Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred. |
| (xx) | As proposed, no ground water shall be used during construction/ operation phase of the project. |
| (xxi) | Approval of the CGWA require before any dewatering for basements. |
| (xxii) | The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc. |
| (xxiii) | Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board. |
| (xxiv) | Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours. |
| (xxv) | Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB. |
| (xxvi) | Use of environment friendly materials in bricks, blocks and other |
construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement shall be met from Municipal water supply and shall not exceed 116 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 8,644.122 sqm area shall be provided for green belt development.

(xii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Department. This shall also include the consent of all the concerned implementing agencies.

(xiii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiv) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.4.15 Construction of proposed commercial complex at plot no. C4A, Sector 16B, Greater Noida (West) Uttar Pradesh by M/s Maheshwari Infratech Pvt. Ltd - Environmental Clearance (IA/UP/NCP/65067/2017; F. No. 21-209/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s Maheshwari Infratech Pvt. Ltd proposes to develop a commercial complex at plot no: C4A, Sector 16B, Greater Noida (west) Uttar Pradesh
(ii) Earlier the project was submitted in the SEAC, UP. The project was appraised in 299\textsuperscript{th} SEAC meeting dated 23.12.2016. There were some queries raised in the meeting. The point wise reply for the queries has already been submitted to SEAC, UP on 07.02.2017.

(iii) Adequate parking of 798 ECS is proposed on surface & basements for visitors as well as residents. A total of 1522 m\textsuperscript{2} is to be developed as landscape area.

(iv) The project envisages construction of 1 block, including 3B+G+15 floors.

(v) Total population of the proposed project will be 7595 which include the population of residents, community and visitors.

(vi) The total water requirement for the project has been estimated to be 575 KLD. This includes domestic water requirement, flushing, D.G. cooling and landscaping. The total fresh water requirement is 369 KLD which includes domestic water requirement. The water requirement for flushing and landscaping will be met through treated water from STP.

(vii) Total waste water generated is 263 KLD, which will be treated in onsite STP. The treated water will be recycled and re-used for flushing, D.G. cooling and landscaping.

(viii) The total electrical load demand has been estimated to be 6000 KW for the proposed project. The source of power will be from Uttar Pradesh Power Corporation Ltd.

(ix) In case of power failure, DG sets of total capacity of 7570 KVA for the proposed project will be provided as power back-up.

(x) The domestic solid waste will be generated by the occupants will pertain to the two categories, Bio-degradable and Non-biodegradable. It is estimated that maximum solid waste generation would be about 1.29 TPD for the proposed project and 125 kg of sludge will be generated from the proposed project.

(xi) Investment/Cost of the project is Rs. 104 crores.

(xii) Employment potential: The project involves labour camp for 112 labours during construction.

(xiii) Benefits of the project: During operational phase of the project, persons will get employment opportunities as staff for management, maintenance and security. As an estimate, during operation phase, persons will get marginal employment opportunities, who would work as domestic helpers. This will help in improving the quality of life of economically weaker sections of the local area.

During deliberation, the EAC noted that the project was earlier submitted to SEIAA/SEAC, UP. The project was appraised in 299\textsuperscript{th} SEAC meeting dated 23.12.2016. There were some queries raised in the meeting. The point wise reply for the queries was submitted to SEAC, U.P. on 07.02.2017. However, due to non availability of SEIAA/SEAC in U.P. project appraised at Central Level. The project proponent presented the point wise reply of the queries. The Committee found the
reply given by the Project Proponent satisfactory.

On being satisfied with the submission of the Project Proponent, the EAC recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

PART A – SPECIFIC CONDITIONS:

I. Construction Phase

(i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) All industries within the lands owned by the project proponents shall be made inoperative and not influence in any negative way the life or property of the residents/occupants of the proposed project.

(vi) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(viii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(ix) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(x) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xi) Sewage shall be treated in the STP based on MBBR Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 02 No. of recharge pits shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.

(xiii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 160 sqm space shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xiv) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xvi) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xviii) The diesel generator sets to be used during construction phase shall be
(xix) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xx) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xxii) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxiii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvi) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. **Operational Phase**

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be
used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement will be met from GNIDA and shall not exceed 369 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 1522 sqm area shall be provided for green belt development.

(xii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic
management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Department. This shall also include the consent of all the concerned implementing agencies.

(xiii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiv) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.4.16

Proposed Hotel Building at Khasra No. 606 1 & 2, 603,604,605, 617 and part of Khasra No.615,616, 618, 621 & 622 Mauza-Basai, Mustakil near Shilpgram, Eastern Gate, Taj Mahal Road, District Agra, Uttar Pradesh by M/s The Leela Palaces and Resorts Limited - Environmental Clearance (IA/UP/NCP/65112/2017; F. No. 21-210/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The Leela Palaces and Resorts Limited is going to develop a Hotel Project on the total land area measuring 27,490.00 sqm. Land area measuring 8,554.76 sqm is left for the road widening and zonal green. The project is a green building project and has achieved pre-certification under the Leadership in Energy & Environmental Design (LEED) for the Platinum rating. The development will be done in accordance with Agra Development Authority and will be developed as per the Agra Master Plan 2021.

(ii) The Proposed project is being developed on the net plot area of 18,935.24 sqm. The built up area is 69,098.92 sqm. The project envisages construction of 250 Guest Rooms, Retails, Restaurants, Business centre and meeting rooms. The two tower blocks, Block 1 & Block 2 are proposed in the project. Block 1 & Block 2 have common Basements, attached up to Third floor but detached above and again connected at the Terrace level of the Block 1.

(iii) The parking shall be provisioned in 2 level basements with the provision of 401 ECS and 20032.45 sqm is to be developed / maintained as green area.

(iv) Total projected population of the proposed project will be 2,500 including guest, staff and visitors.

(v) The source of water supply for the project will be Jal Sansthan, Agra. The total water requirement for the proposed project has been estimated to be 544 KLD. This includes domestic water requirement, flushing, landscaping,
cooling and make water requirement for swimming pool. The total fresh water requirement is 237 KLD which includes Domestic water requirement & make water requirement for swimming pool.

(vi) The total estimated quantity of wastewater to be generated from proposed project is 375 KLD, which will be treated in the STP of capacity 450 KLD of MBR technology. The STP will be installed in the basement with double height. The treated water will be recycled and re-used for flushing, washing, cooling and landscaping.

(vii) The total electrical load demand has been estimated to be 2,500 kVA. The source of power will be supplied by State Electricity Board. In case of power failure, 2 gas based generators sets of total capacity of 1,000 kVA (2 x 500) will be provided as power back-up for the essential load.

(viii) The generators sets will be provided with acoustic enclosure. Adequate stack heights of generators Sets will be provided as per the stipulated guidelines of Central Pollution Control Board (CPCB) to facilitate natural dispersion of exhaust gases.

(ix) It is estimated that maximum solid waste generation would be about 400 kg/day.

(x) Total numbers of RWH Pits proposed are 14 pits.

(xi) There is no/court case pending against the project.

(xii) Investment/Cost of the project is Rs. 400 Crore.

(xiii) Employment potential is 500 peoples.

(xiv) Benefit of the project is social, economical and environmental development.

During the deliberation, the Committee noted that the proposal was earlier submitted to SEIAA/SEAC, Uttar Pradesh on 27th May 2015 and was appraised in 236th SEAC U.P. meeting dated 1st October, 2015. There were some queries which were related to NOCs. Due to non availability of SEIAA/SEAC in U.P., the project submitted to EAC at Central Level for grant of Environment Clearance.

After detailed deliberations, the EAC recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

PART A – SPECIFIC CONDITIONS:

I. Construction Phase

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) This clearance shall be subject to directions of the Hon'ble Supreme Court and the Taj Trapezium Zone Authority in the matter of location of industries and allocation of gas in the Taj Trapezium Zone Authority.

(iii) The natural drain system should be maintained for ensuring unrestricted
flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iv) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(v) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(vi) All industries within the lands owned by the project proponents shall be made inoperative and not influence in any negative way the life or property of the residents/occupants of the proposed project.

(vii) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(viii) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(ix) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(x) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(xi) Separation of grey and black water should be done by the use of dual
plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(xii) Sewage shall be treated in the STP based on Membrane Bio-Reactor (MBR) Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

(xiii) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 14 No. of recharge pits shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.

(xiv) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As suggested at least 150 sqm space shall be provided for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.

(xv) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xvi) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xvii) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xviii) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xix) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xx) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xxi) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xxii) Approval of the CGWA require before any dewatering for basements.

(xxiii) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.

(xxiv) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals.
of the State Pollution Control Board.

(xxv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxvi) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxviii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. **Operational Phase**

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) Gas powered power generating sets shall only be installed after seeking a permission of the U.P. Pollution Control Board and the Taj Trapezium Zone Authority.

(iii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iv) Fresh water requirement will be met from Jal Sansthan, Agra and shall not exceed 237 m³/day.

(v) 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.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(vi)</strong></td>
<td>The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.</td>
</tr>
<tr>
<td><strong>(vii)</strong></td>
<td>No sewage or untreated effluent water would be discharged through storm water drains.</td>
</tr>
<tr>
<td><strong>(viii)</strong></td>
<td>Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.</td>
</tr>
<tr>
<td><strong>(x)</strong></td>
<td>Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.</td>
</tr>
<tr>
<td><strong>(xi)</strong></td>
<td>A mechanism should be developed for the utilisation of leftover food from the Kitchen. All food for free distribution shall be suitably certified and regulated. The Hotel and the collecting and distributing agencies shall be jointly and severally responsible for the cleanliness, hygiene and quality of food distributed</td>
</tr>
<tr>
<td><strong>(xii)</strong></td>
<td>Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.</td>
</tr>
<tr>
<td><strong>(xiii)</strong></td>
<td>A minimum of 1 tree for every 80 sqmt of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 20032.45 sqm area shall be provided for green belt development.</td>
</tr>
<tr>
<td><strong>(xiv)</strong></td>
<td>An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Department.</td>
</tr>
<tr>
<td><strong>(xv)</strong></td>
<td>An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions</td>
</tr>
</tbody>
</table>
specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xvi) The company shall draw up and implement a corporate social Responsibility plan as per the Company’s Act of 2013.

19.4.17 Capacity Expansion, Cuddalore Port Tamil Nadu by M/s Tamil Nadu Maritime Board - Terms of Reference (IA/TN/MIS/64666/2017; F. No. 10-35/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) This is a Capacity Expansion Project involving Cargo Handling (Present : 0.37 MTPA, Proposed: 5.68 MTPA) for which additional Berths: 120m x 38.7m – 2 Nos will be required at Uppanar & Paravanar confluence, Bay of Bengal, Cuddalore.

(ii) The latitude 11° 42’ N and longitude are 79° 46’ E (Existing Port). The landside area is 56.92 hectares Extension of North breakwater: 210m and Extension of South breakwater: 410m is proposed.

(iii) 17,30,000 M³ Dredging; land reclamation of 5 hectares within the port limits will be done.

(iv) Multiple Cargo of Handling 5.68 MTPA Viz. Coal, cement, fertilizer, cereals, wood logs, Food grains & Containers. Spillage Control & dust suppression system will be installed.

(v) Water requirement will be 100 KLD sourced by installing a captive desalination plant (250 KLD).

(vi) Investment/Cost of the project is Rs. 115 crores.

(vii) Employment potential will be 1500 Nos. directly and 10000 Nos. indirectly.

(viii) Benefits of the project: Enable Cargo transportation to existing power plants and proposed industrial development in Cuddalore and adjoining districts like Nagapattinam, Villupuram, and Salem, etc.,

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

(iii) Recommendation of the SCZMA.
(iv) Stage – I forest clearance to be submitted.
(v) Various Dock and shipbuilding facilities with capacities for existing and proposed project.
(vi) Submit a copy of the certified compliance report for the earlier clearance received or a certified compliance report to the conditions of consent and authorization received from the Pollution Control Board, if an E.C. was not issued earlier.
(vii) Study the impact of dredging on the shore line.
(viii) A detailed impact analysis of rock dredging.
(ix) Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.
(x) A detailed analysis of the physico-chemical and biotic components in the highly turbid waters round the project site (as exhibited in the Google map shown during the presentation), compare it with the physico-chemical and biotic components in the adjacent clearer (blue) waters both in terms of baseline and impact assessment and draw up a management plan.
(xi) Details of Emission, effluents, solid waste and hazardous waste generation and their management in the existing and proposed facilities.
(xii) Toxicity Factor to be carried out on treated trade effluent beside chemical analysis.
(xiii) The existing project should avail of and submit consent to operate from the State Pollution Control Board.
(xiv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
(xv) Wastewater management plan.
(xvi) Details of Environmental Monitoring Plan.
(xvii) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.
(xviii) Disaster Management Plan for the above terminal.
(xix) Layout plan of existing and proposed Greenbelt.
(xx) The compliance to the conditions of consent issued by the State Pollution Control Board.
(xxi) The impact of the project, in its various phases, on the nearly villages specially the one shown as just 600 meters from the project site.
(xxii) A response to any complaints that have been received by the project
against the setting up of the project including the representation submitted by the Conservation Action plan.

