

**Minutes of the 23<sup>rd</sup> 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 13<sup>th</sup> October, 2017 in the Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, New Delhi – 3.**

**Day: Friday, 13<sup>th</sup> October, 2017**

**23.1 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.

**23.2 Confirmation of the Minutes of the 22<sup>nd</sup> Meeting of the EAC held on 11-13 September, 2017 at New Delhi.**

The minutes of the 22<sup>nd</sup> Expert Appraisal Committee (Infra-2) meeting held during 11-13 September, 2017 were confirmed with the following corrections.

Corrections were also made in the 1<sup>st</sup> EAC (Infra-2) meeting held on 21<sup>st</sup> December, 2015 and 21<sup>st</sup> EAC (Infra-2) meeting held on 21-24 August, 2017.

Agenda item No.	Minuting	Correction/To be read as
2.7 of 1 <sup>st</sup> EAC (Infra-2) meeting held on 21 <sup>st</sup> December, 2015  Proposed construction of Information Technology Park at S.No. 281/1, 4 & 54/293, Kottivakkam Village, Saidapet Taluk, Rajiv Gandhi Salai, Kandanchavadi, Chennai, Tamil Nadu by M/s Easyaccess Financial Services Limited	The Committee noted that Planning Permit from CMDA approval was obtained for the project on 4.10.2015.	The Committee noted that Planning Permit from CMDA approval was obtained for the project on 4.10.2005.
	Completion certificate was obtained from CDMA vide their letter no. ES3/27919/2005 dated 01.11.2006.	Completion certificate was obtained from CMDA vide their letter no. ES3/27919/2005 dated 01.11.2006.
21.3.6 of 21 <sup>st</sup> EAC (Infra-2) meeting held on 21-24 August, 2017	Specific condition <b>I. Construction Phase</b> (iv) The inert waste from group housing project will be sent to dumping site.	Specific condition <b>I. Construction Phase</b> (iv) The inert waste from the commercial project will be sent to dumping site.
21.3.24 of 21 <sup>st</sup> EAC (Infra-2) meeting held on 21-24 August, 2017	Project brief: para (ii) .....total construction area of 92,058.015 sqm.	Project brief: para (ii) ...total construction area of 1,97,625.915 sqm.
22.3.17 of 22 <sup>nd</sup> EAC (Infra-2) meeting held on 11-13 September, 2017	Project brief: para (iii) FSI area is 2,23,341.05 sqm.....	Project brief: para (iii) FSI area is 2,54,255.54 sqm.....
22.3.21 of 22 <sup>nd</sup> EAC (Infra-2) meeting held on 11-13 September, 2017	Specific condition <b>II. Operational Phase</b> (i) Fresh water requirement from HUDA water supply shall not exceed 92 KLD.	Specific condition <b>II. Operational Phase</b> (i) Fresh water requirement from HUDA water supply shall not exceed 1205 KLD.
22.4.15 of 22 <sup>nd</sup> EAC (Infra-2) meeting held on 11-13 September, 2017	Project brief: para (ii) The total construction area of 53,986.77 sqm.	Project brief: para (ii) The total construction area of 52,127.18 sqm.

**23.3 Consideration of Proposals**

23.3.1	<p><b>Area Development of Multimodal Logistic Park &amp; Industrial Park for Smart Industrial Port City (SIPC) in Paradip Port &amp; Debottlenecking efficiency by Mechanization of existing operational berths in Port Master Plan by M/s Paradip Port Trust – Terms of Reference (IA/OR/MIS/62887/2017; F.No. 10-18/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s National Environmental Engineering Research Institute (NEERI) gave a detailed presentation on the salient features of the project and informed that:</p>
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- (i) The proposal is for Area Development of MMLP&IP for Smart Industrial Port City in Paradip Fort & Debottlenecking efficiency by Mechanization of Existing Operational Berths in the Eastern Dock 86 Central Dock including Expansion of PPT inner harbor to facilitate handling of cape size vessels in the berths of the Port Master Plan.
- (ii) Paradip Port Trust (PPT) is located approx. at Latitude 20<sup>o</sup>15'55.44" N and Longitude 86040'34.62" E. Land belongs to Paradip Port Trust and is being used for various port related activities such as harbour area, township area and industrial area. Area available for MMLP 86 IP for the Smart Industrial Port City is 283 Ha. Beyond this, the total existing back up harbour area i.e. custom bond is 1000 Ha.
- (iii) To Develop Multimodal Logistic Park and Industrial park as a part of smart Industrial port city over an area of 283 Ha & Mechanization of existing port berths in the Eastern. Dock & Central Dock including expansion of inner harbour by extension of South Breakwater by approx 500 mts. Construction of Western Dock and Capital dredging 21.20 rats. in the approach channel and 19.80 mts in the entrance channel leading to increase in cargo handling from 93.6 MTPA to 144 MTPA in these berths.
- (iv) Paradip port is well connected from State capital Bhubaneswar by National Highway No. 5A and state Highway no. 12. It is located at a distance of about Nearest Airport: Biju Pattanaik International Air port, Bhubaneswar at approx. 125 km. Nearest Railway station: Paradip approx. 10km
- (v) Cost of the project A. Smart Industrial Port City (SIPC): Rs. 2770.33 Crore B. Mechanized of existing berths in the Eastern & Central Dock: Rs. 2541.18 Crore, C. Expansion of Inner Harbour including Western Dock: Rs. 2000.00 Crore D, Total: Rs. 7311.51 Crore.
- (vi) Forest Clearance for 74.71 Ha area common for both inner and future outer harbour has already been applied vide proposal No. FP/OR/Others/26300/2017 Dated 24.05.2017.
- (vii) Employment potential-Direct: 400 (approx.), Indirect: 1500 (approx.)
- (viii) Benefits of the project: Smart Industrial Port City (SIPC) will have a better transport networks, better healthcare facility, water availability and proper waste management from the existing ones. A reduction in cost and non- renewal resource consumption. Expansion of Inner Harbour including Mechanization of existing port berths will have the benefits like. Rail cum Sea route mode of transportation enables reduction of freight charges, Faster turnaround time, Facilitates cargo handling in environmentally sustainable manner and Boost industrial activity, generating employment in the hinterland.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for Terms of Reference to the project Area Development of MMLP&IP for Smart Industrial Port City in Paradip Fort & Debottlenecking efficiency by Mechanization of Existing Operational Berths in the Eastern Dock 86 Central Dock including Expansion of PPT inner harbor to facilitate handling of cape size vessels in the berths of the Port Master Plan.
- (ii) The project/activity is covered under category 'A' of item 7(e) 'Ports, harbours, break waters and dredging' and also covered under Category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at Central level.

	<p>(iii) Earlier ToR was granted by MoEFCC for Development of Outer Harbour Paradip Port Trust, Paradip, Dist Jagatsinghpur, Odisha vide F. NO. 21-28/2016-IA-III dated 17<sup>th</sup> April, 2017.</p> <p>(iv) The instant proposal also has some common components for which ToR was granted vide letter dated 17<sup>th</sup> April, 2017.</p> <p><i>After deliberations on the proposal, the Committee advised Project Proponent to:</i></p> <p>(i) Revise Form 1 to integrate both the inner and outer harbor proposals under item no 7(e) i.e. 'Ports, harbors, break waters and dredging' and Smart Industrial Port City under item 8(b) i.e. 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006 and apply afresh for both the category separately.</p> <p>(ii) Apply only for proposals to be implemented within 10 years. The committee would only consider those components of the proposal which are to be implemented within 10 years of grant of E.C. The committee will not consider any proposal, to be executed beyond the validity period of the E.C. as and when issued.</p> <p>(iii) Consult the standard terms of reference for Category 7(e) and 8 (b) of the E.I.A. Notification, 2006 and proceed as per the guidelines of the MoEF&amp;CC in the matter of initiating base level surveys.</p> <p>(iv) Work out the Industry mix proposed in the area as per land use and include in proposal.</p> <p>(v) Include making a provision for a combined Effluent treatment plant including conveyance systems and management aspects in the application for ToR.</p> <p>(vi) Include proposals, in the application, for a detailed traffic management and a traffic decongestion plan to ensure that the current level of service is maintained in the feeder roads.</p> <p>(vii) Include proposals, in the application, for a detailed marine biodiversity management on marine, brackish water and fresh water ecology and biodiversity.</p>
23.3.2	<p><b>BPTP “Capital City” Commercial Project at Plot No. 2B, Sector 94, Noida, District: Gautam Budh Nagar, Uttar Pradesh by M/s Countrywide Promoters Pvt. Ltd- Environmental Clearance (IA/UP/MIS/62871/2016; F. No. 21-158/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s ENVIRTA Sustainable Solutions India Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The Commercial Project entitled “Capital City” is planned as a new project to be developed on Plot no. 02B, Sector 94, Noida, Uttar Pradesh. The Geographical Co-ordinates of the project site are 77°19'34.55"E &amp; 28°33'8.43"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.</p> <p>(ii) 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.</p> <p>(iii) Area measuring 25,162.92 sqm will be put under Green cover which is 43.88% of the total plot area.</p> <p>(iv) During the construction period daily water requirement will be around 100 cu.m. During</p>

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 302 KLD or 30 percent of the total water requirement. Water will be supplied by Municipal Supply (NOIDA).