(xxiii) The impact and management of using dredged material to raise the height of the proposed land of 39 HA.

(xxiv) The details of waste water disposal into the sea, its impacts and Management plan.

(xxv) Status of court case pending against the project.

(xxvi) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

(xxvii) A tabular chart with index for point wise compliance of above TORs.

It was recommended that ‘TOR’ along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastrucure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

19.4.18


The project proponent made a presentation and provided the following information to the Committee:-


(ii) Total land area: 6,000 m², CETP & other ancillary facilities: 5400 m², Green Belt Area: 600 m²

(iii) Effluent from Dairy Products, Meat Products & Jaggery Manufacturing Industries, and Textiles Industries. Effluent conveyance system: Through the pipeline from adjacent Gujarat Agro Infrastructure Mega Food Park Ltd. and effluent from the industrial units in future from nearby areas shall be conveyed through dedicated tankers. Treatment in proposed Common Effluent Treatment Plant/s (CETP/s) and treated effluent will be used for land irrigation in green belts and other area.

(iv) Total water requirement: 109 KL/day while CETP will be operating at peak capacity. Water supply will be from M/s. Gujarat Agro Infrastructure Mega Food Park Pvt. Ltd.

(v) Three categories of Hazardous/Solid Wastes will be generated. Treatment, storage & disposal mode for the same is and will be followed as per Hazardous & Other Wastes (Management & Trans-boundary Movement) Rules, 2016.

(vi) Power Requirement will be 570 KVA and will be sourced from DGVCL
The source of flue gas emission will be from the stack attached to D.G. sets (emergency standby). Adequate stack height will be provided to control the emission.

(vii) Total 6,000 m² land area is available at site; out of this area about 600 sqm (10 %) area shall be covered as greenbelt and other forms of greenery.

(viii) Court cases if any.: **No**

(ix) **Investment/Cost** of the project is Rs. 17.0 Crores

(x) **Employment potential**: 66 Nos.

(xvi) **Benefits of the project**: Proposed CETP is to be located adjacent to upcoming park developed by M/s. Gujarat Agro Infrastructure Mega Food Park Pvt. Ltd. in which nos. of food industries will likely to come in existence in very near future that lead to effluent generation which needs adequate treatment and final disposal of treated effluent. Also there are other industrial areas i.e. Kim GIDC, Pipodra GIDC, Panoli GIDC, Ankleshwar GIDC, etc. developed by Gujarat Industrial Development Corporation (GIDC) having myriad of small, medium and large scale industrial units located at some distance from proposed project site and there is good demand by this industries for common effluent treatment facility. Thus, due to this reason and scenario, Mangrol Enviro Protect LLP plans for new CETP for treatment of effluent to be generated and usage of treated effluent for land irrigation in green belts and other area.

*After detailed deliberations on the proposal, the EAC recommended for grant of Terms of Reference (ToR) as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:*

i. Importance and benefits of the project.

ii. A chapter on Quantification and Characterization of inlet characteristic including methodology adopted.

iii. Process flow diagram of the proposed CETP.

iv. Layout plan of CETP.

v. Cost of project and time of completion.

vi. Area earmarked for CETP.

vii. The EIA would provide a list of all the member units along with a description of their product, capacities, manufacturing process quantity of wastes generated and the quality of primary treated effluents as prescribed by the Gujarat State Pollution Control Board.

viii. Complete Plan and details of the conveyance system and safeguards planned to ensure that untreated and unauthorized effluents are not allowed to enter the CETP.

ix. The technical adequacy evaluation of the CETP with reference to the Standards prescribed by the Gujarat State Pollution Control Board.

x. Method for conveyance of effluent from the individual industrial unit to CETP.
xi. Explore the option to recycle the treated effluent to individual industrial unit instead or discharging outside.

xii. Reuse and Recycle option of treated effluent.

xiii. List of hazardous waste to be handled and their source along with mode of transportation.

xiv. Other chemicals and materials required with quantities and storage capacities.

xv. Details of temporary storage facility for storage of hazardous waste at project site.

xvi. Details of pre-treatment facility of hazardous waste at proposed incinerator site.

xvii. Details of air Emission, effluents, hazardous/solid waste generation and their management.

xviii. Hazard identification and details of proposed safety systems.

xix. Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.


xxi. Status of court case pending against the project.

xxii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

xxiii. A tabular chart with index for point wise compliance of above TOR.

It was recommended that ‘TOR’ along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

19.4.19 Development of Bhiwadi International Airport near Bhiwadi, Distt. Alwar, Rajasthan by M/s Delhi Mumbai Industrial Corridor Development Corporation (DMICDC) - Terms of Reference (IA/RJ/MIS/64611/2017; F. No. 10-29/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for Development of Bhiwadi International Airport near Bhiwadi, Distt. Alwar, Rajasthan by M/s Delhi Mumbai Industrial Corridor Development Corporation (DMICDC). The coordinates are 28° 0'23.50"N and 76°47'2.88"E. Total land required for the project is 2074 ha, out of which 1037 ha land will be used for the first phase. The land has been identified for the airport based on the pre-feasibility study conducted by Airports Authority of India in consideration of the operational requirements.
Ministry of Civil Aviation has granted approval of ‘Site Clearance’ and the Ministry of Defense has accorded ‘No Objection Certificate’ for the proposed airport.

(ii) The Project components are:
1. Runway: 18 Ha
2. Taxiway: 13.6 ha
3. Apron: 36.3 ha
4. Terminal Building: 1.5 ha
5. ATC and Admin Building: 0.3 ha
6. Hanger: 3.0 ha
7. Offices: 2.0 ha
8. ESS and Power Station: 4.0 ha
9. Fuel Farm: 6.0 ha
10. Crash Fire Rescue: 0.065 ha
11. STP: 1.0 ha
12. Cargo Building: 0.3 ha
13. Cargo Aircraft Apron: 5.2 ha
14. Space for Defence: 4.0 ha
15. Isolation Bay: 1.0 ha
16. Space for Commercial Development: 31.4 ha
17. Parking: 8.5 ha

(iii) The project area falls within 15 km from Critically Polluted Area-Bhiwadi Industrial Cluster. The Critically Polluted Area is 9.5 km from the proposed Airport boundary. Critically Polluted Area Map as given in “Comprehensive Environmental Pollution Abatement Action Plan for Critically Polluted Industrial Cluster, Bhiwadi”.

(iv) Water requirement during Operation will be 5000 KLD (Drinking Water: 961 KLD & Gardening: 3500 KLD and others 539 KLD) Fire Fighting Requirement: 5000 KL. It will be sourced from Ground water

(v) Sewage will be treated through Septic Tank and Soak Pit during construction and STP during operation.

(vi) Solid waste generated during construction and operation of the project will be disposed at nearby SWM Facility.

(vii) Electricity Power Supply will be provided by Electricity Board

(viii) Rehabilitation is involved in which about 6 villages need to be displaced

(ix) Court cases if any – Nil

(x) **Investment/Cost** of the project is Rs. 2500 Crore (250,000 Lakhs)

(xi) **Employment** potential: About 10000 technical staff required during operation phase @ 1000 staff per one million annual passengers (MAP).

(xii) **Benefits of the project**: Airport development will generate multiple commercial benefits. Air transport facilitates the growth of many industries and delivers real benefits that can be measured in economic output and jobs. At the local level benefits accrue in terms of airport and air traffic related commercial activities providing jobs, profits and welfare.

*After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April,*
2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

i. Importance and benefits of the project.

ii. A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet (including all eco-sensitive areas and environmentally sensitive places).

iii. Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.

iv. Cost of project and time of completion.

v. The EIA report will give a justification of the land requirements for the project. It will also provide the guidelines, if any, developed by the Airport Authority of India regarding land requirements for airports in India and the conformity status with regards to the land provisions proposed.

vi. A management plan for the conservation of top soil in the cut and fill operations proposed. Area has a contour difference of about 20 m hence management of leveling and surplus/deficit of earth be given including Top soil preservation.

vii. Details on environmental problems, compliance status and improvement plans, if any for the existing airport which is planned to be retained.

viii. A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

ix. Electro-mechanical doors to be explored for the toilets meant for disabled persons.

tax. Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft.

xi. Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.

xii. Noise monitoring shall be carried out in the funnel area of flight path.

xiii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

xiv. Water bodies should not be disturbed.

xv. The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.
xvi. Details of fuel tank farm and its risk assessment.

xvii. R&R plant for displaced families be given as per GoI rules.

xviii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organisation of repute and specialising in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

xix. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

xx. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

xxi. A tabular chart with index for point wise compliance of above TOR.

It was recommended that ‘TOR’ along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

Shamuka Beach Project Sipasurubali Village Puri Sadar No.78 P.S. Brahmagiri Tahasil, Puri District, Odisha by M/s Department of Tourism, Government of Odisha - Terms of Reference (IA/OR/NCP/64762/2017; F. No. 10-31/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) Puri is one of the Four Dham & visited by large number of tourists round the year. The area selected for development of Shamuka Project is a beautiful site with long sea frontage and river front on its adjacent site. This site has tremendous potential for hi-end hotels & resorts, water front development, eco tourism & other ancillary tourism activities. It will also decongest the Puri city which is already overcrowded. Total Area of the project is 920.04 Acres (373.32 Ha). Total Built up area – 9,16,046 sqm.

(ii) The details of the land use are as follows:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Land Use Table

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (sq m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>80.07</td>
</tr>
<tr>
<td>Commercial</td>
<td>103.35</td>
</tr>
<tr>
<td>Residential</td>
<td>100.83</td>
</tr>
<tr>
<td>Mix Land use</td>
<td>128.13</td>
</tr>
<tr>
<td>Open space &amp; Recreational</td>
<td>198.56</td>
</tr>
<tr>
<td>Golf course</td>
<td>221.08</td>
</tr>
<tr>
<td>Road</td>
<td>75.65</td>
</tr>
<tr>
<td>Utility &amp; Services</td>
<td>12.38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>920.04</strong></td>
</tr>
</tbody>
</table>

(iii) Nalaban Sanctuary is located at (54.6 Km WSW), Chandaka – Dampara Sanctuary (64.8 Km NNW), and NandanKanan Sanctuary (69.4 Km N). Bhubaneswar is the nearest Airport i.e. 60 Km from Site. Site can be accessed through Puri - Brahagiri road which is approximately 3Kms away. Industrial Development Corporation Odisha (IDCO) is constructing a proper two lane road from the Puri-Brahagiri road to the site. The nearest railway station is at Puri which is approximately 8Kms from the site. Bhubaneswar is the nearest Airport i.e. 60 Kms from the site.

(iv) Surface water (14 MLD) shall be provided from water supply project of Puri town jointly developed by the State Government and JNURM Project. The pond and other infrastructure is already in place and the pipeline laying will be done once the construction work starts in the site.

(v) A strip of forests scattered in the project site, approximately 1200 mtr wide starts from middle of the site and extends beyond its limits. Apart from this chunk of plantation in smaller groups of trees scattered all over the site. The trees are mainly of casuarinas and kikar which cover 36% and 35% respectively.

(vi) **Investment/Cost** of the project is Rs. 166.64 crores.

(vii) **Employment potential**: 3000 people directly in construction period as well as operational phase. There will be at least two times indirect employment.

(viii) **Benefits of the project**: To attract tourists, visitors and enhance the tourism industry further improves the living condition of the local community and creates vast direct & indirect employment.

After detailed deliberations, the EAC recommended for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) The data collection and impact assessment shall be as per standard survey methods. Fresh data collection for three months should be done and incorporated in the EIA/EMP report.

(iii) 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.
(iv) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

(v) Recommendation of the SCZMA.

(vi) Present land use of the proposed project site.

(vii) Copy of approved project sanction plan.

(viii) Details of project configurations and built up area.

(ix) The project proponents will seek and submit a status of environmental clearance for the Draft Master Plan proposed by the Puri-Konark Development Authority.

(x) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.

(xi) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(xii) An estimation of the extent of dewatering for basements, description of the methodology used and assessment of impacts shall be submitted along with a plan for reutilisation of Water as per the CGWA Guidelines.

(xiii) Details of source of water supply along with permission to be submitted.

(xiv) Quantification of various effluent streams such as sewage, restaurant effluent, Laundry effluent etc.

(xv) Treatment scheme for effluent and its recycling mode.

(xvi) The details of the treated sewage disposal and its impact on the recipient system shall be studied.

(xvii) Action plan to prevent pollution from discharge of surface runoff into water bodies.

(xviii) Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

(xix) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(xx) Thick greenbelt should be provided towards railway line.

(xxi) Details of DG sets. Prediction of ground level concentration due to emissions from DG sets.

(xxii) Details of arrangement for meeting standby power from solar energy.

(xxiii) Details of rain water harvesting system to be furnished. Clarity on
recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.

(xxiv) Calculation on sizing of solar water heating systems to be furnished.