- (v) 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.
- (vi) 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.
- (vii) E-waste generated will be managed as per E-waste (Management) Rules, 2016. E-waste generation will be minimized by adopting practices of repair. Un-repairable electronics will be sold off to government authorized agencies for management & disposal.
- (viii) Total 3136 ECS Parking will be provided
- (ix) **Investment/Cost** of the project is: Rs 1004.15 Crore.
- (x) **Employment potential:** Approx. 13,084.
- (xi) **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 deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'BPTP "Capital City" Commercial Project at Plot No. 2B, Sector 94, Noida, District: Gautam Budh Nagar, Uttar Pradesh by M/s Countrywide Promoters Pvt Ltd in a total built-up area of 2,73,130.2 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Uttar Pradesh. However, due to non-availability of SEIAA/SEAC in Uttar Pradesh, proposal considered at Central level by EAC (Infra-2) in the Ministry.
- (iii) The ToR for the project was granted by SEAC, Uttar Pradesh in its 294<sup>th</sup> meeting dated 05.10.2016.
- (iv) The proposal was earlier considered by the EAC in its 19<sup>th</sup> meeting held on 27-29 June, 2017, wherein some additional information regarding Certified compliance report issued by Regional Office of MoEFCC, Lucknow, Traffic Impact Analysis, ECBC compliance, etc. were sought. The Project Proponent submitted the required information on 22.09.2017 on Ministry's website.

*The EAC deliberated on the Certified Compliance Report letter F. No. VII/UP/SCL/144/2017 dated 07.09.2017 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 noted that the observation in the Compliance report was mentioned as “The Compliance status could be treated as satisfactory”. 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 project proponent shall obtain necessary clearance/ permission from concerned authority before felling any tree.
- (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, 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.
- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing and horticulture. Excess treated water shall be discharged into municipal drain.
- (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, 3 rain water harvesting pits and 2 rainwater harvesting tanks shall be provided 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. 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.
- (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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxviii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxix) 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
- (xxx) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 Noida Supply Water Supply shall not exceed 302 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (vii) No sewage or untreated effluent water would be discharged through storm water drains.
- (viii) No drainage should be allowed to flow into the eco-sensitive areas.
- (ix) 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) 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.
- (xi) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xii) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xiii) 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.
- (xiv) 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 25,162.92 sqm area shall be provided for green area.
- (xv) 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.

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

**23.3.3 Proposed Wadhwa Panvel Integrated Township at in Village Vardoli of Panvel, Raigad, Maharashtra by M/s Wadhwa Construction and Infrastructure Pvt Ltd- Environmental Clearance (IA/MH/MIS/64748/2017; F.No. 21-258/2017-IA-III)**

The project proponent and the accredited Consultant **M/s Building Environment (India) Pvt Ltd** gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at 18°57' 27.87" N; Latitude and 73°11'30.84" E. The project is new and no construction initiated on site.
- (ii) The total plot area is 846129.39 sqm, FSI area is 346230.86 sqm and total construction area of 425117.93 sqm. The project will initially comprise of 23 Buildings (Phase I). Total 5564 flats shall be developed. Maximum height of the building is 75.4m.
- (iii) During construction phase, total water requirement is expected to be 59 KLD which will be met by MJP. 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 11713 KLD and the same will be met by the MJP (5634 KLD)/ Recycled Water. Wastewater generated (7743 KLD) uses will be treated in STP of total 7743 KLD capacity. 6079 KLD of treated wastewater will be recycled (2954 KLD for flushing, 3125 KLD for gardening). About 845 KLD will be disposed in to municipal drain.
- (v) About 16 TPD solid wastes will be generated in the project. The biodegradable waste (9.7 TPD) will be processed in OWC and the non-biodegradable waste generated (6.3 TPD) will be handed over to authorized local vendor.
- (vi) The total power requirement during construction phase is 5MVA and will be met from MSEDCL and total power requirement will be met from MSEDCL is as follows:

	<b>Connected Load</b>	<b>Max Demand</b>	<b>DG set capacity</b>
Special Township	72299 kVA	50963 kVA	At individual plot levels.
Road	300 kVA	300 kVA	180 kVA
Total	72599 kVA	51263 kVA	--

- (vii) Rain water harvesting is carried out by providing Recharge pits. Surface RWH Unit: - Grease Cum De-silting Chamber + Recharging Pit 385 Nos. Recharge pit: 3.0MLX3.0MLX3.0ML Depth.
- (viii) Parking facility for 3538 four wheelers and 326 two wheelers is proposed to be

provided against the requirement of 3516 four wheelers and 321 two wheelers respectively (according to local norms).

- (ix) There is no court case pending against the project
- (x) Investment Cost of the project is Rs. 750 Crore.
- (xi) Employment potential. Project works would require approx.1000 Masons, 715 Plumbers, 1100 carpenters, 700 Electricians, 800 security personnel & 1000 maintenance personnel.
- (xii) Benefits of the project: The project will help in developing remote & underdeveloped areas and shall also assist out-migration from overcrowded centres in long run. As no R & R is envisaged, the project will bring about several economic benefits to local people & integrate locals seamlessly. The project envisages employment potential and economic prosperity to local population of the surrounding villages as well as helps create opportunities for entrepreneurship leading to multiple associates activities. Precious foreign exchange will flow into our country in the form of hard currency. Physical infrastructure is a key towards better quality of life. It plays a vital role in current lifestyles for individuals, businesses & organizations. It includes utility services, overhead & underground facilities, telecommunication facilities & roads. The proposed project would provide housing, transportation & communication facilities, as also recreational & business opportunities. Apart from the general benefits above following are some of the direct & indirect benefits due to the development of this project

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Proposed Wadhwa Panvel Integrated Township at in Village Vardoli of Panvel, Raigad, Maharashtra by M/s Wadhwa Construction and Infrastructure Pvt Ltd in a total plot area of 8,46,129.39 sqm and total built-up area of 4,25,117.93 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at Central level.
- (iii) The project was considered for ToR by SEAC, Maharashtra in its 34<sup>th</sup> meeting held on 20-23 July, 2016 and ToR was prescribed vide dated 23.07.2016.
- (v) The proposal was earlier considered by the EAC in its 21<sup>st</sup> meeting held on 21-24 August, 2017, wherein some additional information regarding uploading of EIA/EMP report on ministry's website, point wise reply to the complaint made by Conservation Action Trust and response of the observations made by SEAC, Maharashtra in earlier meeting. The Project Proponent submitted the required information on 19.09.2017 on Ministry's website.
- (vi) The project is outside the eco-sensitive zone and conforms to the provisions of the E.S.Z. notification and guidelines therein. The Project Proponent submitted affidavit in this regards.
- (vii) There are no wild life corridors and wild life animal movements in the area. The Project Proponent submitted affidavit in this regards.
- (viii) There is no flow of effluents into the eco-sensitive zone.
- (ix) A traffic management plan has been drawn up taking into consideration all project and non project activities within 05 kms of the site.
- (x) No excavation is planned for basements.

*The EAC, after deliberations, 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 project proponent shall obtain necessary clearance/ permission from concerned authority before felling any tree.
- (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, 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.
- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 MBBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing and irrigation. Excess treated water shall be discharged into municipal drain.
- (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, 385 nos. of rain water harvesting recharge pits in addition to one rain water harvesting tank shall be provided 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 100 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.
- (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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxviii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxix) 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
- (xxx) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 MJP/CIDCO Water Supply shall not exceed 5634 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (vii) No sewage or untreated effluent water would be discharged through storm water drains.
- (viii) No drainage should be allowed to flow into the eco-sensitive areas.
- (ix) 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) 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.
- (xi) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xii) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xiii) 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.
- (xiv) 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 36576 sqm (32.32%) area shall be provided for green belt development.
- (xv) An environmental management plan (EMP) shall be prepared and implemented to

	<p>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.</p> <p>(xvi) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.4	<p><b>Expansion of secured landfill cell in existing Integrated Common Hazardous Waste Treatment Storage &amp; Disposal Facility at Village Juna Kataria, Lakadi, District kutch, Gujarat by M/s Saurashtra Enviro Projects Private Limited (SEPPL) - Environmental Clearance (IA/GJ/MIS/53189/2016; F.No. 10-36/2016-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Mahabal Enviro Engineers Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) Saurashtra Enviro Projects Private Limited (SEPPL) proposes to develop Secured Landfill Site at Villages: Juna Kataria and Lakadia, Taluka: Bhachau, District: Kutch, Gujarat. The proposed project is expansion project within the existing project boundary. The facility is presently catering industries located state of Gujarat for disposal of Hazardous Waste.</li> <li>(ii) The company has obtained Environment Clearance (EC) for the existing unit from Ministry of Environment and Forest vide letter no. 10-45/2007-IA-III dated 15.04.2008. Accordingly company has developed the facility. Due to industrialization the waste generation has increased which has lead to the demand of landfill facility. The existing cells are capped and the capacity is almost exhausted. Thus in order to meet the rising demand, SEPPL has decided to expand the existing facility. Accordingly SEPPL was granted Terms of Reference (TOR) from MoEF&amp;CC vide letter no. F. No. 10-36/2016-IA.III dated 12.07.2016 to develop the project.</li> <li>(iii) The proposed expansion project is within the industrial premises of project site hence no additional land will be procured. The land fill will be developed in the existing granted area of 62 acres as per EC. The site is surrounded by barren land and wind mill at all four sides. There is existing approach road connecting the site to National Highway. Nearest village is Lakadia located at distance of approx 2.92 km.</li> <li>(iv) In the proposed expansion project, 1.1 MMT of Secured Landfill Cell will be developed in a span of 10 years. This cell will be developed in phase wise manner based on the waste received from industries. Secured Landfill Cell will be developed with two liner system as per Criteria for Hazardous Waste Landfills published by CPCB (HAZWAMS/17/2000-01) and stringent QA-QC plan shall be followed during the landfill construction phase.</li> <li>(v) Source of water for existing unit is Gujarat Water Supply and Sewerage Board (GWSSB) and tanker water. Same shall be used for the proposed expansion project. There is no increase in water consumption and waste water generation due to the expansion project. No flue gas and process stack will be installed. Hence no addition of air pollution due to proposed expansion project. Leachate will be generated due to proposed expansion project which will be marginal.</li> <li>(vi) Based on the Terms of Reference (ToR) issued by Ministry of Environment, Forest and Climate Change (MoEF&amp;CC), baseline study was conducted in the area of 10 Km</li> </ul>

radius from the project site. The land use pattern in the study area showed maximum of agricultural land covering an area of 61 % and scrub land covering an area of 23 %. The major crop cultivated in the study area was cotton (*Gossypium spp.*) and castor (*Ricinus Communis*). Other crops are Jiru (*Cuminum cyminum*) in winters and Juwar (*Sorghum sp.*), Mung (*Vigna radiate*), Guar (*Cyamopsis tetragonoloba*), Bajra (*Pennisetum glaucum*), Moth (*Vigna aconitifolia*) and til (*Sesamum indicum*) in winters. Few areas had bore wells which goes up to 200-300 fts.

- (vii) As per the meteorology data collected for one season (December 2016 – February 2017), the predominant wind direction observed in study area was from North East to South West. Based on the predominant wind direction, monitoring stations were selected. Two down wind and one up wind location was selected. There will be no stack installed due to proposed expansion project. No source of air pollution added due to proposed expansion project.
- (viii) Ground water samples were collected from four no. of villages. Detail socio economic study was conducted in the nearby villages.
- (ix) The total cost of project is estimated as Rs. 40 Crores
- (x) Employment potential: With the progressive closure of cells, the equipment and man force will be shifted to new cell operation.
- (xi) Benefits of project: Providing environment infrastructure (secured engineered landfill) for safe disposal of hazardous waste to industries located in Gujarat

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Expansion of secured landfill cell in existing Integrated Common Hazardous Waste Treatment Storage & Disposal Facility at Village Juna Kataria, Lakadi, District kutch, Gujarat by M/s Saurashtra Enviro Projects Private Limited (SEPPL).
- (ii) The project/activity is covered under category 'A' of item 7(d) 'Common Hazardous Waste Treatment, Storage and Disposal Facilities' of the Schedule to the EIA Notification, 2006, and requires appraisal at Central level.
- (iii) The ToR was granted by MoEF&CC vide letter no. F. No. 10-36/2016-IA.III dated 12.07.2016. Public hearing was exempted as per para 7 (ii) of EIA Notification, 2006 as public hearing conducted on 02.04.2008.

*The EAC deliberated on the Certified Compliance Report letter F. No. 5-125/2008 (Parya)-952 dated 30.08.2017 issued by the MoEF&CC's Regional Office (WZ), Bhopal and reply given by the project proponent to non-compliance of EC conditions. The committee examined the compliance report and noted that the compliance was not satisfactory. It was also noted that changes have been made in the proposals on which E.C. was given earlier without seeking a modification in the E.C. granted earlier. It was also informed that a consent to establish has been received inclusive of the changes and that there are no generic changes except that for the conventional E.T.P. a forced evaporation system has been installed which also comes in the category of an E.T.P.*

*After detailed deliberation, the Committee sought following additional information:*

- (i) Latest status of Compliance of the conditions stipulated in the earlier Environmental Clearance along with comments on the not complied, partially complied and agreed to



comply clauses.

- (ii) A chart of activities where the proposals have been modified from those as prescribed through the earlier E.C.
- (iii) A parawise compliance to the public hearing report held in April, 2008.
- (iv) A copy of the authorization granted under the Hazardous and other wastes management Rules 2016.
- (v) A copy of the letter from the CGWA in compliance to the E.C. condition that there is no detriment to the ground water quality due to leachates.
- (vi) Method of disposal practiced for waste with a carbon content of more than 5%.
- (vii) Proposals for green belt submitted earlier (on which E.C. has been already granted) and the actual plantation done with documentary proof.
- (viii) Measures proposed to reduce the levels of particulate matter from ambient air.
- (ix) Status of show cause notices issued by the State Government/ GPCB vide dated 08.05.2015, 03.10.2015 and 15.09.2016.

*The proposal was, therefore, deferred till the desired information is submitted.*

23.3.5

**Bifurcation of Existing CRZ/EC and its amendments of Kattupalli Shipyard cum Port on the name of L&T Shipbuilding (LTSB) and Marine Infrastructure Developer Private Limited (MIDPL) by M/s L&T Shipbuilding Limited - Amendment in Environmental and CRZ Clearance (IA/TN/MIS/20243/1910; F. No. 10-130/2007-IA.III)**

The project proponent gave a detailed presentation on the salient features of the project and informed that:

- (i) The Environmental and CRZ clearance for the development of Shipyard cum Port Complex at Kattupalli village, Thiruvallur district, Tamil Nadu was granted to L&T Shipbuilding Limited (LTSB) vide Letter No. 10-130/2007-IA.III dated July 03, 2009. The project consists of shipbuilding, ship repair, modular fabrication facilities, port and associated infrastructure. The Kattupalli Shipyard cum Port Complex has become operational since January 2013.
- (ii) In considering the divergent nature of business of LTSB and to harness the potential for growth with clear focus on port business, LTSB had approached the Hon'ble National Company Law Tribunal (NCLT), Chennai with a Scheme of Arrangement for Demerger of Port business of LTSB into a separate company Viz., M/s Marine Infrastructure Developer private Limited (MIDPL). The Hon'ble NCLT after careful examination of the scheme, had accorded its approval on 20/03/2017. In pursuant to the said NCLT Order, the Port business in Kattupalli Shipyard cum Port Complex on a going concern basis together with the identified port assets, powers, sanctions, approvals, registrations etc., stands transferred and vested with MIDPL.
- (iii) The facilities to be operated by LTSB and MIDPL respectively in the Kattupalli Complex, post demerger are given below:

S. No	Company	Facilities to be Operated
1	<b>L&amp;T Shipbuilding Limited (LTSB)</b>	<p><b><u>Shipyard/ MFF</u></b></p> <ul style="list-style-type: none"> <li>• Shipbuilding (25 Ships per annum) and Ship Repair (60 Ships per Annum)</li> <li>• Facilities such as South Breakwater, Ship lift, Outfitting Jetties, Dry berths, Various Shops including assembly</li> </ul>

		<p>shops, Scrap Yard, Blasting /Painting Bay, other various necessary infrastructure, utilities and services, Housing Colony etc., and</p> <ul style="list-style-type: none"> <li>• Modular Fabrication Facility (MFF) with Loading /Outfitting Jetties, quay wall, Work Zones, Spool Lay down Area, Various storage areas, P&amp;M Stores and Maintenance, Various Shops including Blasting Painting Shops, other various necessary infrastructures, utilities and services etc.,</li> <li>• Dredging of Shipyard/MFF area upto (-)15 m and Offshore dumping</li> <li>• Area: 892.11 Acres (830.25 Acres of Revenue Land and 61.86 Acres of Coastal land)</li> </ul>
2	<p><b>Marine Infrastructure Developer Private Limited</b></p> <p><b>(MIDPL)</b></p>	<p><b><u>Port and Common Facilities</u></b></p> <ul style="list-style-type: none"> <li>• North breakwater, facilities required for Port such as Navigational Channel (Outer (-)16.7 m CD and Inner (-)17.5 m CD depth), Other Navigational Facilities,</li> <li>• Five Berths and 2 Port Craft Berths, Container Freight Station,</li> <li>• Container Stackyard, Cargo Storage areas and Tank farms, other various necessary supporting infrastructures, utilities and services etc., Dredging of Port area and Navigation channel and Offshore dumping</li> <li>• Area: 336.75 Acres (321.75 Acres of Revenue Land and 15.0 Acres of Coastal land)</li> </ul>

(iv) The split up of Permitted activities to be carried out by LTSB and MIDPL in Kattupalli are as given below:

S. No	Company	Activities to be Carried out	
1.	<p><b>L&amp;T Shipbuilding Limited</b></p> <p><b>(LTSB)</b></p>	<ol style="list-style-type: none"> <li>1. Ship Building :25 ships/Annum</li> <li>2. Ship Repair :60 ships/Annum</li> <li>3. Modular Fabrication Facility: Raw Materials Receiving and Product Delivery Facility upto (-) 15 m draft and capacity of about 50,000 MT/Annum</li> </ol>	
2.	<p><b>Marine Infrastructure Developer Private Limited</b></p> <p><b>(MIDPL)</b></p>	<b>Cargo Handling</b>	
		Containers (Mn TEU's)	1.80
		Ro-Ro –Automobiles (nos)	1,49,899
		Project Cargo (MTPA)	0.44
		Break Bulk/general cargo (Barytes/Gypsum/Limestone/Granite/Steel Cargo) (MTPA)	1.82

	Edible oil, CBFS, Base Oil, Lube Oil and Non-Hazardous Liquid Cargo (MTPA)	0.57
	<b>Total Handling Capacity at Port</b>	<b>24.65 MTPA</b>

- (v) LTSB request to bifurcate the Environmental and CRZ Clearance issued earlier to LTSB between LTSB and MIDPL based on their respective businesses for carrying out the permitted activities by each company as there is no change in location, technology, process, products and impact on environment as approved and appraised by MoEF&CC earlier.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for Bifurcation of Existing EC&CRZ and its amendments of Kattupalli Shipyard cum Port on the name of L&T Shipbuilding (LTSB) and Marine Infrastructure Developer Private Limited (MIDPL) by M/s L&T Shipbuilding Limited.
- (ii) The project/activity is covered under category 'A' of item 7(e) i.e. 'Ports, harbors, break waters and dredging' of the Schedule to the EIA Notification, 2006, and requires appraisal at Central level.
- (iii) The Environmental and CRZ Clearance was granted by MoEF&CC vide letter no. F. No. 10-130/2007-IA.III dated 03.07.2009 and their subsequent amendments vide dated 12.05.2010 and 17.12.2014.
- (iv) The proposal was considered in 21<sup>st</sup> EAC meeting held on 21-24 August, 2017. *The Committee after detailed deliberation asked the PP to submit following information:*
- Regarding partial transfer of units, the committee asked the PP to submit a matrix indicating all the conditions of existing environmental clearance and, as against each condition, the mutually agreed proposal as to which unit would be responsible for compliance of which condition after the proposed disintegration is permitted. This proposed devolution of responsibilities regarding compliance of EC conditions would be deliberated upon by the Committee which would make suitable recommendations.
  - Undertaking of the company for which transfer of Environmental & CRZ Clearance is proposed and parent company shall submit undertaking for abiding the implementation of the Environmental & CRZ Clearance conditions; no change in the pollution load; and no conflict in sharing in common facilities in day to day operations.
- (v) The Project Proponent submitted/uploaded the additional information on 06.09.2017 on Ministry's website. **Now the Project proponent has proposed the following existing Environmental & CRZ clearance and its Amendment conditions applicable to Marine Infrastructure Developer Private Limited (MIDPL) and L&T Shipbuilding Limited (LTSB) after the proposed bifurcation:**