(xxv) A backup arrangement of at least 50% solar powered systems connected to the grid and at least two solar powered lights and one solar powered fan in each flat

(xxvi) A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.

(xxvii) Solid waste management plan along with area earmarked for solid waste management scheme.

(xxviii) Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble/stone cutting.

(xxix) Layout plan indicating Greenbelt along with area earmarked to be provided.

(xxx) Disaster Management plan including onsite and offsite plan.

( xxxi) The project proponents will submit a source apportionment study for the source of pollution in the area, formulate an action plan and the same shall be presented in the EIA.

( xxxii) The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

( xxxiii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities within the project area. A detailed traffic management and a traffic decongestion plan drawn up through an organisation of repute and specialising in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

It was recommended that ‘ToR’ prescribed by the Expert Appraisal Committee (Infrastrucure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.

19.4.21 Proposed LNG, LPG import facilities with Captive Jetty & Breakwaters at T. Challapalli Village by M/s Hindustan LNG Ltd - Terms of Reference (IA/AP/MIS/64642/2017; F. No. 10-32/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for Proposed LNG & LPG import facilities with captive jetty and breakwaters for LNG capacity of 11 MMTPA (Phase I - 5.5 MMTPA, Phase II - 5.5 MMTPA) with offshore & onshore storage tanks and LPG
capacity of 4 MMTPA (Phase I – 2.0 MMPTA, Phase II – 2.0 MMTPA) with offshore and onshore storage tanks at T. Challapalli, Uppalaguptam Mandal, East Godavari District, Andhra Pradesh

(ii) Total area of the project is 330 Acres.

(iii) The proposed LNG and LPG terminal is located at a distance of 27 km in SE direction from Kotipalli railway station. The Rajahmundry Airport is at 60 km in NE direction from the proposed LNG and LPG terminal. The area is well connected by the road network. The LNG terminal is about 2.5 km in N direction from Amalapuram - S.Yanam road. NH216 is at a distance of 14 km’s from the proposed site. Kakinada port is at a distance of 70 km’s.

(iv) Raw water of 22.5 KLD will be sourced from T. Challapalli Canal. LNG & LPG Floating storage and loading terminal facilities do not require water for process.

(v) Investment/Cost of the project is Rs. 2800 Crore.

(vi) Employment potential: During Construction 300 and during Operation 200.

(vii) Benefits of the project: Based on the growing demand in the state of Andhra Pradesh over the next 10 years, the proximity of the project location to this market is an advantage with respect reduction in freight of LNG to these markets. The financial viability also shows a good Rate of return from the project.

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) Submit a copy of layout superimposed on the HTL/LTL map demarcated by an authorized agency on 1:4000 scale.

(iii) Recommendation of the SCZMA.

(iv) Stage – I forest clearance to be submitted.

(v) Various Dock and shipbuilding facilities with capacities for existing and proposed project.

(vi) The Project proponents would examine the possibility of generating wave Energy and present the same in the EIA report.

(vii) Study the impact of dredging on the shore line.

(viii) A detailed impact analysis of rock dredging.

(ix) Study the impact of dredging and dumping on marine ecology and draw up a management plan through the NIO or any other institute specializing in marine ecology.

(x) A detailed analysis of the physico-chemical and biotic components in the highly turbid waters round the project site (as exhibited in the Google map shown during the presentation), compare it with the physico-chemical and biotic components in the adjacent clearer (blue) waters both in terms of baseline and impact assessment and draw up a management plan.

(xi) Details of Emission, effluents, solid waste and hazardous waste generation.
and their management in the existing and proposed facilities.

(xii) Toxicity Factor to be carried out on treated trade effluent beside chemical analysis.

(xiii) The existing project should avail of and submit consent to operate from the State Pollution Control Board.

(xiv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

(xv) Wastewater management plan.

(xvi) Details of Environmental Monitoring Plan.

(xvii) To prepare a detailed biodiversity impact assessment report and management plan through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity. The report shall study the impact on the rivers, estuary and the sea and include the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, subtidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standard survey methods.

(xviii) Disaster Management Plan for the above terminal.

(xix) Layout plan of existing and proposed Greenbelt.

(xx) The compliance to the conditions of consent issued by the State Pollution Control Board.

(xxi) A response to any complaints that have been received by the project against the setting up of the project including the representation submitted by the Conservation Action plan.

(xxii) The details of waste water disposal into the sea, its impacts and Management plan.

(xxiii) Status of court case pending against the project.

(xxiv) Certified compliance report issued by the Regional Office of MoEF&CC, for environmental conditions stipulated in the environmental clearance issued earlier, if any.

(xxv) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

(xxvi) A tabular chart with index for point wise compliance of above TOR.

It was recommended that ‘TOR’ along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.

19.4.22 Proposed Municipal Solid Waste Management at Bharatpur by M/s Rollz
The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s Rollz Material Handling Systems Pvt. Ltd has proposed Municipal Solid Waste Management at Khasra No- 966, 992, 993, 1756, 1681, 1766, 1887, 1760 and 3103 Village- noh, Tehsil & District, Bharatpur (Raj)

(ii) Keoladeo Bird Sanctuary at 4.0 km in SW direction Interstate boundary at 6.5 km in NE direction Lohagarh Fort at 5.0 km in West direction Giriraj Canal at 1.0 km in SW direction

(iii) Proposed project is govt. land and earmarked for Municipal Solid Waste Management.

(iv) New machinery will be installed. Excavation will be carried out for laying foundation, preparation of sump tank and other land developmental work. Almost entire excavated material will be utilized at site for filling of low-lying area and development of landscape.

(v) Capacity of municipal solid waste management is 101 TPD.

(vi) Construction activities causes generation of debris, brick bats, plaster falls, Cement bags, metal scraps, battered stone mixture, aggregate leftovers, sand leftovers, etc. Most of the material will be re-utilized in construction of roads and filling of low laying areas, recyclable material will be sold to authorized recyclers. This is a municipal solid waste management processing plant. Leachate generated from solid waste are collected separately and treated with leachate treatment plant.

(vii) There will be temporary and minor influx of workers during the construction phase. There will be influx of people employed with the RMHS (Rollz Material Handling System).

(viii) Electricity demand will be 200kW and meet from State/ City Electricity Board. Two DG set with capacity of 40 kVA and 25 kVA are proposed for power backup.

During the presentation the Committee noted that the Consultant representing the proposal is not accredited with QCI-NABET. The Committee took a note of that. Further, the Committee asked following additional information:

• The impact of the location on the Flight pattern of migratory birds and on the Keoladeo Ghana National Park duly authenticated by the Director, Keoladeo shall be provided along with a management plan.

• The proponents would also provide details on the conformity of the project to the Solid Waste Management Rules, 2016.

• The complete details of collection, segregation, storage, handling and disposal facilities and their management along with key responsibilities of stakeholders viz a viz the responsibility of the project proponent.

• Justification of 2 acres of land with regards to proposed project components and where the inert material will be disposed should also be provided.

The proposal was deferred till the desired information is submitted. The
above information shall be provided with the uploading of minutes on the website.

19.4.23 Proposed Project for Municipal Solid Waste Management at Pali (Rajasthan) M/s Rollz Material Handling Systems Pvt. Ltd - Terms of Reference (IA/RJ/MIS/64665/2017; F. No. 10-34/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:

(i) M/s Rollz Material Handling Systems Pvt. Ltd has proposed project for Municipal Solid Waste Management at Khasra No 452, Village-Pali II (Pali Chak), Tehsil & District- Pali (Rajasthan). It is in Critically polluted areas as notified by the Central Pollution Control Board (CPCB) from time to time.

(ii) Proposed project is govt. land and earmarked for Municipal Solid Waste Management.

(iii) Excavation will be carried out for laying foundation, preparation of sump tank and other land developmental work. Almost entire excavated material will be utilized at site for filling of low-lying area and development of landscape.

(iv) Construction activities causes generation of debris, brick bats, plaster falls, Cement bags, metal scraps, battered stone mixture, aggregate leftovers, sand leftovers, etc. Most of the material will be reutilized in construction of roads and filling of low laying areas, recyclable material will be sold to authorized recyclers.

(v) There will be temporary and minor influx of workers during the construction phase. There will be influx of people employed with the RMHS (Rollz Material Handling System).

(vi) 2 KLD water will be required for domestic purpose only.

(vii) Electricity demand will be 200kW and meet from State/ City Electricity Board. Two DG set with capacity of 40 kVA and 25 kVA are proposed for power backup.

(viii) The biodegradable waste is highly susceptible to pathogenic bacteria invasion. The biodegradable waste will be treated properly in plant with latest technology. The leachate generated will be treated in ETP.

(ix) The hazardous waste is, spent oil from standby DG set and machinery. The spent oil will be carefully stored in HDPE drums under isolated storage, and periodically sold to authorized recyclers.

During the presentation the Committee noted that the Consultant representing the proposal is not accredited with QCI-NABET. It was also noticed that disposal site is not yet finalized. The Committee took a note of that. Further, the Committee asked following additional information:

- The proponents would also provide details on the conformity of the project to the Solid Waste Management Rules, 2016.

- The complete details of collection, segregation, storage, handling and disposal facilities and their management along with key responsibilities of stakeholders viz a viz the responsibility of the project proponent.

- Justification of 2.6 acres of land with regards to proposed project.
components and where the inert material will be disposed should also be provided.

*The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.*

---

**Day 3: Thursday, 29th June, 2017**

<table>
<thead>
<tr>
<th>19.5.1</th>
<th>BPTP “Capital City” Commercial Project at Plot No. 2B, Sector 94, Noida, District: Gautam Budh Nagar, Uttar Pradesh M/s Countrywide Promoters Pvt. Ltd - Environmental Clearance (IA/UP/MIS/62871/2016; F. No. 21-158/2017-IA-III)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>The Commercial Project entitled “Capital City” is planned as a new project to be developed on Plot no. 02B, Sector94, Noida, Uttar Pradesh. The Geographical Co-ordinates of the project site are 77°19'34.55&quot;E &amp; 28°33'8.43&quot;N. As per Noida Development Plan-2021, the project site has been earmarked as Commercial Zone. The built-up area of the project is 2,73,130.2 sqm.</td>
</tr>
<tr>
<td>(ii)</td>
<td>The Project includes development of office area, commercial area, cinema theatre and ancillary facilities. The buildings will have 3 basements for providing car parking. A Green belt will be developed along the periphery of the project site. Also to be developed are green lawns within the project site. The project will be beneficial to both society &amp; environment. The proposed construction project will lead to generation of direct &amp; in-direct employment to many job seekers.</td>
</tr>
<tr>
<td>(iii)</td>
<td>Area measuring 25,162.92 SQM will be put under Green cover which is 43.88 percent of the total plot area.</td>
</tr>
<tr>
<td>(iv)</td>
<td>During the construction period daily water requirement will be around100 cu.m. During the operation period Municipal Water supply will be used to meet the water needs of the people. The total water requirement has been calculated to 1,003 KLD, of which domestic water requirement is around 302KLD or 30 percent of the total water requirement. Water will be supplied by Municipal Supply (NOIDA).</td>
</tr>
<tr>
<td>(v)</td>
<td>It has been estimated that the up-coming project will generate 791 KL of wastewater daily. The said waste water will be treated in a STP of capacity 955 KLD within the project complex and generate 701 KLD of recoverable water, which will be re-used in flushing, horticulture, Avenue Plantation etc.</td>
</tr>
<tr>
<td>(vi)</td>
<td>Total Solid Waste Generation: - Solid waste generated the project will be 5232 kg/day @ 0.20 Kg / person/ day for commercial refuse and 0.15 kg/person/day for Visitors refuse as per CPHEEO manuals.</td>
</tr>
<tr>
<td>(vii)</td>
<td>E-waste generated will be managed as per E-waste (Management) Rules, 2016. E-waste generation will be minimized by adopting practices of repair.</td>
</tr>
</tbody>
</table>
Un-repairable electronics will be sold off to government authorized agencies for management & disposal.

(viii) Total green area measures 25,162.92 m² i.e. 58.40% of the open area, which will be area under tree plantation, avenue plantation, green parks & lawns.

(ix) Total 3136 ECS Parking will be provided

(x) **Investment/Cost** of the project is: Rs 1004.15 Crore.

(xi) **Employment potential:** Approx. 13,084.

(xii) **Benefits of the project:** Promotion of Commercial services is very important for economic development of the country. This will generate employment opportunities for many skilled, unskilled and semi-skilled jobless workers. The industry is also foreign exchange earner. The proposed project will also generate indirect employment in supporting trade and industries viz Food Courts, photocopying & printing shops, computer stationery etc. Other IT related companies may also come-up in near-by areas. Thus the project is very important from the point of view of employment generation and foreign exchange earnings.

_During the deliberation, the Committee noted that this is an expansion project and the Project Proponent has not submitted Certified Compliance Report of the conditions stipulated in the earlier environmental clearance issued for the project._

After detailed deliberation, the Committee sought following additional information:

(i) Certified compliance report issued by the MoEF&CC Regional Office, Lucknow on environmental conditions stipulated in the existing environmental clearance.