Condition No.	Conditions	After bifurcation applicable to	
		MIDPL	LTSB
<b>Environmental/CRZ Clearance vide Letter No. 10-130/2007-IA.III dated 3<sup>rd</sup> July, 2009</b>			
<b>5.</b>	<b>SPECIFIC CONDITIONS</b>		
(i)	The proponent shall comply all the conditions stipulated in the letter R.C. No.P1/2004/2008, dated 21.10.2008 of	YES	YES

	Department of Environment, Chennai.		
(ii)	The proponent shall comply all the commitment made vide his letter No. D/Shipyard/00/07 dated 20.03.2009.	NA	NA
(iii)	Provision shall be made for the housing of construction labour within the site will all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	NA	NA
(iv)	There shall be no withdrawal of groundwater in Coastal Regulation Zone area, for this project. In case any ground water is proposed to be withdrawn from outside the CRZ area, specific prior permission from the concerned State Central Groundwater Board shall be obtained in this regard.	YES	YES
(v)	The paints based on "Primer non-toxic water organic co-polymer latish solvent free" shall be used to prevent VOC. No. Tri butyl Tin [TBT] based paints shall be used.	NA	YES
(vi)	No dumping of dredging materials in the sea shall be undertaken. In case of sea dumping is required an integrated modelling study to be carried out to locate the dump site so that it does not cause any problem to Ennore Port.	NA	NA
(vii)	Shoreline changes due to project shall be monitored continuously. Nourishment of northern shoreline shall be carried out using the sediments from beach acceleration on the southern shoreline.	YES	NA
(viii)	Suitable screens shall be installed between the construction area and the intakes so that operation of the intakes is not affected by the construction activity.	NA	NA
(ix)	At least a distance of 100 meters shall be provided between intake of Chennai Water Desalination Ltd., [CWDL] and north edge of the northern breakwater as agreed in the meeting between the proponent and CWDL.	NA	NA
(x)	An independent port connectivity shall be developed.	YES	NA
(xi)	Rehabilitation if any shall be carried out as per law / State Government	NA	NA
(xii)	Fire station shall be located within the project area.	YES	YES
(xiii)	The Hazardous Waste generated shall be properly collected and handled as per the provisions of Hazardous waste [Management, Handling and Transboundary Movement] Rules, 2008.	YES	YES
(xiv)	The waste water generated from the activity shall be collected, treated and reused properly.	YES	YES
(xv)	Sewage Treatment facility should be provided in accordance with the CRZ Notification.	YES	YES
(xvi)	No solid waste will be disposed of in the Coastal Regulation Zone area. The solid waste shall be properly collected, segregated and disposed as per the provision of Solid Waste [Management and Handling] Rules, 2000.	YES	YES
(xvii)	Installation and operation of DG set if any shall comply with guidelines of CPCB.	YES	YES
(xviii)	There shall be no reclamation / dredging of areas.	NA	NA
(xix)	Air quality including the VOC shall be monitored regularly as	YES	YES

	per the guidelines of CPCB and reported.		
(xx)	The project proponent shall undertake green belt development all along the periphery of the project area and also alongside the road.	YES	YES
(xxi)	All necessary clearances from the concerned agencies shall be obtained before initiating the project.	NA	NA
(xxii)	Project proponent shall install necessary oil spill mitigation measures in the shipyard. The details of the facilities provided shall be informed to this Ministry within 3 months from the date of receipt of the letter	YES	YES
(xxiii)	No hazardous chemical shall be stored in the Coastal Regulation Zone area.	YES	YES
(xxiv)	The project shall not be commissioned till the requisite water supply and electricity to the project are provided by the PWD / Electricity Department	NA	NA
(xxv)	Specific arrangements for rainwater harvesting shall be made in the project design and the rain water so harvested shall be optimally utilised.	YES	YES
(xxvi)	The facilities to be constructed in the CRZ area as part of this project shall be strictly in conformity with the provisions of the CRZ Notification, 1991 and its amendment. The facilities such as office building and residential buildings which do not require water front and foreshore facilities shall not be constructed within the Coastal Regulation Zone area.	YES	YES
<b>6.</b>	<b>GENERAL CONDITIONS</b>		
(i)	Construction of the proposed structures shall be undertaken meticulously conforming to the existing Central / local rules and regulations including Coastal Regulation Notification 1991 and its amendments. All the construction designs / drawings relating to the proposed construction activities must have approvals of the concerned State Government Departments / Agencies.	YES	YES
(ii)	Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. shall be ensured for construction workers during the construction phase of the project so as to avoid felling of trees / mangroves and pollution of water and the surroundings.	YES	YES
(iii)	The project authorities shall make necessary arrangements for disposal of solid wastes and for the treatment of effluents by providing a proper wastewater treatment plant outside the CRZ area. The quality of treated effluents, solid wastes and noise level etc. must conform to the standards laid down by the competent authorities including the Central / State Pollution Control Board and the Union Ministry of Environment and Forests under the Environment [Protection] Act, 1986, whichever are more stringent.	YES	YES
(iv)	The proponent shall obtain the requisite consents for discharge of effluents and emissions under the Water [Prevention and Control of Pollution] Act, 1974 and the Air [Prevention and Control Pollution] Act, 1981 from the Tamil Nadu State Pollution Control Board before commissioning of the project and a copy of each of these shall be sent to this	YES	YES

	Ministry.		
(v)	In order to carry out the environment monitoring during the operational phase of the project, the project authorities shall establish an environmental laboratory well equipped with standard equipment and facilities and qualified manpower to carry out the testing of various environmental parameters.	YES	YES
(vi)	The proponents shall provide for a regular monitoring mechanism so as to ensure that the treated effluents conform to the prescribed standards. The records of analysis reports must be properly maintained and made available for inspection to the concerned State / Central officials during their visits.	YES	YES
(vii)	The sand dunes and mangroves, if any, on the site shall not be disturbed in any way	NA	NA
(viii)	A copy of the clearance letter will be marked to the concerned Panchayat / local NGO, if any, from whom any suggestions / representation has been received while processing the proposal.	NA	NA
(ix)	The Tamil Nadu Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office / Tehsildar's Office for 30 days.	NA	NA
(x)	The funds earmarked for environment protection measures shall be maintained, in a separate account and there shall be no diversion of these funds for any other purpose. A year wise expenditure on environmental safeguards shall be reported to this Ministry.	YES	YES
(xi)	Full support shall be extended to the officers of this Ministry's Regional Office at Bangalore and the officers of the Central and State Pollution Control Boards by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	YES	YES
(xii)	In case of deviation or alteration in the project including the implementing agency, a fresh reference shall be made to this Ministry for modification in the clearance conditions or imposition of new ones for ensuring environmental protection.	YES	YES
(xiii)	This ministry reserve the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	YES	YES
(xiv)	The Ministry or any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	YES	YES
(xv)	The Project proponents shall inform the Regional Office at Bangalore as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of Land Development Work.	NA	NA
<b>7.</b>	These stipulations would be enforced among others under the provisions of water [Prevention and Control of Pollution] Act, 1974 the Air [Prevention and Control of Pollution] Act, 1981,	YES	YES

	the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991, the Hazardous Chemicals (Manufacture, Storage and Import) Rules, 1989, Municipal Solid Wastes (Management and Handling) Rules, 2000 and the Coastal Regulation zone Notification, 1991 and its subsequent amendments made there under from time to time.		
8.	All other statutory clearances such as the approvals for the storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	NA	NA
9.	The project proponent should advertise in at least in two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Tamil Nadu Pollution Control Board and may also be seen on the web site of the Ministry of Environment & Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . The advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same should be forwarded to Regional Office of the Ministry at Bangalore.	NA	NA
10.	Any appeal against this Environmental Clearance shall lie with the National Environmental Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	NA	NA
11.	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.	YES	YES
<b>Amendment to the Environmental/CRZ Clearance vide Letter No. 10-130/2007-IA.III dated 12<sup>th</sup> May, 2010</b>			
4.	<b>SPECIFIC CONDITIONS</b>		
(i)	The details of Combined Effect on both the Ports (i.e. Ennore Port and Kattupalli Port) shall be carried out to monitor the impact of the post-dumping. This model study shall be carried out for a period of One year	NA	NA
(ii)	A Comparison between model study and actual dumping shall be carried out to examine the impacts both on North- East and South-West of the Ports shall be submitted to the Ministry.	NA	NA
(iii)	No reclamation of the areas outside the Port Limit and Buckingham Canal shall be carried out.	YES	YES
<b>Amendment to the Environmental/CRZ Clearance vide Letter No. 10-130/2007-IA.III dated 17<sup>th</sup> December, 2014</b>			
6.	<b>CONDITIONS</b>		
(i)	The cargo should only include (i) Container 21.60 MTPA, (ii) Ro-Ro 0.22 MTPA, (iii) Project Cargo 0.44 MTPA, (iv) Break bulk / General Cargo (Barytes/Gypsum/Limestone/Granite/Steel Cargo) – 1.82 MTPA and (v) Edible Oil, CBFS, Base Oil and Lube Oil and Non – Hazardous Liquid Cargo – 0.57 MTPA.	YES	NA