(ii) Give a conformity status to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

(iii) Notarized affidavit of undertaking by Board of Director(s) stating, no construction activity has commenced at the site and Project Proponent undertakes that the construction works will be commenced only after obtaining all necessary clearances from statutory authorities.

(iv) Submit an assessment of the cumulative impact of expansion and increased inhabitation being carried out or proposed to be carried out by the project for traffic densities and parking capabilities in a 5 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall also be submitted.

(v) Compliance report of ECBC norms.

(vi) What is the status of validity of the Environmental Clearance issued earlier.

(vii) What is the position of the site with regards to the nearest eco-sensitive zone.

_The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website._
<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>19.5.2</strong></td>
<td><strong>Residential cum Plotted Development “Eldeco Regalia” at IIM Road, Lucknow by M/s Eldeco City Pvt. Ltd - Environmental Clearance (IA/UP/MIS/63968/2017; F. No. 21-159/2017-IA-III)</strong></td>
</tr>
<tr>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>The project Residential cum Plotted Development “Eldeco Regalia” at IIM Road, Lucknow is new project. The project is located at 26°55’42.29”N Latitude and 80°54’47.58”E longitude.</td>
</tr>
<tr>
<td>(ii)</td>
<td>The total (net) project/plot area and proposed built-up area of the project are 132897.50 sqm and 59223.325 sqm respectively. The project will comprise of Villas and Plots. Total villas of 270 nos. and plots of 148 nos. shall be developed. Maximum height of the highest villa will be 6.78 m.</td>
</tr>
<tr>
<td>(iii)</td>
<td>During construction phase, total water requirement is expected to be 20 KLD which will be met by private tankers supply. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.</td>
</tr>
<tr>
<td>(iv)</td>
<td>During operational phase, total water demand of the project is expected to be 526 KLD and the same will be met by the 207 KLD Recycled Water. Wastewater generated (362 KLD) will be treated in STP of total 520 KLD capacity. 207 KLD of treated wastewater will be recycled (107 KLD for flushing, 100 KLD for gardening). About 119 KLD will be used/disposed in road side irrigation/into municipal drain.</td>
</tr>
<tr>
<td>(v)</td>
<td>About 2.127 TPD solid wastes will be generated in the project. The biodegradable waste (0.978 TPD) will be processed in OWC and the non-biodegradable waste generated (1.149 TPD) will be handed over to authorized local vendor.</td>
</tr>
<tr>
<td>(vi)</td>
<td>Total power requirement during operation phase will be 2629.77 KW and met from Lucknow Electricity Supply Administration (LESA).</td>
</tr>
<tr>
<td>(vii)</td>
<td>Rooftop rainwater of buildings will be collected in 11 RWH tanks of total 238.2 KLD capacity for harvesting after filtration.</td>
</tr>
<tr>
<td>(viii)</td>
<td>Total 506 ECS and 42 two wheeler parking will be provided.</td>
</tr>
<tr>
<td>(ix)</td>
<td>Project site is not located within 10 km of Eco Sensitive areas</td>
</tr>
<tr>
<td>(x)</td>
<td>There is no court case pending against the project.</td>
</tr>
<tr>
<td>(xi)</td>
<td><strong>Investment/Cost</strong> of the project is Rs. 52.40 (in crore).</td>
</tr>
<tr>
<td>(xii)</td>
<td><strong>Employment potential</strong> - Labours during construction phase 50 nos. and about 30 personnel as staff during operation phase.</td>
</tr>
<tr>
<td>(xiii)</td>
<td><strong>Benefits of the project</strong>-</td>
</tr>
<tr>
<td></td>
<td>• It will increase Infrastructure of the area &amp; will provide housing facility, educational facility, commercial area and open space with all other basic amenities to various classes of people.</td>
</tr>
<tr>
<td></td>
<td>• It will provide healthy, green &amp; safe premises for living. People have more open and green spaces, bringing them closer to nature.</td>
</tr>
<tr>
<td></td>
<td>• The benefits relate to the direct employment associated during the construction of the infrastructure as well as during operation of the</td>
</tr>
</tbody>
</table>
After detailed deliberations, the Committee recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be
| (vii) | Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan. |
| (viii) | Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done. |
| (ix) | Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done. |
| (x) | Sewage shall be treated in the STP based on MBBR Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms. |
| (xi) | The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, 11 nos. of rain water recharge pits shall be provided for harvesting after filtration as per CGWB guidelines. |
| (xii) | Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter (OWC). As proposed, 242 m² of space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site. |
| (xiii) | Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power. |
| (xiv) | A First Aid Room shall be provided in the project both during construction and operations of the project. |
| (xv) | Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site. |
| (xvi) | Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. |
| (xvii) | The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards. |
| (xviii) | Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred. |
| (xix) | As proposed, no ground water shall be used during construction/ operation |
phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) A dedicated visitors parking shall be provided and it shall be ensured that no vehicles are parked outside the premises or on the approach roads.

(xxiv) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxv) An assessment of the cumulative impact of all activities being carried out or proposed to be carried out by the project, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

(xxvi) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxviii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation
<table>
<thead>
<tr>
<th>II. <strong>Operational Phase</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.</td>
</tr>
<tr>
<td>(ii) For indoor air quality the ventilation provisions as per National Building Code of India.</td>
</tr>
<tr>
<td>(iii) Fresh water requirement shall not exceed 319 m³/day.</td>
</tr>
<tr>
<td>(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&amp;CC along with six monthly Monitoring reports.</td>
</tr>
<tr>
<td>(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.</td>
</tr>
<tr>
<td>(vi) No sewage or untreated effluent water would be discharged through storm water drains.</td>
</tr>
<tr>
<td>(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.</td>
</tr>
<tr>
<td>(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.</td>
</tr>
<tr>
<td>(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.</td>
</tr>
<tr>
<td>(xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. The Green belt should be kept separate (distinct) from green areas as proposed.</td>
</tr>
<tr>
<td>(xii) An environmental management plan (EMP) shall be prepared and</td>
</tr>
</tbody>
</table>
implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiii) The company will draw up and implement a Corporate Social Responsibility plan as per the Company’s Act of 2013.

19.5.3 Proposed Residential Project at Village Gahunje, Tal. - Maval, Dist - Pune, Maharashtra by M/s Sahajanand Hi Tech Constructions Pvt. Ltd - Environmental Clearance (IA/MH/MIS/64613/2017; F. No. 21-160/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The project is located at 18°39'48.68"N Latitude and 73°42'29.61"E Longitude.

(ii) The project is expansion of residential township development at plot bearing G. No. 205(P), 221(P), 225(P), 226(P), 227(P), 228 to 247, 248(P), 249(P), 251, 252, 253 to 256, 258(P), 264(P), 265, 267(P), 268(P), 269(P), 270, 358(P), 359(P), 360 at Village: Gahunje, Taluka: Maval, Dist. Pune, Maharashtra.

(iii) Earlier Clearance details, Constructions status, if any: Construction works is in progress as per EC obtained vide No. SEAC 2010/CR. 486/TC. 2 dated 07.04.2011 for total construction area of 4,33,443.22 sqm. As of today we have constructed 3,66,822.96 sqm of area. The EC was obtained in the name of Parasnath Hi-tech construction Pvt. ltd.

(iv) The total plot area is 4,79,992.34 sqm. FSI area is 3, 64, 947.69 sqm and total construction area is 5,80,983.22 sqm. The project comprise of 32 residential buildings having 3,157 flats, 28 Nos. of villas, 86 Nos. of Town House, 1 Retail (Shops: 8 Nos), 1 Meditation Centre, 2 Club House, 1 Fire station with Staff Quarters. Maximum Height of the building is 72.85 m.

(v) During construction phase, total water requirement is expected to be 150 KLD which will be met by tanker water/excess treated water from the nearby society. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

(vi) During operational phase, total water demand of the project is expected to be 2,225 KLD and same will be met by fresh water from Pawana River and recycled water. Wastewater generated (2,061 KLD) uses will be treated in STP's of 2,200 KLD capacity. 736 KLD of treated wastewater will be recycled for flushing. About 309 KLD will be discharged in pond.

(vii) About 8,180 kg/d solid waste will be generated in the project. The biodegradable waste (4,908 kg/d) will be processed in mechanical composting (Eco-biocompack) and the non-biodegradable waste generated
(3,272 kg/d) will be handed over to authorized local vendor.

(viii) The total power requirement during construction phase is 500 kVA and will be met from MSEDCL and Total power requirement during operation phase is 27.6 MW (Connected Load) and will be met from MSEDCL.

(ix) Rooftop rainwater of building will be recharged in 10 Nos. of Recharge pits.

(x) Parking facility for 3371 Nos. four wheelers and 6,400 Nos. two wheelers are proposed to be provided against the requirement of 1,768 Nos. four wheelers and 6,377 Nos. two wheelers respectively (as per local norms).

(xi) Proposed energy saving measures would save about 20.1 % of power.

(xii) There is no court case pending against the project

(xiii) **Investment/Cost** of the project is Rs. 710 Cr.

(xiv) **Employment potential**: 800 Nos.

(xv) **Benefits of the project**: The project will generate employment (Labour employment of household activity, services, maintenance, plumbing, electricians) during operational phase which will benefit the local population in getting work opportunities. It will create long term employment in activities such as maintenance of the buildings and ancillary services.

The Committee noted that this is an expansion project. The Project proponent has submitted Certified Compliance Report issued by the Regional Office of MoEF&CC, Nagpur vide letter No. 18-C-51/2015 (SEAC) dated 23.06.2017. The Committee deliberated on the Certified Compliance Report and reply given by the project proponent to non-compliance of EC conditions and asked the project proponent to submit the latest status of compliance to the conditions of the EC issued earlier and ensure that all conditions have been complied. Accordingly, Project Proponent has submitted the requisite information to the Committee.

The Committee on being satisfied with the submission of the Project Proponent recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bioswales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Moving Bed Biofilm Reactor (MBBR) Technology with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated shall be discharged into Municipal sewer as per CPCB norms.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban
Development Model Building Byelaws, 2016. As proposed, Rooftop and surface runoff shall be recharged in ground through 10 rain water recharge pits after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter (OWC). As proposed, 400 m² of space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) An assessment of the cumulative impact of all activities being carried out or proposed to be carried out by the project, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up
through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

(xxv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvi) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from Pawana River after treatment (WTP of 2560 m³/day capacity) shall not exceed 1489 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted.
Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed green belt area of 15200 sqm shall be provided.

(xii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiii) The company will draw up and implement a Corporate Social Responsibility plan as per the Company’s Act of 2013.

<table>
<thead>
<tr>
<th>19.5.4</th>
<th>Expansion of Residential Plotted Colony at Sector-106, 108, 109 Vill Babupur and Pawala Khusrupur, Gurgaon, Haryana by M/s Chintels India Ltd - Environmental Clearance (IA/HR/NCP/64136/2015; F. No. 21-173/2017-IA-III)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
</tr>
</tbody>
</table>

| 144 |
The project is located at Village Babupur, Sector-106, 108 & 109, Gurgaon, Haryana. Latitude = 28°30'47.11"N and Longitude = 76°59'43.76"E.

Earlier environmental clearance was granted to the project by SEIAA/SEAC, Haryana vide letter SEIAA/HR/2014/1609 dated 17.12.2014 for total plot area 6,02,981.55 sqm and build up area 4,85,751.52 sqm.

The proposed proposal is for expansion at a total plot area of 6,73,457.61 sqm and total construction (built-up) area of 5,53,402.698 sqm.

During construction phase, total water requirement is expected to be 3075 KLD which will be met from tanker water/STP.

During operational phase, total water demand of the project is estimated to be 3075 KLD. The water supply will be through HUDA. Wastewater generated (1858 KLD) and (15 KLD) will be treated in STP of total 2050 KLD capacity and 20 KLD by ETP. About 1486 KLD of treated wastewater will be generated from STP which 648 KLD will be used for flushing, 784 KLD for gardening, 112 KLD for DG Set and 12 KLD from ETP and 56 KLD will be discharged to sewer.

About 9969 kg/day solid waste will be generated from the project. The biodegradable waste (5981.4 kg/day) will be processed in OWC and the non-biodegradable waste generated (3987.6 kg/day) will be handed over to vendors.

The total power requirement during operation phase is 32.54 MVA which shall be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN).

Rooftop rainwater of buildings will be collected in 4 RWH tanks and 88 pits.

Parking facility for 1200 ECS is proposed to be provided against the requirement of 4281 ECS (according to local norms). For Plotted development, individuals plot owner will be responsible for providing parking within their plots itself. Total 1200 ECS parking will be provided for the community and commercial area.

Proposed energy saving measures, Electronic Ballast, Timer based lighting and APFC Panel.

It is not located within 10 km of Eco Sensitive areas.

There is no court case pending against the project.

Estimated Cost of the project is Rs. 239.88 Crore.

Employment potential: It will generate approx. 250-300 direct and indirect employment opportunities for both skilled and unskilled labor during construction & operation phase.

Benefits of the project: 250-300 Direct & Indirect employment opportunities and Infrastructural Development of the Area.

The Committee noted that this is an expansion project. The Project proponent has submitted Certified Compliance Report issued by the Regional Office of MoEF&CC, Chandigarh vide letter No. 4-826/2010-RO(NZ) dated 17.04.2017. The Committee deliberated on the Certified Compliance Report and reply given by the project proponent to non-compliance of EC conditions.

The Committee on being satisfied with the submission of the Project
Proponent recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

PART A – SPECIFIC CONDITIONS:

I. Construction Phase

(i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building bye-laws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/fixtures (viz. low flow flushing systems; use of
low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Extended Aeration with Ultra Filtration Technology. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling. Excess treated shall be discharged into Municipal sewer as per CPCB norms.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 04 Nos. of rain water harvesting tanks and 88 recharge pits shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, 650 m² of space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/ operation
phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) An assessment of the cumulative impact of all activities being carried out or proposed to be carried out by the project, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

(xxv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxvi) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvii) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase
| (i) | The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms. |
| (ii) | For indoor air quality the ventilation provisions as per National Building Code of India. |
| (iii) | Fresh water requirement from HUDA shall not exceed 3075 m³/day. |
| (iv) | The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports. |
| (v) | The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP. |
| (vi) | No sewage or untreated effluent water would be discharged through storm water drains. |
| (vii) | Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013. |
| (ix) | Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible. |
| (x) | Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. |
| (xi) | A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed green belt area of 12,178.35 sqm shall be provided. |
| (xii) | An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined responsibilities shall be formed. |
functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiii) The company will draw up and implement a Corporate Social Responsibility plan as per the Company’s Act of 2013.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19.5.5</td>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
</tr>
<tr>
<td>i.</td>
<td>The project is located at 10°29'10.35&quot;N to 10°29'26.42&quot;N (Latitude) and 76°15'42.09&quot;E to 76°15'29.02&quot;E (Longitude).</td>
</tr>
<tr>
<td>ii.</td>
<td>The project is new Integrated IT Township Project.</td>
</tr>
<tr>
<td>iii.</td>
<td>No earlier Clearance granted. And No Construction work at site.</td>
</tr>
<tr>
<td>iv.</td>
<td>The total plot area is 81,708.93 sq. m. FSI area is 3,23,624 sqm. and total construction area of 6,72,526 sqm. The project will comprise of Towers of IT Office buildings, Shopping Mall, Convention Center, Hotel, Restaurant &amp; residential apartment towers shall be developed. Maximum height of the building is 81.60 m.</td>
</tr>
<tr>
<td>v.</td>
<td>During construction phase, total water requirement is expected to be 45 KLD which will be met by pond water for construction and Kerala Water Authority supply for meeting the domestic water requirement. During the construction phase, mobile STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.</td>
</tr>
<tr>
<td>vi.</td>
<td>During operational phase, total water demand of the project is expected to be 1,570 KLD (which includes fresh water requirement of 889 KLD) and the same will be met by the 707 KLD Recycled Water. Wastewater generated (1,256 KLD) uses will be treated in STP of total 1,507 KLD capacity. 1,131 KLD of treated wastewater will be recycled ( 707 KLD for flushing,50KLD for gardening &amp; 374 KLD for cooling towers make-up requirement). About no treated / untreated water will be disposed in to municipal drain.</td>
</tr>
<tr>
<td>vii.</td>
<td>About 5.30 TPD solid waste will be generated in the project. The biodegradable waste (3.975 TPD) will be processed in bio-gas generation unit / OWC unit / bio bin system and the non-biodegradable waste generated (1.325 TPD) will be handed over to authorized local vendor.</td>
</tr>
<tr>
<td>viii.</td>
<td>The total power requirement during operation phase is 12 MWh and will be met from Kerala State Electricity Board &amp; DG Sets (standby) and total power requirement during construction phase is 0.5 MVA and will be met from Kerala State Electricity Board &amp; DG Sets (standby).</td>
</tr>
<tr>
<td></td>
<td>Rooftop rainwater of buildings will be collected in 937.5 KL in RWH tanks and 12,000 KL in pond capacity for harvesting after filtration.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>x.</td>
<td>Parking facility for 4397 four wheelers and 1,150 two wheelers is proposed to be provided against the requirement of 4296 Cars and 1074 Two wheelers respectively (according to local norms).</td>
</tr>
<tr>
<td>xi.</td>
<td>Proposed energy saving measures would save about 22 % of power.</td>
</tr>
<tr>
<td>xii.</td>
<td>No Eco Sensitive areas is located within 10 km radius.</td>
</tr>
<tr>
<td>xiii.</td>
<td>There is no court case pending against the project.</td>
</tr>
<tr>
<td>xiv.</td>
<td><strong>Investment / Cost</strong> of the project is Rs. 2,000 /- Crores.</td>
</tr>
<tr>
<td>xv.</td>
<td><strong>Employment potential</strong> about 10,000 jobs.</td>
</tr>
</tbody>
</table>
xvi. | **Benefits of the project**: the proposed Integrated IT township project would provide jobs to about 10,000 persons in it with affordable housing and commercial facilities to the local population. |

After detailed deliberations, the Committee recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

### I. Construction Phase

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the
provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Tertiary Treatment. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rooftop rainwater of buildings will be collected in 937.5 KL in RWH tanks and 12,000 KL in pond capacity for harvesting after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As suggested at least 120 sqm space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.
| (xv) | Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site. |
| (xvi) | Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. |
| (xvii) | The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards. |
| (xviii) | Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred. |
| (xix) | As proposed, no ground water shall be used during construction/ operation phase of the project. |
| (xx) | Approval of the CGWA require before any dewatering for basements. |
| (xxi) | The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc. |
| (xxii) | Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board. |
| (xxiii) | Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours. |
| (xxiv) | Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB. |
| (xxv) | Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction. |
| (xxvi) | A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. |
| • | Hierarchy of roads with proper segregation of vehicular and pedestrian |
Traffic calming measures
• Proper design of entry and exit points.
• Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement shall not exceed 889 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut,
compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained.

(xii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiii) The company will draw up and implement a Corporate Social Responsibility plan as per the Company’s Act of 2013.

<table>
<thead>
<tr>
<th>19.5.6</th>
<th>IT/ITES SEZ Project at Behrampur, Gurgaon Haryana by M/s Mikado Realtors Private Limited - Environmental Clearance (IA/HR/NCP/62690/2016; F. No. 21-176/2017-IA-III)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
<td></td>
</tr>
<tr>
<td>(i) The Project site is located at Village Behrampur, Tehsil Sohna, District Gurgaon, Haryana. (Latitude: 28°24'36.67&quot;N and Longitude: 77°07'2.18&quot;E)</td>
<td></td>
</tr>
<tr>
<td>(ii) The project is new. The total plot area is 1,02,143sq.m. FAR area is 2,80,251sq.m and total construction (built-up) area will be 4,96,144 sqm. Maximum height of the building is 77.35 m.</td>
<td></td>
</tr>
<tr>
<td>(iii) During construction phase, approx. 2480 ML of water will be required which will be provided by private water tanker/STP. During the construction phase, soak pits/septic tanks will be provided for disposal of waste water. Temporary toilets will be provided to labourers.</td>
<td></td>
</tr>
<tr>
<td>(iv) During operation phase, water supply will be provided through HUDA water supply. About 1806 KLD of water will be required during operation phase of the project. Wastewater generated (1314 KLD) will be treated in STP of total 1400 KLD capacity. About 1183 KLD of treated wastewater will be generated from STP which will be used for flushing (939 KLD), gardening (144 KLD) and HVAC cooling (253 KLD)</td>
<td></td>
</tr>
<tr>
<td>(v) About 8051 kg/day solid waste will be generated from the project. The biodegradable waste (3220.4 kg/day) will be processed in OWC and the non-biodegradable waste generated (4025.5 kg/day) will be handed over to local vendors. Approx. 805.1 kg/day of inert waste would be generated.</td>
<td></td>
</tr>
<tr>
<td>(vi) Electricity will be supplied by DHBVN. The total electrical load during operation will be 20,000 KW. Proposed energy saving measures would save approx. 38.98% energy</td>
<td></td>
</tr>
<tr>
<td>(vii) Rooftop rainwater of buildings will be collected in 31 RWH pits.</td>
<td></td>
</tr>
<tr>
<td>(viii) Parking proposed is 7040 ECS (as against 7022 ECS required as per state bye-laws)</td>
<td></td>
</tr>
<tr>
<td>(ix)</td>
<td>There is no court case pending against the project.</td>
</tr>
<tr>
<td>(x)</td>
<td><strong>Estimated Cost</strong> of the project is INR 550 Crore (approx.).</td>
</tr>
<tr>
<td>(xi)</td>
<td><strong>Employment potential:</strong> It will generate direct and indirect employment opportunities for both skilled and unskilled labor during construction &amp; operation phase.</td>
</tr>
<tr>
<td>(xii)</td>
<td><strong>Benefits of the project:</strong> Direct &amp; Indirect employment opportunities and Infrastructural Development of the Area.</td>
</tr>
</tbody>
</table>

The Committee noted that this is a new project. ToR was granted to the project by SEIAA, Haryana vide letter dated 09.09.2016. After detailed deliberations, the Committee recommended the project for grant of environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

**PART A – SPECIFIC CONDITIONS:**

I. **Construction Phase**

(i) The project proponent shall obtain all necessary clearance/permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws
shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP based on Tertiary Treatment. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected in 31 pits for storm water recharging to ground after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse
effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation
## II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement will be met from HUDA and shall not exceed 623 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. Recreational Ground Area shall be provided as per norms.
(xii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiii) The company will draw up and implement a Corporate Social Responsibility plan as per the Company’s Act of 2013.

19.5.7 Proposed Master Plan development for Infopark Phase-2 (IT/ITES SEZ township) project at Infopark Phase-2 Campus by M/s Infoparks Kerala - Environmental Clearance (IA/KL/NCP/63483/2016; F. No. 21-182/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

i. The project is located at 10°29'10.35"N to 10°29'26.42"N (Latitude) and 76°15'42.09"E to 76°15'29.02"E (Longitude).

ii. The project is new Integrated IT Township Project.

iii. No earlier Clearance granted. And No Construction work at site.

iv. The total plot area is 81,708.93 sq. m. FSI area is 3,23,624 sq. m. and total construction area of 6,72,526 sq. m. The project will comprise of 3 Towers of IT Office buildings, 1 Shopping Mall, 1 Convention Center, 1 Hotel, 1 Restaurant & 3 residential apartment towers shall be developed. Maximum height of the building is 81.60 m.

v. During construction phase, total water requirement is expected to be 45 KLD which will be met by pond water for construction and Kerala Water Authority supply for meeting the domestic water requirement. During the construction phase, mobile STP will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

vi. During operational phase, total water demand of the project is expected to be 1,570 KLD (which includes fresh water requirement of 889 KLD) and the same will be met by the 707 KLD Recycled Water. Wastewater generated (1,256 KLD) uses will be treated in STP of total 1,507 KLD capacity. 1,131 KLD of treated wastewater will be recycled (707 KLD for flushing,50KLD for gardening & 374 KLD for cooling towers make-up requirement). About no treated / untreated water will be disposed in to municipal drain.

vii. About 5.30 TPD solid waste will be generated in the project. The biodegradable waste (3.975 TPD) will be processed in bio-gas generation unit / OWC unit / bio bin system and the non-biodegradable waste generated (1.325 TPD) will be handed over to authorized local vendor.

viii. The total power requirement during operation phase is 25 MVA and will be met from Kerala State Electricity Board & DG Sets (standby) and total
power requirement during construction phase is 0.5 MVA and will be met from Kerala State Electricity Board & DG Sets (standby).

ix. Rooftop rainwater of buildings will be collected in 922.50 KL in RWH tanks and 12,000 KL in pond capacity for harvesting after filtration.

x. Parking facility for 4,095 four wheelers and 1,150 two wheelers is proposed to be provided against the requirement of 3,904 Cars and 976 Two wheelers respectively (according to local norms).

xi. Proposed energy saving measures would save about 22 % of power.

xii. No Eco Sensitive areas is located within 10 km radius.

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

xiv. Investment / Cost of the project is Rs. 2,000 /- Crores.

xv. Employment potential about 10,000 jobs.

xvi. Benefits of the project the proposed Integrated IT township project would provide jobs to about 10,000 persons in it with affordable housing and commercial facilities to the local population.

During the deliberation, the Committee noted that this is an expansion project and the Project Proponent has not submitted Certified Compliance Report of the conditions stipulated in the earlier environmental clearance issued for the project. It was also noticed that there is a difference in Form-I and the presentation given by the Project proponent.

After detailed deliberation, the Committee sought following additional information:

(i) Submit revised Form-1/1-A.

(ii) Certified compliance report issued by the MoEF&CC Regional Office, Bangalore on environmental conditions stipulated in the existing environmental clearance.