(ii)	All the conditions stipulated by the Tamil Nadu Coastal zone Management Authority [TNCZMA] vide letter no: 6064/EC-3/2014-1 dated 26.06.2014 shall be strictly complied with	YES	NA
(iii)	No additional land should be utilized for the proposed development.	YES	NA
(iv)	As committed, the local traffic should not be disturbed.	YES	NA

*The Committee deliberated upon the proposal and found additional information adequate and recommended the aforesaid bifurcation proposal on the mutually acceptable division of responsibilities as made available. The Committee also recommended that wherever there is a doubt or NA is mentioned (the committee was given to understand through the presentation that this has been taken care of) in the documents as submitted to the MoEF&CC, the conditions shall be the equal responsibility of both Project Proponents separately.*

**23.3.6 “Mantri Vantage” at Sy. No. 16/4a, at Village Kharadi, Taluka Haveli, District Pune, Maharashtra by M/s Mantri Dwellings Pvt. Ltd.– Environmental Clearance regarding (IA/MH/NCP/62176/2017; 21-33/2017-IA-III)**

The project proponent and the accredited Consultant M/s ULTRA-TECH (Environmental Consultancy and Laboratory) gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at Latitude 18°32'45.16"N and Longitude 73°56'36.55"E.
- (ii) The project is for Expansion. EC obtained vide letter No. SEAC-III-2014/CR-365/TC-3 dated 12<sup>th</sup> January 2016 for Construction area 48,804.71sqm Out of above 8,156 sqm is already completed. The details of the expansion are as follows:

No.	Details	As per EC	Proposed
1	Plot area (sqm)	27,100.00	27,100.00
2	Proposed FSI (sqm)	23,594.55	30,909.00
3	Proposed Non- FSI (sqm)	25,210.16	27,111.00
4	Total construction area (sqm)	48,804.71	58,020.00
5	Ground Coverage (sqm)	2,200.12	2,200.12
6	Green belt (sqm)	1,621.96	1,621.96
7	No. of buildings	3 residential + club house Tower-A – 2P+15 Tower-B – 2P+16 Tower-C – 2P+15	3 residential + club house Tower-A – 2P+19 Tower-B – 2P+20 Tower-C – 2P+21
8	No. of parking	4 wheeler 306 2 wheeler 612	4 wheeler 449 2 wheeler 800
9	No. of tenements	Flats 306	Flats 400
10	No. of persons	Fixed 1530	Fixed 2000



11	Water requirement (m <sup>3</sup> /day)	Domestic: 138 Flushing: 68 Gardening: 30	Domestic: 180 Flushing: 90 Gardening: 10
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- (iii) The total plot area is 27,100.00 sqm, FSI area is 30,909 sqm and total construction area of 58,020.00 sqm. The project will comprise of 03 Buildings with 400 Nos. of tenements. Maximum height of the building is 69.45m.
- (iv) During construction phase, total water requirement is expected to be 18 KLD which will be met by water from Potable water tankers. During the construction phase, disposal of waste water will be done in existing sewer line.
- (v) During operational phase, total water demand of the project is expected to be 280 m<sup>3</sup>/day and the same will be met by water supply from Pune Municipal Corporation. Wastewater generated (234 m<sup>3</sup>/day) will be treated in 1 STP of total 250 m<sup>3</sup>/day capacity. 100 m<sup>3</sup>/day of treated wastewater will be recycled (90 for flushing, 10 for gardening). About 111 m<sup>3</sup>/day will be disposed-off suitably.
- (vi) About 900 kg/day solid waste will be generated in the project. The biodegradable waste (630 kg/day) will be processed in waste management plant and the non-biodegradable waste generated (270 kg/day) will be handed over to authorized agency.
- (vii) The total power requirement during construction phase is 25 KVA and will be met from MSEDCL and total power requirement during operation phase is 2179.11kW and will be met from MSEDCL.
- (viii) Rooftop rainwater of buildings will be collected in RWH tanks of total. 120 m<sup>3</sup> capacity for harvesting after filtration; 04 nos of recharge pits with borewell of size 2.5m x 2.5m x 2m (1m filter media) will be proposed.
- (ix) Parking facility for 449 Four wheelers and 800 two wheelers is proposed to be provided against the requirement of 400 and 800 respectively (according to local norms).
- (x) Proposed energy saving measures would save about 17% of power
- (xi) It is not located within 10 km of Eco Sensitive areas.
- (xii) There is no court case pending against the project.
- (xiii) Investment/Cost of the project is Rs.196 Crore.
- (xiv) Employment potential; Will create job opportunity for support staff like Security, Maintenance, household workers, Shop keepers etc.
- (xv) Benefits of the project: Enhancement of the infrastructural facilities in the area. The project will create job opportunity for support staff like Security, Maintenance, household workers etc.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Mantri Vantage' at Sy. No. 16/4a, at Village Kharadi, Taluka Haveli, District Pune, Maharashtra by M/s Mantri Dwellings Pvt. Ltd. in a total plot area of 27,100.00 sqm and total construction area of 58,020.00 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and

Construction Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Maharashtra. However due to non availability of SEIAA/SEAC in Maharashtra at that time, the proposal was considered at Central Level.

- (iii) The ToR for the project was granted on 17.08.2017 vide letter No. 21-112/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.
- (v) The Proposal was considered in 14<sup>th</sup> meeting of EAC held on 13-15 February, 2017. After detailed deliberation, the Committee sought following additional information:
  - Certified compliance report issued by the Regional Office on the environmental conditions stipulated in the earlier EC issued by the MoEF and CC.
  - Details of 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
  - Layout plan indicating Greenbelt along with area earmarked to be provided.
- (vi) The Project Proponent submitted/uploaded the additional information on 12.09.2017 on Ministry's website.

*The EAC deliberated on the Certified Compliance Report letter F. No. EC-309/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. 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, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 and gardening. Excess treated water shall be discharged into municipal drain.
- (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 RWH tanks of total 120 m<sup>3</sup> capacity for harvesting after filtration in addition 04 nos of recharge pits with bore well of size 2.5m x 2.5m x 2m (1m filter media) shall be provided.
- (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. 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.
- (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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.

(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

(xxix) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 Pune Municipal Corporation Water Supply shall not exceed 180 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws

	<p>requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</p> <p>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</p> <p>(xii) 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.</p> <p>(xiii) 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 1,621.96 sqm area shall be provided for green belt development.</p> <p>(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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.7	<p><b>Proposed expansion of Residential cum Commercial project 'Sai World City' at village Kolkhe , Taluka: Panvel, Dist: Raigad, Maharashtra by M/s. Dhariwala Developments - Environmental Clearance (IA/MH/NCP/62069/2017; F. No. 21-49/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Enviro Analyst and Engineers Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The proposal is for Expansion of Residential cum Commercial project under MMRDA Rental Housing Scheme at C.T.S. no. 95/1, 95/2, 95/3A, 98/1, 98/1B, 98/2, 98/3, 98/4, 98/4(2A), 98/4(2B), 98/5, 98/7(3), 98/8, 98/9, 98/10A, 98/10B, 99/0, 101/3, 101/4A, 101/4B, 101/4C, 101/5, 101/6, 101/7, 101/8A, 101/8B, 101/9, 101/10A, 101/10B, 102/0, 103/1, 103/2, 103/3, 103/4, 110/10, 110/11, 110/1A, 110/4, 110/5A, 110/6A at Village Kolkhe, Taluka Panvel, District Raigad, Maharashtra.</p> <p>(ii) Latitude &amp; Longitude: Points A - Latitude: 18°58'5.26"N, Longitude: 73° 7'33.01"E, Points B - Latitude: 18°58'1.22"N, Longitude: 73° 7'35.94"E, Points C - Latitude: 18°58'3.19"N, Longitude: 73° 7'45.85"E, Points D - Latitude: 18°58'8.78"N, Longitude: 73°7'48.39"E and Points E - Latitude: 18°58'12.06"N, Longitude: 73° 7'41.66"E.</p> <p>(iii) Earlier EC has been received vide letter SEAC – 2014/CR –187/TC - 1 dated 6<sup>th</sup> February 2015 for total construction area of 8,25,031.19 sqm. Construction work has</p>

been started on site as per EC obtained dated 6<sup>th</sup> February 2015.

(iv) Project Brief: The details of the project are as follows:

Particulars	As per EC Received dated 6 <sup>th</sup> February 2015	Total after proposed amendment and expansion
Building		
Rental building	Building 1: St + 27 floor	Building 1: St + 27 floor
	Building 2: St(pt) + 26 floors	Building 2: St + 27 floor
	Building 3: St + 26 floors	Building 3: St + 27 floor
	Building 4: St (pt) + 27 floors	--
Sale Building	<b>Sale 1:</b> Wing A & C: B+ St+ 2P + 38 floors Wing B: B + St +2P + 38 floors	<b>Sale 1:</b> Wing A, B, C: 2B + Gr + 4P + 27 floors
	<b>Sale 2:</b> Wing D: B+ St + 2P +38 floors	<b>Sale 2:</b> Wing D: 2B + Gr + 4P + 31 floors
	<b>Sale 3:</b> Wing E,F,G,H: B+ St+ 2P + 37 floors Wing I,J,K,L,M: B+St+2P+38 floors	<b>Sale 3:</b> Wing E to M: 2B + Gr + 4P + 37 floors

No. of flats: Rental: 3234 No's (Re) + 24 (Co) , Sale: 2928 No's (Re) + 23 (Co) . Maximum height of the buildings:112.05 m. Areas details are as follows:

Sr. No.	Particulars	As per EC Received dated 6 <sup>th</sup> February 2015	Total after proposed amendment and expansion
1.	Total Plot area (sqm)	1,26,231.00	1,26,231.00
2.	Net Plot area (sqm)	1,13,607.90	1,13,607.90
3.	Proposed FSI area (sqm)	4,34,157.33	4,09,568.95
4.	Non FSI Area	3,90,873.86	4,87,346.66
5.	Total Built-up area (sqm)	8,25,031.19	8,96,915.61

(v) During Construction Phase total expected water requirement will be 22 KLD which will be sourced through tanker. Septic tanks will be provided for disposal of waste water: Temporary sanitary toilets will be provided during peak labor force.

(vi) During Operation Phase total expected water demand will be Rental- 2216 KLD, Sale- 2370 KLD. Recycled water will be Rental- 756KLD, Sale- 873 KLD. Waste water generated will be: Rental Building- (Grey Water 1168 KLD, Black Water: 585 KLD), Sale Building- (Grey Water: 1198 KLD, Black Water: 604 KLD). Excess treated water will be discharged to municipal drain.

(vii) Solid waste management: Biodegradable waste & management: 9944 Kg/Day (will be processed and treated in OWC to convert into organic manure). Non-biodegradable

- waste & management: 6669 Kg/Day (will be handed over to authorized local vendor).
- (viii) Power Requirement: During construction phase 200-250 kVA power from MSEDCL will be required. During operation power will be sourced from MSEDCL as Rental Building (Connected load: 7544 KW, Demand Load:4525 KW), Sale Building (Connected load:41400 KW, Demand Load: 24840 KW).
  - (ix) Rain Water Harvesting: Quantity of Rain Water: 876 KLD. Capacity of RWH Tanks for harvesting after filtration: 876 cum.
  - (x) Parking details: 4 wheelers (according to local norms): 6,648 nos., 2 wheelers (according to local norms): 3,672 nos.
  - (xi) Project located within 10 km eco sensitive area of Karnala Bird Sanctuary. However, the project does not fall under ESZ of Karnala Bird Sanctuary as per the S.O.230(E) dated 22<sup>nd</sup> January 2016 from MOEFCC.
  - (xii) There is no court case pending against the project.
  - (xiii) Investment/Cost of the project: Rs. 200 Crore.
  - (xiv) Employment Potential: 300 shall be provided with temporary housing facilities Around 300 labors will come to site during peak construction phase. This is a residential project which will create 50 direct employments and 300 indirect employments during the operation phase.
  - (xv) Benefits of the project: This is a residential project which will help in reducing population density of Mumbai city and for convinces in employment for commercial & industrial belts of thane and adjoin industrial estate. This is a residential project which will create 50 direct employment and 300 indirect employments during the operation phase.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Expansion of Residential cum Commercial project under MMRDA Rental Housing Scheme at C.T.S. no. 95/1, 95/2, 95/3A, 98/1, 98/1B, 98/2, 98/3, 98/4, 98/4(2A), 98/4(2B), 98/5, 98/7(3), 98/8, 98/9, 98/10A, 98/10B, 99/0, 101/3, 101/4A, 101/4B, 101/4C, 101/5, 101/6, 101/7, 101/8A, 101/8B, 101/9, 101/10A, 101/10B, 102/0, 103/1, 103/2, 103/3, 103/4, 110/10, 110/11, 110/1A, 110/4, 110/5A, 110/6A at Village Kolkhe, Taluka Panvel, District Raigad, Maharashtra in a total plot area of 1,26,231.00 sqm and total built-up area of 8,96,915.61.00 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at Central Level.
- (iii) Earlier EC was granted by SEIAA Maharashtra vide letter No. SEAC-2014/CR-187/TC-1 dated 6<sup>th</sup> February 2015 for total construction area of 8,25,031.19 sqm. Construction work has been started on site as per EC obtained dated 6<sup>th</sup> February 2015.
- (iv) The project was granted Standard ToR for the project vide letter No. 21-49/2017-IA-III dated 15.03.2017.
- (v) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.
- (vi) The Proposal was considered in 21<sup>st</sup> meeting of EAC held on 21-24 August, 2017.



During the deliberation, the Committee noted that there is a difference in the area of the project mentioned in the Form-1 and presentation. After detailed deliberation, the Committee asked the project proponent to submit and upload the revised Form-1 and 1-A.

- (vii) The Project Proponent submitted/uploaded the additional information on 11.09.2017 on Ministry's website.

*The EAC deliberated on the Certified Compliance Report letter F. No. EC-369/RON/2016-NGP/2268 dated 16.08.2017 issued by the MoEF&CC's Regional Office (WCZ), Nagpur and reply given by the project proponent to non-compliance of EC conditions. The 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 project proponent shall obtain necessary clearance/ permission from concerned authority before felling any tree.
- (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, 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.
- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 MBBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing and gardening. Excess treated water shall be discharged into municipal drain.
- (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 Rooftop rainwater of buildings shall be collected in RWH tanks 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 proposed 361 sqm area for Rental building and 384 sqm for Sale building shall be provided for OWC 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.
- (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 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxviii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxix) 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

(xxx) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 MJP Water Supply shall not exceed 2957 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xii) 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

	<p>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.</p> <p>(xiii) 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 5592.62 sqm area shall be provided for green belt development.</p> <p>(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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.8	<p><b>SRA redevelopment project located on plot bearing Proposed Amalgamation S.R. Scheme Scheme - I at BMC Plot, Congress Office, Koliwada Plot, Garib Nawaz Maidan, Mogra Village, Jogeshwari (E), Mumbai – 400 060 by M/s Omkar Ventures Pvt. Ltd. - Environmental Clearance (IA/MH/NCP/60604/2016; F. No. 21-62/2016-IA-III)</b></p> <p>The project proponent and the accredited Consultant <b>M/s Building Environment (India) Pvt Ltd</b> gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The project is located at following Latitude and longitude Coordinates; Latitude: 19° 7'58.75"N; Longitude: 72°51'26.28"E, Latitude: 19° 8'3.34"N; Longitude: 72°51'22.42"E, Latitude: 19° 8'7.31"N; Longitude: 72°51'30.84"E and Latitude: 19° 7'55.69"N; Longitude: 72°51'34.49"E.</p> <p>(ii) The project is new. The total plot area is 1,43,910.61 sqm and total built-up area of 5,65,006.10 sqm. The project will comprise of 37 Building of following configuration:</p> <p><b>Rehab:</b></p> <p>Residential:</p> <p>Bldg. No.1 &amp; 3 (Wing A &amp; B): LG + UG + 1st to 22nd Floor  Bldg. No.2 &amp; 4: LG + UG+ 1st to 22nd Floor  Bldg. No.5 &amp; 6: Stilt +1st to 3rd Podium +4th to 18th Floor  Bldg. No. 7 to 18, 23 &amp; 24: Stilt + 23rd Floor  Bldg. No.19 to 22: Stilt + 18th Floor  Bldg. No.25 (Type A): Stilt +21st Floor  Bldg. No.25 (Type B): Stilt +23rd Floor  Bldg. No.26 &amp; 27: Stilt +1st Podium + 2nd to 16th Floor</p> <p><b>Sale:</b></p> <p>Bldg. No.1 (Wing A to O): 2 Basements + LG+ 1 Podium +19<sup>th</sup> Floor  Building No. 2 to 8: Stilt+11th Floor  Building No. 9: Stilt+10th Floor</p> <p><b>Reservation:</b></p> <p>Maternity Clinic &amp; Dispensary: G+1 Flr</p>

FSI area is 3, 43,647.30 sq.mt;  
 Non-FSI area is 2, 18,071.31 sq.mt. and  
 Total construction BUA of 5,65,006.10 sqm

**Rehabilitation:**

Residential: 5058 Nos.  
 Commercial: 667 Nos.  
 Society Offices: 57 Nos.  
 Balwadi: 57 Nos.  
 Welfare Centres: 57 Nos.

**Sale:**

Residential: 2566 Nos. Nos. of Flats shall be developed.

- (iii) During construction phase, total water requirement is expected to be 12 KLD for workers and 10-20 KLD for construction, which will be met by MCGM and 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.
- (iv) During operational phase, total water demand of the project is expected to be 5430 KLD and the same will be met by the M.C.G.M and recycled water/ STP Treated Water/RWH. Waste water generated (4816 KLD) uses will be treated in STP of total 4930 KLD capacity. Treated wastewater will be recycled (1804 KLD for flushing, 81 KLD for gardening). Excess will be disposed in to municipal drain.
- (v) About 22,100 kg/day solid waste will be generated in the project. The biodegradable waste (13,060 kg/day) will be processed in OWC and the non-biodegradable waste generated (8708 kg/day) will be handed over to authorized local vendor.
- (vi) The total power requirement during construction phase is 100 KVA and will be met from MSEB. During operation phase the power requirement will be as follows:

S.No	Description	Load Details
1.	Rehabilitation	
	Maximum Demand (KW)	19,679.92
	Connected Load (KW)	56679.16
	D. G. Set (KVA)	9529.14
2.	Sale	
	Maximum Demand (KW)	10228
	Connected Load (KW)	27845
	D. G. Set (KVA)	6063

- (vii) Rooftop rainwater of buildings will be collected in RWH tank for harvesting after filtration.
- (viii) Parking facility for 2975 four wheelers is proposed to be provided against the requirement of 3224 (According to local norms) & adequate numbers of 2W parking also proposed.
- (ix) Proposed energy saving measures would save about 6% of power.
- (x) ESZ boundary of Sanjay Gandhi National Park is ~1.90 km away from the project site & the project land is not part of any forest land. As seen in the Google Image from the project site to ESZ of National Park, there is 1.90 kms of highly urbanized built area. The well vegetated Arey Colony Area, which forms the ESZ of SGNP is 2.00 kms from

Sanjay Gandhi National Park boundary.