(iii) Give a conformity status to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

(iv) Notarized affidavit of undertaking by Board of Director(s) stating, no construction activity has commenced at the site and Project Proponent undertakes that the construction works will be commenced only after obtaining all necessary clearances from statutory authorities.

(v) Submit an assessment of the cumulative impact of expansion and increased inhabitation being carried out or proposed to be carried out by the project for traffic densities and parking capabilities in a 5 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall also be submitted.

(vi) Compliance report of ECBC norms.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

19.5.8 Modification of Group Housing Project at Sector-108 Babupur, Gurgaon
The project proponent made a presentation and provided the following information to the Committee:-

(i) The project is located at Village Babupur, Sector-108 Gurgaon, Haryana. Latitude 28°30'55"N and Longitude 76°59'40"E. The project is for modification. Earlier the EC has been accorded from SEAC Haryana vide letter SEIAA/HR/2010 dated 25/11/2010. No construction has been done till date.

(ii) The total plot area is 1,59,345 sqm with total construction (built-up) area of 4,19,749.495 sqm.

(iii) During construction phase, total water requirement is expected to be 1834 KLD which will be met from tanker water/STP.

(iv) During operational phase, total water demand of the project is estimated to be 1834 KLD. The water supply will be through HUDA. Wastewater generated (1314 KLD) will be treated in STP of total 1550 KLD capacity. About 1183 KLD of treated wastewater will be generated from which 505 KLD will be used for flushing, 318 KLD for gardening and remaining 360 KLD will be discharged to sewer.

(v) About 5959 kg/day solid waste will be generated from the project. The biodegradable waste (3575.4 kg/day) will be processed in OWC and the non-biodegradable waste generated (2383.6 kg/day) will be handed over to vendors.

(vi) The total power requirement during operation phase is 23,424 kVA which shall be met from Dakshin Haryana Bijli Vitran Nigam (DHBVN).

(vii) Rooftop rainwater of buildings will be collected in 6 RWH tanks and 134 pits.

(viii) Parking facility for 3093 ECS is proposed to be provided against the requirement of 2797 ECS (according to local norms).

(ix) Proposed energy saving measures, Electronic Ballast, Timer based lighting and APFC Panel.

(x) It is not located within 10 km of Eco Sensitive areas.

(xi) There is no court case pending against the project.

(xii) **Estimated Cost** of the project is INR 1165.4 Cr (approx.)

(xiii) **Employment potential**: It will generate direct and indirect employment opportunities for both skilled and unskilled labor during construction & operation phase.

(xiv) **Benefits of the project**: Direct & Indirect employment opportunities and Infrastructural Development of the Area.

_The Committee discussed the project in detail and noted that this is a case of modification and the project proponent has not started construction at site. After detailed deliberations, the Committee recommended the project for grant of environmental clearance and stipulated the following specific conditions along with_
other environmental conditions while considering for accord of environmental clearance:

PART A – SPECIFIC CONDITIONS:

I. Construction Phase

(i) The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

(ii) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

(iii) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

(iv) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

(v) At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

(vi) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

(vii) Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be
incorporated in the building plan.

(viii) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

(ix) Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

(x) Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling.

(xi) The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. As proposed, Rainwater of buildings will be collected and 06 No. of tanks and 134 pits shall be provided for storm water recharging to ground after filtration as per CGWB guidelines.

(xii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.

(xiii) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.

(xiv) A First Aid Room shall be provided in the project both during construction and operations of the project.

(xv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

(xvi) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(xvii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) As proposed, no ground water shall be used during construction/ operation phase of the project.

(xx) Approval of the CGWA require before any dewatering for basements.

(xxi) The approval of the Competent Authority shall be obtained for structural
safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

(xxii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

(xxiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

(xxiv) Ambient noise levels shall 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 shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

(xxv) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.

(xxvi) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- Proper design of entry and exit points.
- Parking norms as per local regulation

II. Operational Phase

(i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

(ii) For indoor air quality the ventilation provisions as per National Building Code of India.

(iii) Fresh water requirement from HUDA shall not exceed 1011 m³/day.

(iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the
Regional Office, MoEF&CC along with six monthly Monitoring reports.

(v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

(vi) No sewage or untreated effluent water would be discharged through storm water drains.

(vii) Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.


(ix) Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heaters shall be used to meet hot water demand, as far as possible.

(x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

(xi) A minimum of 1 tree for every 80 sqmt of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. Recreational Ground Area shall be provided as per norms.

(xii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

(xiii) The company will draw up and implement a Corporate Social Responsibility plan as per the Company’s Act of 2013.

19.5.9 Group Housing “Red Apple Homes” Located at Khasra No. 1108m, 1109m,
Propjet Proponent did not attend meeting.


The project proponent made a presentation and provided the following information to the Committee:-

(i) The project is located at 28°30'18.19"N Latitude and 77°23'56.26"E longitude.

(ii) The project is new and the total plot area is 5293 sqm. The total construction area of 27708.895 sqm. The project will comprise of 1 Buildings which includes G+17 Floors, 2 nos. of Basement (upper basement will be 3190 sqm and lower basement will be 3190 sqm). Maximum height of the building is 80 m.

(iii) During construction phase, total water requirement is expected to be 15 to 20 KLD which will be met through tankers arranged by the contractor or STP water. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.

(iv) During operational phase, total water demand of the project is expected to be 105 KLD and the same will be met by the Municipal supply. 76 KLD Recycled Water. Wastewater generated (84.48 KLD) uses will be treated in 1 STP of total 100 KLD capacity. 76 KLD of treated wastewater will be recycled (29.7 KLD for flushing, 5.5 KLD for gardening and 40 KLD for HVAC and DG Cooling). About 0 KLD will be disposed into municipal drain.

(v) About 440Kg/day solid waste will be generated in the project. The biodegradable waste (264 kg/day) will be processed in OWC and the non-biodegradable waste generated (176 kg/day) will be handed over to authorized local vendor.

(vi) The total power requirement during construction phase is 50kVA and will be met from Uttar Pradesh Vidyut Vitran Nigam and total power requirement during operation phase is 2250kVA and will be met from Uttar Pradesh Vidyut Vitran Nigam.

(vii) Rooftop rainwater of buildings will be collected in 1 RWH tank of total 24.75 cum/hr. capacity for harvesting after filtration.

(viii) Parking facility for 334 nos. of ECS four wheelers is proposed to be provided against the requirement of 333 nos. of ECS (according to local norms).

(ix) Proposed energy saving measures would save about 10% of power.

(x) It is located not located within 10 km of any Eco Sensitive areas.

(xi) There is no court case pending against the project.

(xii) **Investment/Cost** of the project is Rs. 50 crore.
(xiii) **Employment potential**: 100 local labours in the construction phase and approx. 40 workers in the operational phase.

(xiv) **Benefits of the project**: Commercial purpose.

*During the deliberations, the EAC was given to understand that part of the project has already been constructed because no clearance was required for built up area below 20000 sqm. The committee advised the project proponents to submit a copy of the original sanction letter along with a certified detailed project configuration for which the sanction was obtained.*

*The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.*

19.5.11

**Expansion of Residential & Commercial complex at Evershine Global City, New survey no. 5, 5B,5F,5G,5D at Village Dongre, Virar (West), Taluka Vasai, District Thane by M/s Evershine Developers - Environmental Clearance (IA/MH/NCP/64339/2014; F. No. 21-186/2017-IA-III)**

The project proponent made a presentation and provided the following information to the Committee:-

(i) The project is Expansion in EC of Residential & Commercial complex at Evershine Global City, New survey no. 5, 5B,5F,5G,5D at Village Dongre, Virar(west), Taluka Vasai, District Thane. The land use is Residential with Plot area-9,32,440 Sq.mts, FSI area- 14,59,803.39sq.m, Non FSI Area-10,45,310.97sq.m and Construction Area- 25,05,114.36sqm.

(ii) Total water requirement will be 16007 KLD and Shall be made available by Vasai Virar City Municipal Corporation (VVCMC)/Recycle Water. NOC from the VVCMC received dated 24.4.2017.

(iii) Total waste water generation will be 12862 KLD. STP of Capacity 12862 KLD based on MBBR followed by ultrafiltration will be installed.

(iv) Biodegradable waste of 40,316 Kg/day Will be treated in (organic waste converter)OWC and the manure will be used for landscaping at site. Non-biodegradable waste of 29,985 Kg/day will be handed over to recyclers/vendors for further use.

(v) Power requirement will be 99,788 KW which will be sourced from MSEDCL

(vi) **Estimated Cost** of the project is INR 1200 Crore.

(vii) **Employment potential**: 100 shall be provided with temporary housing facilities. Since it is a partially commercial project it will generate permanent employment of approx.2000 persons

(viii) **Benefits of the project**: This is a township project which will help in reducing population density of Mumbai city and for convinces in employment for industrial belts of Virar Palghar and adjoin industrial estate. The project also has proposals for school which will add to the basic infrastructure of the Vasai Virar region. This is a residential project which will create 2000 direct employment and 1500 indirect employment during...
During the deliberation, the Committee noted that this is an expansion project and the Project Proponent has not submitted Certified Compliance Report of the conditions stipulated in the earlier environmental clearance issued for the project.

After detailed deliberation, the Committee sought following additional information:

(i) Certified compliance report issued by the MoEF&CC Regional Office, Nagpur on environmental conditions stipulated in the existing environmental clearance.

(ii) Give a conformity status to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.

(iii) Notarized affidavit of undertaking by Board of Director(s) stating, no construction activity has commenced at the site and Project Proponent undertakes that the construction works will be commenced only after obtaining all necessary clearances from statutory authorities.

(iv) Submit an assessment of the cumulative impact of expansion and increased inhabitation being carried out or proposed to be carried out by the project for traffic densities and parking capabilities in a 5 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall also be submitted.

(v) Compliance report of ECBC norms.

The proposal was deferred till the desired information is submitted. The above information shall be provided with the uploading of minutes on the website.

19.5.12 Development of Common Biomedical Treatment and Disposal Facility at Arakhapada Orissa By M/s Medaid Marketing Services - Terms of Reference (IA/OR/MIS/65118/2017; F. No. 10-37/2017-IA-III)

The Committee noted that Project proponent has already completed the project. Being a violation case, the Committee suggested Project Proponent to apply under violation case as per S.O. 804(E) dated 14.03.2017.

19.5.13 Expansion of Existing Common Bio Medical Waste Treatment Facility at Plot No. 47/B, KIADB Industrial Area, Mulky, Mangalore (Taluka), Dakshina Kannada (District), Karnataka by M/s Ramky Energy and Environment Limited - Terms of Reference (IA/KA/MIS/65273/2017; F. No. 10-38/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The proposal is for the Expansion of Existing Common Bio Medical Waste Treatment Facility at Plot No. 47/B, KIADB Industrial Area, Mulky, Mangalore (Taluka), Dakshina Kannada (District), Karnataka by M/s Ramky Energy and Environment Limited. The existing facility is in KIADB Industrial Area which is a notified Industrial Estate. The facility is extended up to 1 Acre.
(ii) Pavanje River flows at 1.6 Km south West from the site and Mulky River at 2.4 Km in the North West direction. Mangrove forest is approx. 2.2 Km towards West. The site is 2.6 Km from Arabian Sea which is in the west direction from site.

(iii) The 120 kg/hr standby incinerator shall be upgraded to 250 kg/hr incinerator and the 430 liters/batch shall be upgraded to 2000 liters/batch. Existing DG set capacity is 62.5 kVA which will be expanded to 100 kVA. After the proposed expansion, the CBWTF shall have the following components: (a) two incinerators – 250 kg/hr each; (b) autoclave – 2000 liters/batch; and (c) shredder- 200 kg/hr.

(iv) With the proposed expansion, the water requirement will be 60 kLD. Water requirement will be met through KIADB supply.

(v) Wastewater shall be treated in in-house ETP and the treated wastewater shall be continuously re-circulated to fulfill the water requirement of Air Pollution Control Devices (APCDs) attached to the incinerator(s).

(vi) The power requirement will be 0.1 MW Power will be fetched from Karnataka Power Transmission Corporation Limited (KPTCL) and a DG set of 100 kVA will be used for emergency power backup.

(vii) The total water required is 60 KLD will be met through KIADB supply.

(viii) **Investment / cost of the project:** The total cost of the project for expansion including the infrastructure setup is Rs. 4 Crores.

(ix) **Employment Potential:** The existing facility employs 35 local people.

(x) **Benefits of the Project.** Majority of the hospitals do not have adequate arrangement for disposal of the hospital waste. Keeping in view the difficulties faced by private Hospitals, Nursing Homes and Clinics that cannot make their own arrangements due to high cost involved in Treatment facilities, there is a need for centralized system for treatment. Hence, set up of a CBWTF is essential to the state and the country. The existing facility caters the need of Healthcare establishments in Dakhsina Kannada district by treating the generated Bio Medical Waste.

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) To carry out a sensitivity analysis of alternative sites as per the “Guidelines for conducting Environmental Impact Assessment: site selection for common Hazardous waste management facility published by the CPCB in 2003.”

(iii) Project proponents would also submit a write up on how their project proposals conform to the stipulations made in the “Protocol for Performance evolution and monitoring of the Common Hazardous Waste Treatment Storage and Disposal facilities including common Hazardous Waste incinerators”, published by the CPCB on May 24, 2010.

(iv) Status of compliance to the provisions of the Hazardous and
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(v)</td>
<td>Compliance to the conditions of the consent to operate and authorization A separate chapter on status of compliance of Environmental Conditions granted by State/Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF&amp;CC, a certified report by RO, MoEF&amp;CC on status of compliance of conditions on existing EC to be provided in EIA-EMP report.</td>
</tr>
<tr>
<td>(vi)</td>
<td>The project proponents would submit a certificate that no expansion, modernization or capacity enhancement has been undertaken after the introduction of the EIA notification.</td>
</tr>
<tr>
<td>(vii)</td>
<td>The project proponents would submit a para wise certified compliance report to the consent to operate and the authorization received from the State Pollution Control Board for the existing facilities.</td>
</tr>
<tr>
<td>(viii)</td>
<td>Details of various waste management units with capacities for the proposed project.</td>
</tr>
<tr>
<td>(ix)</td>
<td>List of waste to be handled and their source along with mode of transportation.</td>
</tr>
<tr>
<td>(x)</td>
<td>Other chemicals and materials required with quantities and storage capacities.</td>
</tr>
<tr>
<td>(xi)</td>
<td>Details of temporary storage facility for storage of hazardous waste at project site.</td>
</tr>
<tr>
<td>(xii)</td>
<td>Details of pre-treatment facility of hazardous waste at TSDF.</td>
</tr>
<tr>
<td>(xiii)</td>
<td>Details of air emissions, effluents, hazardous/solid waste generation and their management.</td>
</tr>
<tr>
<td>(xiv)</td>
<td>Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).</td>
</tr>
<tr>
<td>(xv)</td>
<td>Process description along with major equipments and machineries, process flow sheet (quantitative) from waste material to disposal to be provided.</td>
</tr>
<tr>
<td>(xvi)</td>
<td>Hazard identification and details of proposed safety systems.</td>
</tr>
<tr>
<td>(xvii)</td>
<td>Layout maps of proposed Solid Waste Management Facilities indicating storage area, plant area, greenbelt area, utilities etc.</td>
</tr>
<tr>
<td>(xviii)</td>
<td>Details of Drainage of the project up to 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.</td>
</tr>
<tr>
<td>(xix)</td>
<td>Ground water quality monitoring in and around the project site.</td>
</tr>
<tr>
<td>(xx)</td>
<td>Status of the land purchases in terms of land acquisition Act and study the impact.</td>
</tr>
<tr>
<td>(xxi)</td>
<td>Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.</td>
</tr>
<tr>
<td>(xxii)</td>
<td>R&amp;R details in respect of land in line with state Government policy.</td>
</tr>
<tr>
<td>(xxiii)</td>
<td>Details of effluent treatment and recycling process.</td>
</tr>
<tr>
<td>(xxiv)</td>
<td>Leachate study report and detailed leachate management plan to be</td>
</tr>
</tbody>
</table>
(xxv) Action plan for measures to be taken for excessive leachate generation during monsoon period.

(xxvi) Action plan for any pollution of ground water is noticed during operation period or post closure monitoring period.

(xxvii) Detailed Environmental Monitoring Plan as well as Post Closure Monitoring Plan.

(xxviii) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

(xxix) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

(***x) A tabular chart with index for point wise compliance of above ToR.

It was recommended that ‘TOR’ prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The Committee exempted Public hearing as per para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006 for preparation of EIA/EMP Report, being site is located in the Notified industrial area.


The project proponent made a presentation and provided the following information to the Committee:-

(i) The rivers, flowing through the city, have a very wide channel with encroachment by temple construction, slum dwellers and others at several places. It has been proposed to remodel and constrict the channel to a uniform cross section and the additional land including back filling behind the river banks is to be developed as a riverfront with Roads, Parks, Promenades, Access points, Ghats, Walkways, Recreational spaces, public facilities etc. The newly developed area would have waterfront, which is proposed for aesthetic and commercial purposes in eco-friendly manner.

(ii) The daily fresh water requirement will be approximately 174 m³/day & 180 m³/day during construction phase & operation phase respectively, which will be met from dedicated PMC supply which is available in the vicinity. The recycle water demand is 1000 m³/day for landscaping & premises maintenance. The recycled water available from the premises is in the tune of 135 m3/day & short of recycled water is 865 m³/day. The short of
recycled water will be fulfilled from recycled water from the existing STP.

(iii) The sewage generation will be 144 m³/day. The sewage treatment plant is proposed for the riverfront development on SBR / Anaerobic process with tertiary treatment. The recycled water generated will be used within the premises for flushing & gardening requirement.

(iv) Solid waste generated during operation phase will be @ 0.07 kg/person/day. The generated waste will be segregated into Bio-degradable & Non-bio degradable solid waste and disposed off through Municipal Corporation. Solid waste collection bins will be provided.

(v) The sewage treatment plant is proposed for the riverfront development on SBR / Anaerobic process with tertiary treatment. The recycled water generated will be used within the premises for flushing & gardening requirement. The recycle water demand is 1000 m³/day for landscaping & recycle water available is 135 m³/day. The short of recycle water is 865 m³/day. The balance demand will be fulfilled from the existing STP within project area. This will reduce the discharge into the river.

(vi) 5 mVA during operation phase (Source: MSEDCL)

(vii) **Project Cost:** Rs. 3000 crores.

(viii) **Employment potential:** Project will provide direct and indirect employment opportunities to local people in terms of labor during construction and service personnel during operation.

(ix) **Benefits of the project:** Reduce risk of flooding, Clean the River and make it pollution free, Retain and replenish water, Create a continuous public realm along the river, Conserve and enhance heritage places and buildings, Integrate slums and Improve accessibility and connectivity

*After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:*

(i) Importance and benefits of the project.

(ii) Present land use of the proposed project site.

(iii) Copy of approved building sanction plan.

(iv) Status land acquisition.

(v) Details of no. of floor along with built-up area to be constructed in each block to be furnished.

(vi) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.

(vii) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(viii) Details energy conservation measures to be taken (all points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(ix)</td>
<td>Thick greenbelt should be provided towards railway line.</td>
</tr>
<tr>
<td>(x)</td>
<td>Details of source of water supply along with permission to be submitted.</td>
</tr>
<tr>
<td>(xi)</td>
<td>Excess treated sewage disposal plan/scheme to be submitted.</td>
</tr>
<tr>
<td>(xii)</td>
<td>Prediction of ground level concentration from the stack of DG set.</td>
</tr>
<tr>
<td>(xiii)</td>
<td>Efforts shall be made to reduce capacity of DG set and remaining standby power shall be met from solar energy.</td>
</tr>
<tr>
<td>(xiv)</td>
<td>Treatment scheme for sewage and its recycling mode.</td>
</tr>
<tr>
<td>(xv)</td>
<td>Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.</td>
</tr>
<tr>
<td>(xvi)</td>
<td>Calculation on sizing of solar water heating systems to be furnished.</td>
</tr>
<tr>
<td>(xvii)</td>
<td>A backup arrangement of at least 50% solar powered systems connected to the grid and at least two solar powered lights and one solar powered fan in each flat</td>
</tr>
<tr>
<td>(xviii)</td>
<td>A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.</td>
</tr>
<tr>
<td>(xix)</td>
<td>Solid waste management plan along with area earmarked for solid waste management scheme.</td>
</tr>
<tr>
<td>(xx)</td>
<td>Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble /stone cutting.</td>
</tr>
<tr>
<td>(xxi)</td>
<td>Layout plan indicating Greenbelt along with area earmarked to be provided.</td>
</tr>
<tr>
<td>(xxii)</td>
<td>An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.</td>
</tr>
<tr>
<td>(xxiii)</td>
<td>A detailed qualitative and quantities list of all direct and indirect activities to be undertaken at the project site shall be presented with the EIA along with the expected impacts and mitigation measures. The same shall be a part of the detailed impact assessment also.</td>
</tr>
<tr>
<td>(xxiv)</td>
<td>The impacts of impounding the rivers through the construction of barrages shall be studied in detail and presented.</td>
</tr>
<tr>
<td>(xxv)</td>
<td>The total quantum of wastes flowing into the river and the assimilation capacity of the river shall be studied during the entire stretch of the project.</td>
</tr>
<tr>
<td>(xxvi)</td>
<td>The impact of the project on the hydro biology of the river shall be presented along with the consent status with respect to the entire spectrum of aquatic life.</td>
</tr>
<tr>
<td>(xxvii)</td>
<td>The use categories of water in the entire stretch shall be mapped as per</td>
</tr>
</tbody>
</table>
the river quality standards prescribed by the CPCB and the impact of the project on downstream uses assessed.

It was recommended that ‘TOR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.

19.5.15 Proposed Industrial units and warehouse at Plot No.-2, 2A & 11, Sector-1, IIE, SIDCUL Phase II, Sitarganj, District - US Nagar, Uttarakhnad by Dharampal Satyapal Ltd - Terms of Reference (IA/UK/NCP/64352/2017; F. No. 21-194/2017-IA-III)

Project Proponent did not attend the meeting.

19.5.16 Expansion of IT/ITES project of at Technopark Campus, Village Kulathoor, Thiruvananthapuram District, Kerala by M/s Technopark - Terms of Reference (IA/KL/NCP/64975/2017; F. No. 21-199/2017-IA-III)

The project proponent made a presentation and provided the following information to the Committee:-

(i) The present proposal is for expansion. Earlier environment clearance was granted by MoEF&CC vide letter No. 21-21/2009-IA.III dated 28.05.2010 for the IT/ITES project for Plot area 11.87 Ha and built-up area 2,82,069 sqm. After the expansion the total built up area will be 3,40,000 sqm (2,82,069 sqm as per EC + 57,931 sq. m. as Expansion area) and the construction as per EC obtained is in progress at site. As per MoEF&CC Notification No. S.O. 3999 (E) dated 09.12.2016 the project falls under Category ‘A’ under 8 (b) and hence required EIA Study. The draft Terms of Reference (ToR) for EIA Study is attached for approval.

(ii) The project is an IT / ITES project and the site is in notified SEZ Campus and hence the project site is selected for the project development in total plot area 11.87 ha and built-up area of 3,40,000 sqm.

(iii) Total water requirement will be about 1,254 KLD and source of water will be Technopark water supply, roof rain water storage tanks & ground water as standby source for meeting non-flushing requirement and treated water from STP will be used for flushing, horticulture and cooling purposes.

(iv) The project site is located in “Kazhakuttam Revenue Block” which is as per CGWB report in “Safe Zone” and hence for non flushing water requirement, no permission is required. Further, other approvals regarding water will be obtained. About 1,003 KL of waste water will be generated and this waste water will be treated through STP within the project site and treated water will be used for flushing, horticulture & cooling purposes within the project site.

(v) Municipal solid waste will be segregated in separate bins and biodegradable solid waste will be sent to the bio-gas generation plant and non-biodegradable waste will be sold to the approved recyclers.

(vi) Total power requirement will be about 7.5 MVA and will be supplied by Technopark and D.G. Sets as standby source will be used. Solar street
- lights, LED, roof & wall insulation, building orientation and BEE rating fixtures / equipments will be used to conserve electricity.

(vii) Roof rain water will be stored in water tanks and will be used to meet the non-flushing water requirement after treatment.

(viii) Parking for about 2268 Cars & 2835 Two-wheelers will be provided.

(ix) The cost of the project would be about Rs. 850 Crores.

(x) The IT/ITES project would provide jobs to about 25,000 persons in it and hence the project will enhance the social / economic status of the local population.

After detailed deliberations on the proposal, the Committee recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) Certified compliance report from the MoEF&CC Regional Office for environmental conditions stipulated in the environmental clearance issued.

(iii) Present land use of the proposed project site.

(iv) Details of project configurations and built up area.

(v) R&R details in respect of land in line with state Government policy.

(vi) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.

(vii) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(viii) List of raw materials required and their source along with mode of transportation.

(ix) Other chemicals and materials required with quantities and storage capacities

(x) Details of Emission, effluents, hazardous waste generation and their management.

(xi) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)

(xii) Water balance chart.

(xiii) Details of effluent treatment schemes and disposal facility.

(xiv) Details energy conservation measures to be taken (all points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

(xv) Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features including DG sets.