- (xi) No Court case or litigation is pending.
- (xii) Investment/Cost of the project is Rs. 4000 crore.
- (xiii) Employment potential: ~500.
- (xiv) Benefits of the project: Will create job opportunity for support staff like Security, Maintenance, Household Workers etc.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'SRA redevelopment project located on plot bearing Proposed Amalgamation S.R. Scheme Scheme - I at BMC Plot, Congress Office, Koliwada Plot, Garib Nawaz Maidan, Mogra Village, Jogeshwari (E), Mumbai – 400 060 by M/s Omkar Ventures Pvt Ltd, in a total plot area of 1,43,910.61 sqm and total built-up area of 5,65,006.10 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at Central Level.
- (iii) The ToR was granted to the project vide letter No. 21-62/2016-IA-III dated 30.01.2017.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.
- (v) The Proposal was considered in 21<sup>st</sup> meeting of EAC held on 21-24 August, 2017. During the deliberation, the Committee noted that there is a difference in the total plot area and built-up area for which ToR was granted earlier. Accordingly, the Committee prescribed additional ToR.
- (viii) The Project Proponent submitted/uploaded the additional information on 15.09.2017 on Ministry's website.

*The EAC, after deliberations, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 and landscaping. Excess treated water shall be discharged into municipal drain.
- (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 RWH tanks 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 361 sqm area for Rental building and 384 sqm for Sale building shall be provided for OWC 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.

- (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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.

- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (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
- (xxix) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 Water Supply shall not exceed 3545 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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

	<p>Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.</p> <p>(ix) 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.</p> <p>(x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</p> <p>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</p> <p>(xii) 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.</p> <p>(xiii) 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 16171 sqm area shall be provided as RG area.</p> <p>(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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.9	<p><b>Proposed expansion project for construction of residential cum commercial complex at plot bearing C.S. No.1798, 1841, 16/1840 of Byculla Division, Byculla (West), Mumbai by M/s. Swayam Realtors &amp; Traders LLP - Environmental Clearance (IA/MH/NCP/61391/2016; F.No. 21-36/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Fine Envirotech Engineers gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The project is located at 18°58'24.86"N Latitude and 72°49'52.48"E.</p> <p>(ii) This is an expansion project. Earlier environmental clearance was obtained vide letter no.21-744/2006-IA-III dated 06.06.2007 from Ministry of Environment, Forest and Climate Change. The total constructed work completed is 31,956 sqm.</p> <p>(iii) The total plot area is 49422.81 sqm, FSI area is 2,52,583.45 sqm and total proposed</p>

construction area is 6,92,226.89 sqm. The project will comprise of 4 nos. of Buildings. Total 1890 Flats, 59 Offices and 44 shops shall be developed. Maximum height of the building is 210.40m.

- (iv) During construction phase, total water requirement is expected to be 100 KLD which will be met by tanker water supply. During construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided construction labor.
- (v) During operational phase, total water demand of the project is expected to be 1528 KLD and the same will be met by the MCGM / Recycled Water. Wastewater generated (1270 KLD) uses will be treated in 5 STPs of total 1339 KLD capacity. 597 KLD of treated waste water will be recycled (525 KLD for flushing, 72 KLD for gardening). About 546 KLD will be disposed in to municipal drain.
- (vi) About 6.2 TPD solid wastes will be generated in the project. The biodegradable waste (3.6 TPD) will be processed in OWC and the non-biodegradable waste generated (2.6 TPD) will be handed over to authorized local vendor.
- (vii) The total power requirement during construction phase is 160 KVA and will be met from TATA power and total power requirement during operation phase is 18568 KVA and will be met from TATA power.
- (viii) Rooftop rainwater of buildings will be collected in 5 nos. of RWH tanks of total 478 cu.mt capacity for harvesting after filtration.
- (ix) Parking facility for 6003 four wheelers and proposed to be provided against the requirement of 5646 (According to local norms).
- (x) Proposed energy saving measures would save about 15 % of power measures.
- (xi) There is no court case pending against the project.
- (xii) Cost of the project is Rs. 317.67 Crores.
- (xiii) Employment potential: It will generate direct and indirect employment opportunities for both skilled and unskilled worker during construction & operation phase.
- (xiv) Benefits of the project: Proposed development will provide quality and residential accommodation to the people will also help in increase in living standards of the local residents. It will increase Infrastructure of the area and will provide housing facility, commercial area with all other basic amenities to various classes of people. It will provide healthy, green & safe premises for people. It will create job opportunity for support staff like Security, Maintenance, household workers etc. Environmental benefits includes, STP facility for wastewater treatment rain water harvesting system, solid waste management, energy saving measures and developing Green belt etc.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Proposed expansion project for construction of residential cum commercial complex at plot bearing C.S. No.1798, 1841, 16/1840 of Byculla Division, Byculla (West), Mumbai by M/s. Swayam Realtors & Traders LLP in a total plot area of 49422.81 sqm and total built-up area of 6,92,226.89 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Township and Area Development' of the Schedule to the EIA Notification, 2006, and requires appraisal at at Central Level.
- (iii) The ToR for the project was granted on 06.03.2017 vide letter No. 21-36/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the

	<p>present environmental concerns and the projected scenario for all the environmental components.</p> <p>(v) The Proposal was considered in 21<sup>st</sup> meeting of EAC held on 21-24 August, 2017. 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 to the project. The EAC decided not to take the proposal forward till the Certified Compliance Report issued by the MoEF&amp;CC, Regional Office is submitted by the Project Proponent.</p> <p>(ix) The Project Proponent submitted/uploaded the additional information on 18.09.2017 on Ministry's website.</p> <p><i>The EAC deliberated on the Certified Compliance Report letter F. No. 16-97/2007 (ENV)/ dated 14.09.2017 issued by the MoEF&amp;CC's Regional Office (WCZ), Nagpur and reply given by the project proponent to non-compliance of EC conditions. The Committee noted that in summary note of the Certified Compliance Report it has been mentioned that:</i></p> <p>"Site inspection of the project has been carried out on 09 09.2017. Ministry granted environmental clearance for the project vide letter dated 06.06.2007. As per the EIA Notification 2006, validity of EC expired in June 2012. PA did not apply for the revalidation of environmental clearance before expiry of validity of EC. As per the details provided construction of the project started in January 2014. Construction of the project is in progress. PA submitted application for the expansion of the project vide letter dated 16.06.2017."</p> <p>However the Project proponent has submitted in the affidavit that the construction of 31956 sqm out of 92,024 sqm done as on date without any deviation as per previous EC obtained vide dated 06.06.2007.</p> <p><i>The Committee after deliberation asked the Project proponent to submit the following:</i></p> <p>(i) Clarification on the observation made by the Regional Office of MoEF&amp;CC at Nagpur in its Certified Compliance Report dated 14.09.2017 that the construction work was started in January, 2014 after expiry of the Environmental Clearance and still continued without revalidation of the Environmental Clearance.</p> <p>(ii) The Project Proponent to submit the details of the reply submitted to the MoEF&amp;CC's Regional Office (WCZ), Nagpur in response to the non compliance of the EC conditions.</p> <p><i>The proposal was, therefore, deferred till the desired information is submitted.</i></p>
23.3.10	<p><b>Residential Apartment " Mantri Hennur" at K.R Puram Hobli, Bangalore East, Bangalore by M/s. Mantri Developers Pvt Ltd - Environmental Clearance (IA/KA/NCP/64941/2015; F.No. 21-218/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Environmental Health and Safety Consultants Pvt Ltd. gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The project is located at Survey Nos. 15/4P, 18/1, 19/1P, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 19/10, 19/11, 19/12, 19/13, 19/14P, 19/16P, 20/2, of Nagareshwara Nagenahalli Village and Sy. No. 43/1, 45/1, 45/2, 54P, 55P &amp; 58P of Kothanur Village Khata Number 4, 6, 22, 24, K.R Puram Hobli, Bangalore East, Bangalore. Latitude</p>

13°04'24.56" N & Longitude 77°38'42.71" E

- (ii) The project is for Expansion. Earlier Environmental Clearance (EC) was obtained vide File No. SEIAA 78 CON 2010 dated 16.09.2011 from State Environment Impact Assessment Authority (SEIAA), Karnataka for the construction of residential apartment "Mantri Hennur" with total built-up area of 2,54,145.79 sqm having 1783 flats in Parcel 1, 2 & 3
- (iii) The total plot area is 1,69,978.09 sqm (inclusive of Kharab Land of 1 Acres 36 Guntas) FSI area is 500897.79 sqm and total construction area of 2,51,540.27 sqm. The project will comprise of 5 Parcels with 28 blocks. Total 4452 flats shall be developed. Maximum height of the building is 89.95m.
- (iv) During construction phase, total water requirement is expected to be 45 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 labor force.
- (v) During operational phase, total water demand of the project is expected to be 3135 KLD [(288 KLD (parcel 1), 703 KLD (parcel 2), 490 KLD (parcel 3), 875 KLD (parcel 4, building 5), 560 KLD (parcel 4, building 6) & 219 KLD (parcel 6)] and the same will be met by the BWSSB. Wastewater generated (2800 KLD) uses will be treated in 260 KLD (parcel 1), 635 KLD (parcel 2), 445 KLD (parcel 3), 785 KLD (parcel 4, building 5), 495 KLD (parcel 4, building 6) & 190 KLD (parcel 6) STPs of total 2810 KLD capacity. 2670 KLD of treated wastewater will be recycled (1032 for flushing, 448 for gardening Vehicle and road washing 296 KLD & HVAC 40 KLD). About 854 KLD will be disposed in to municipal drain.
- (vi) About 11.2 MT/day solid wastes will be generated in the project. The biodegradable waste (6.17 MT/day) will be processed in OWC and the non-biodegradable waste generated (5.049 MT/day) will be handed over to authorized local vendor.
- (vii) The total power requirement during construction phase is 600 KVA and will be met from BESCOM and total power requirement during cooperation phase is 27,106.15 KVA and will be met from BESCOM.
- (viii) Roof top harvested rainwater for Parcel-1 (Rain water sump - 210 cum and Recharge pits - 46 No's) , Parcel-2 (Rain water sump - 120 cum and Recharge pits - 26 No's) , Parcel-3 (Rain water sump - 260 cum and Recharge pits - 31 No's), Parcel-4 (Rain water sump - 140 cum and Recharge pits - 31 No's for Building -5), Rain water sump - 80 cum and Recharge pits - 22 No's for Building -6) and Parcel-6 (Rain water sump - 60 cum and Recharge pits - 6 No's) during monsoon season will be stored in UG sumps for domestic applications after necessary treatment through sand filters & softener units
- (ix) Parking facility for four wheelers 4941 Nos. will be provided.
- (x) Proposed energy saving measures would save about % of power:]