(xvi) Details of arrangement for meeting standby power from solar energy.
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(xvii)</td>
<td>Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.</td>
</tr>
<tr>
<td>(xviii)</td>
<td>Calculation on sizing of solar water heating systems to be furnished.</td>
</tr>
<tr>
<td>(xix)</td>
<td>A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.</td>
</tr>
<tr>
<td>(xx)</td>
<td>Solid waste management plan along with area earmarked for solid waste management scheme.</td>
</tr>
<tr>
<td>(xxi)</td>
<td>Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble /stone cutting.</td>
</tr>
<tr>
<td>(xxii)</td>
<td>Layout plan indicating Greenbelt along with area earmarked to be provided.</td>
</tr>
<tr>
<td>(xxiii)</td>
<td>Hazard identification and details of proposed safety systems.</td>
</tr>
<tr>
<td>(xxiv)</td>
<td>Disaster Management plan including onsite and offsite plan.</td>
</tr>
<tr>
<td>(xxv)</td>
<td>Status of court case pending against the project.</td>
</tr>
<tr>
<td>(xxvi)</td>
<td>An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms. radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organisation of repute and specialising in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.</td>
</tr>
</tbody>
</table>

It was recommended that ‘TOR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.

**19.5.17**

**Patanjali Food and Herbal Park Noida at Sector 24A Yamuna Expressway Gautam Budh Nagar, Uttar Pradesh by M/s Patanjali Food And Herbal Park Noida Pvt Ltd - Terms of Reference (IA/UP/NCP/65083/2017; F. No. 21-201/2017-IA-III)**

The project proponent made a presentation and provided the following information to the Committee:-

(i) M/s Patanjali Food and herbal park Noida pvt. Ltd. has announced the launch of new food and herbal park project, which is located at Plot No.01 A, Sector -24A, Yamuna Expressway Industrial Development Authority (U.P). The project will be built on a plot area measuring 4,85,622.77 sqm (or 120 Acres).

(ii) The Mega Food Park (MFP) has been envisaged to help in creation of enabling infrastructure for food processing and a comprehensive ‘farm-to-plate’ supply chain system. These Parks would provide state of the art infrastructure for food processing in the country on a pre identified cluster
basis. This is aimed at reducing wastages and ensuring value addition, especially in perishables like fruits and vegetables. Besides making processing more economically viable and help creating large employment opportunities particularly in the rural areas, this is further aimed at reviving the agricultural sector by increasing the returns for farmers.

(iii) The Food and Herbal Park project is located at Plot No.01 A, Sector -24 A, Yamuna Expressway Industrial Development Authority (U.P). The Coordinates of the project site are 28°16'47.2"N & 77°32'31.0"E.

(iv) The project site is in close proximity to the Yamuna Expressway road at 2.70 Km in East direction. The site lies in the National Capital Region (NCR) and is well connected to Delhi, Gurgaon and Ghaziabad by a network of wide roads and expressway.

(v) The total area of site is estimated 4,85,622.77 sqm (or 120 Acres). Height of tallest building proposed is 24 m. Permissible ground coverage is 2,42,811.39 sqm and achieved ground coverage is 1,18,995.00 m². Total open area is 3,66,627.77 sqm and total landscape area is 1,83,313.89 sqm which is 50% of the Open area.

(vi) The population of the Food and Herbal Park project is estimated to be 24,053 including Staff and Visitor.

(vii) Total water requirement will be approx. 2,662 KLD, out of which domestic water requirement will be 1,048 KLD. Fresh water requirement will be 734 KLD which is 70% of the domestic water demand.

(viii) It is expected that 1,880 KLD of wastewater shall be generated from project site during operation phase. Wastewater will be treated in the STP provided within the complex generating recoverable water from STP out of which the domestic treated wastewater will be recycled within the project site.

(ix) Rain water harvesting has been catered to and designed as per the guideline of CGWA. Total of 56 nos. of rainwater harvesting pits are proposed for efficient ground water recharge.

(x) Adequate provision will be made for car/vehicle parking at the project site. There are 190 parking space is provided for Trucks and 380 ECS for staff parking.

(xi) The power supply shall be supplied by State Electricity Board. The maximum load for the project will be approx. 6000 kVA and will be supplied by 3 no’s of transformers of capacity 2000kVA each.

(xii) There is provision of 4 no. of DG sets of total 6,000 kVA (4*1,500 kVA) capacity for power back up.

(xiii) During the operation phase, waste will comprise domestic waste and estimated quantity of the waste shall be approx. 6,133 Kg/ per day.

(xiv) Total green area measures 1,83,313.885 sqm i.e. which is 50% of open area which will be area under tree plantation within the project and along the roads. One tree per 80 sqm of plot area out of which minimum 50 % to be in the category of evergreen trees.

During deliberation, the EAC noted that the proposal is envisaged for the development of Mega Food Park to help in creation of enabling infrastructure for food processing and comprehensive 'farm-to-plate' supply chain. However, the
The project proponent submitted an application for grant of ToR under category B of Project/Activity 8 (b) i.e. Township and Area Development Projects of the schedule of the EIA Notification, 2006, due to non-availability of SEIAA/SEAC in U.P.

After detailed deliberations, the EAC recommended for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) The data collection and impact assessment shall be as per standard survey methods. Fresh data collection for three months should be done and incorporated in the EIA/EMP report.

(iii) 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.

(iv) Present land use of the proposed project site.

(v) Copy of approved project sanction plan.

(vi) Details of project configurations and built up area.

(vii) Details of CETP including the proposed technology should be given.

(viii) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.

(ix) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(x) An estimation of the extent of dewatering for basements, description of the methodology used and assessment of impacts shall be submitted along with a plan for reutilisation of Water as per the CGWA Guidelines.

(xi) Details of source of water supply along with permission to be submitted.

(xii) Quantification of various effluent streams such as sewage, restaurant effluent, Laundry effluent etc.

(xiii) Treatment scheme for effluent and its recycling mode.

(xiv) The details of the treated sewage disposal and its impact on the recipient system shall be studied.

(xv) Action plan to prevent pollution from discharge of surface runoff into water bodies.

(xvi) Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.

(xvii) Thick greenbelt should be provided towards railway line.

(xviii) Details of DG sets. Prediction of ground level concentration due to emissions from DG sets.
(xix) Details of arrangement for meeting standby power from solar energy.  

(xx) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.  

(xxii) Calculation on sizing of solar water heating systems to be furnished.  

(xxii) A backup arrangement of at least 50% solar powered systems connected to the grid and at least two solar powered lights and one solar powered fan in each flat  

(xxiiii) A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.  

(xxiv) Solid waste management plan along with area earmarked for solid waste management scheme.  

(xxv) Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble /stone cutting.  

(xxvi) Layout plan indicating Greenbelt along with area earmarked to be provided.  

(xxvii) Disaster Management plan including onsite and offsite plan.  

(xxviii) Source apportionment study for the various sources of air pollution should be done.  

(xxix) The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated 09.12.2016.  

It was recommended that ‘ToR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.  

<table>
<thead>
<tr>
<th>19.5.18</th>
<th>Bhopal Smart City Development Project at Bhopal, Madhya Pradesh by M/s Bhopal Smart City Development Corporation Ltd - Terms of Reference (IA/MP/NCP/65227/2017; F. No. 21-202/2017-IA-III)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project proponent made a presentation and provided the following information to the Committee:-</td>
<td></td>
</tr>
<tr>
<td>(i) Total built Up Area is 1456805 sqm and total Plot Area: 593265.97 sqm – Residential + Commercial + PSP (53.19%), multipurpose open Spaces (17%), Roads &amp; Utilities (30.10%),</td>
<td></td>
</tr>
<tr>
<td>(ii) Total water requirement will be 10810 KLD. Water will be made available from Kolar reservoir.</td>
<td></td>
</tr>
<tr>
<td>(iii) Waste water generation will be 14610 KLD and will be treated in 2 STPs of total 1500 KLD capacity. About 6360 KLD will be disposed in to municipal drains.</td>
<td></td>
</tr>
<tr>
<td>(iv) About 56 TPD solid wastes will be generated.</td>
<td></td>
</tr>
<tr>
<td>(v) The total power requirement during construction phase is 5 MVA and will be</td>
<td></td>
</tr>
</tbody>
</table>
met from 33/11 kV Bhadbhada Substation or Ram Mandir.

(vi) Solar panels on roof tops will be provided.

(vii) Rooftop rainwater of buildings will be collected in 47 RWH tanks of total 54880 KLD capacity.

(viii) Parking facility for around 10,000 four wheelers and 12,000 two wheelers is proposed.

(ix) Van Vihar National Park is located 1.5 km away from project site.

(x) Investment/Cost of the project: 2000 crore.

(xi) Benefits of the project: Currently, the area is characterized by open spaces, parks and dilapidated structures of government housing. As per SCP, the area will be developed as state-of-art smart city at heart of the city with all modern features in most climate resilient manner. Further, nearly 70% of the area shall be kept for open spaces and greenery.

After detailed deliberations, the EAC recommended for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report:

(i) Importance and benefits of the project.

(ii) The data collection and impact assessment shall be as per standard survey methods. Fresh data collection for three months should be done and incorporated in the EIA/EMP report.

(iii) 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.

(iv) Present land use of the proposed project site.

(v) Copy of approved project sanction plan.

(vi) Details of project configurations and built up area.

(vii) The status of application to the NBWL for clearances with reference to the Bhoj National Park.

(viii) The EIA will suggest a Mechanism to ensure that individual activities which are liable to seek an environmental clearance do so.

(ix) Layout plan indicating road, greenbelt, drainage, sewer line, STP, solid waste handling area, rain water harvesting structure, etc. in different colour to be furnished.

(x) Layout of parking plan indicating entry and exit points of vehicular movement as well as traffic management plan. Highlight the fire tender pathway.

(xi) An estimation of the extent of dewatering for basements, description of the methodology used and assessment of impacts shall be submitted along with a plan for reutilisation of Water as per the CGWA Guidelines.

(xii) The project proponents will submit a copy of the Environmental Clearance obtained for the Greater Bhopal Master Plan and the conformance/ non-conformance of the project to the greater Master Plan.
(xiii) Details of source of water supply along with permission to be submitted.
(xiv) Quantification of various effluent streams such as sewage, restaurant effluent, Laundry effluent etc.
(xv) Treatment scheme for effluent and its recycling mode.
(xvi) The details of the treated sewage disposal and its impact on the recipient system shall be studied.
(xvii) Action plan to prevent pollution from discharge of surface runoff into water bodies.
(xviii) Details energy conservation measures to be taken. All points mentioned in the proposal such as orientation to support reduced heat gain, use of ASHRAE 90.1, use of ECBC compliant envelope measures to be supported through drawings and details in the proposal.
(xix) Thick greenbelt should be provided towards railway line.
(xx) Details of DG sets. Prediction of ground level concentration due to emissions from DG sets.
(xxi) Details of arrangement for meeting standby power from solar energy.
(xxii) Details of rain water harvesting system to be furnished. Clarity on recharge pits, storage systems for rain water and use of appropriate filtration system for collected rain water to be detailed.
(xxiii) Calculation on sizing of solar water heating systems to be furnished.
(xxiv) A backup arrangement of at least 50% solar powered systems connected to the grid and at least two solar powered lights and one solar powered fan in each flat
(xxv) A management plan for excavation and dewatering to ensure compliance to the CGWA guidelines and regulation.
(xxvi) Solid waste management plan along with area earmarked for solid waste management scheme.
(xxvii) Management of excavated soil. Pollution control measures to be taken to control fugitive emission during construction phase including marble /stone cutting.
(xxviii) Layout plan indicating Greenbelt along with area earmarked to be provided.
(xxix) Disaster Management plan including onsite and offsite plan.
(XXX) The project proponents will assess the carrying capacity of the area in terms of population. The projected population estimates shall be evaluated against the carrying capacity. The EIA will also explain as to how it shall be ensured that the carrying capacity consideration is not violated over the next 25 years.
(XXXI) The project proponents will submit a source apportionment study for the source of pollution in the area, formulate an action plan and integrate it with the Bhopal Smart City Project. The same shall be presented in the EIA.
(XXXII) The EIA should also give a compliance plan to conditions stipulated in Annexure XIV of the amended EIA Notification vide S.O. 3999 (E) dated
An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities within the project area. A detailed traffic management and a traffic decongestion plan drawn up through an organisation of repute and specialising in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

It was recommended that ‘ToR’ prescribed by the Expert Appraisal Committee (Infrastructure-2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name</th>
<th>Designation</th>
<th>Attendance</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prof. T. Haque,</td>
<td>Chairman</td>
<td>P P P</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Shri K. Gowarappan</td>
<td>Member</td>
<td>P A A</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Yashpal Singh</td>
<td>Member</td>
<td>A P P</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Dr. S.K. Bhargava</td>
<td>Member</td>
<td>P P P</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Dr. Ayi Vaman N. Acharya</td>
<td>Member</td>
<td>P P A</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Dr. Chandras Has Deshpande</td>
<td>Member</td>
<td>A A A</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Shri A. P. Singh</td>
<td>Member</td>
<td>P A P</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Ms. Mili Majumdar</td>
<td>Member</td>
<td>A A P</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Prof. Dr. Sanjay Gupta</td>
<td>Member</td>
<td>A A A</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MOEF&amp;CC Representative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Dr. Vinod K. Singh</td>
<td>Scientist D &amp; Member Secretary</td>
<td>P P P</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Dr. Deepak Gautam</td>
<td>Research Officer</td>
<td>P P P</td>
<td></td>
</tr>
</tbody>
</table>