<b>Power Requirements and Percentage of Savings - Operational Phase</b>			
<b>S. No</b>	<b>Parcels</b>	<b>Demand Load (KVA)</b>	<b>Percentage Savings (%)</b>
1	Parcel 1	2907.00	29.50
2	Parcel 2	5934.44	11.00
3	Parcel 3	4768.00	31.10
4	Parcel 4	11466.40	14.48
5	Parcel 6	2030.30	23.05

- (xi) It is not located within 10 km of Eco Sensitive areas

	<p>(xii) There is no court case pending against the project.</p> <p>(vi) The ToR was granted to the project by SEIAA/SEAC, Karnataka vide letter No. SEIAA:249:CON:2013 dated 28.10.2015.</p> <p>(xiii) Investment/Cost of the project is Rs. 1775 Crore.</p> <p>(xiv) Employment potential - More than 600 construction labours including technical staff, workers etc.</p> <p>(xv) Benefits of the project: More than 100 persons will get employment during operation phase for day to day maintenance activities in the project. Approximately 500 maids will get job for their lively hood. Conservation of water by utilizing the treated wastewater for urban secondary reuse applications in the project.</p> <p><i>The committee was given to understand that the proposals are covered under legal cases at the NGT and the Hon'ble Supreme Court. The project proponents were advised to submit a detailed report on the court cases along with the related orders passed by the NGT and the Supreme Court and the conformance of the proposals to these orders. The project proponents were also specifically asked to highlight the court directions which allow/disallow the project from being implemented.</i></p> <p><i>The proposal was, therefore, deferred till the desired information is submitted.</i></p>
23.3.11	<p><b>Establishment of Common Effluent Treatment Plant (To be managed by The Ahmedabad Hand Screen Printing Association at Block No. 138/part &amp; 154/part, Behrampura, Ahmedabad, Gujarat – Environmental Clearance (IA/GJ/MIS/38384/2016; F. No. 10-3/2016-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Ramanas Enviro Services Pvt Ltd were present in the meeting.</p> <p>(i) The proposal was earlier considered by the EAC (Infra-2) in its meeting held during 26-28 December, 2016. Wherein some additional information was sought. The Project Proponent vide letter dated 27.03.2017 submitted additional Information. Accordingly, proposal was considered by the EAC in its 19<sup>th</sup> meeting held on 27-29 June, 2017. <i>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 specific conditions along with other environmental conditions.</i></p> <p>(ii) While processing the file in the Ministry, some observations were made and proposal referred to EAC for further deliberation.</p> <p><i>The committee was given to understand that the instant proposal was recommended in the 19<sup>th</sup> meeting of EAC held on 27-29 June, 2017. However, as per Ministry's observation, the proposal needs to be re-examined as to what safeguards would be taken to ensure that this does not result in further mushrooming and haphazard growth of industries within the already congested areas where the industries are situated. The committee held discussions with the representatives of the Ahmadabad Hand Screen Printing Association along with their consultant.</i></p> <p><i>After deliberation, the Committee recommended following additional conditions:</i></p> <p>(i) No further expansion in the existing industries and no new industries shall be allowed in the Danilmda Behrampur Area within Ahmedabad City.</p>

	<ul style="list-style-type: none"> <li>(ii) The MoEF&amp;CC will direct the Gujarat State Pollution Control Board that no industries other than those already set up legitimately and with licensed production capacities as of 13<sup>th</sup> October, 2017, shall be allowed to operate in the area.</li> <li>(iii) The MoEF&amp;CC will also direct the Gujarat Pollution Control Board that no Consents to Establish or Consents to Operate under the Water and Air Acts shall be issued for any new Industry or expansion in the Danilmda- Behrampur Area within Ahmedabad City.</li> <li>(iv) The Ahmedabad Screen Printing Association and the Gujarat Pollution Control Board should ensure that the Member Ship of the CETP is restricted to only those industries which legitimately exist in the area. A list of industries in this regards shall be prepared by the Association which will have the following details: <ul style="list-style-type: none"> <li>a. Name of Industry</li> <li>b. Office Address</li> <li>c. Location of Industry</li> <li>d. Licensing Authority and Licensed capacity as on October 2017.</li> <li>e. Status of Consent under Water Act along with order number.</li> <li>f. Status of consent under Air Act along with order number.</li> <li>g. Production capacity as per consent orders.</li> <li>h. Total industrial Effluent to CETP as per consent order.</li> </ul> </li> <li>(v) It shall be ensured that the Membership is restricted to only those industries included in and for capacities and discharges, as on 13<sup>th</sup> October, 2017, as per the consent orders in the list above. Any modification will be done only after getting the E.C. Modified.</li> </ul>
23.3.12	<p><b>Establishment of Common Effluent Treatment Plant (CETP) at Plot No. : COP - 5, GIDC Jamnagar-I Industrial Estate, Taluka Jamnagar, District Jamnagar, Gujarat by M/s Jamnagar Electroplaters Association– Environmental Clearance (IA/GJ/MIS/22260/2014; F. No. 10-8/2014-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Ramanas Enviro Services Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) Common Effluent Treatment Plant (To be managed by Jamnagar Electroplaters Association) is proposed at Plot No.COP-5, GIDC Jamnagar-I Industrial Estate, Jamnagar, Gujarat.</li> <li>(ii) Project/ activity covered under item 7(h) Common Effluent Treatment Plants (CETPs) of Schedule of the EIA Notification, 2006. Based on general condition of EIA notification but as it attracts general condition viz. its closeness to the eco-sensitive area namely Khijadiya Bird Sanctuary at around 7.5 km, it will be considered as Category A project. Thus, required approval at the Central Level. Khijadiya Bird Sanctuary is 7.58 Km from from the project site.</li> <li>(iii) Terms of Reference was granted by Ministry vide letter No. 10-8/2014-IA-III dated 26.08.2014.</li> <li>(iv) Public Hearing was held on 9<sup>th</sup> August, 2017, at Jamnagar Factory Owners Association Building, Plot no: 370-372, Udhoygnagar, Shanker Tekri, Jamnagar. Major issues raised during public hearing and responses have been included in the EIA/EMP Report.</li> <li>(v) Total plot area/ built up area 980 sqm. Total fresh water requirement for the CETP project will be only for domestic and plantation purpose and it will not exceed beyond about 5 KLD. It will be provided by JMC. CETP will be designed for handling of effluent of 200 KLD at the ultimate stage in two modules of 100 KLD each. Treated effluent will</li> </ul>



be discharged into drainage system of Jamnagar Municipal Corporation. Power requirement will be 150 KVA which will be sourced by PGVCL.

- (vi) Investment/Cost of the project: Rs. 1.95 Crores.
- (vii) Benefits of the project: To better compliance from micro and small scale electroplating units. Employment potential: 12 to 15 local persons.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Establishment of Common Effluent Treatment Plant (CETP) at Plot No. : COP - 5, GIDC Jamnagar-I Industrial Estate, Taluka Jamnagar, District Jamnagar, Gujarat by M/s Jamnagar Electroplaters Association.
- (ii) The project/activity is covered under category 'B' of item 7(h) 'CETPs' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC level. However, since the site is near the Khijadiya Bird Sanctuary (7.5 km), therefore considered at the central level.
- (iii) Terms of Reference was granted by Ministry vide letter No. 10-8/2014-IA-III dated 26.08.2014.
- (iv) Public Hearing was held on 9<sup>th</sup> August, 2017, at Jamnagar Factory Owners Association Building, Plot no: 370-372, Udhoygnagar, Shanker Tekri, Jamnagar. Major issues raised during public hearing and responses have been included in the EIA/EMP Report
- (v) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

*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) The project proponents will implement the project only after getting Consent to Establish from the Gujarat Pollution Control Board.
- (ii) Clearance from National Board for Wildlife (NBWL) is required before commencement of activity.
- (iii) 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.
- (iv) 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.
- (v) Periodical monitoring shall be carried out for the functioning of CETP and outlet parameters.
- (vi) The MoU between CETP and member units shall indicate the maximum quantity of

effluent to be sent to the CETP along with the quality.

- (vii) Individual members to the CETP shall treat their effluents in Primary treatment systems to the Inlet quality standards of the CETP as prescribed by the Gujarat State Pollution Control Board.
- (viii) Individual Members shall segregate their wastes in to concentrated and diluted streams and also as per the nature of chemical contamination vis. Cr<sup>+6</sup>, Ni, Pb, Zn etc and store them as per conditions to be specifically imposed in this regards by the Gujarat Pollution Control Board.
- (ix) Chemical recovery and reuse, either in-house or outside shall be practiced to the satisfaction of the Gujarat State Pollution Control Board. Use in agriculture shall be exercised with caution after getting the irrigation management plan approved by the Gujarat Board.
- (x) All tankers carrying untreated wastes and all hazardous and other wastes shall be properly labeled and transported as per the Hazardous and other Wastes (Management and Transboundary) Rules, 2016.
- (xi) The detailed design of the various unit operations shall strictly conform to the directions of the state pollution control board as given in the consent to establish.
- (xii) The Jamnagar Electroplaters Association and the Gujarat Pollution Control Board should ensure that the Member Ship of the CETP is restricted to only those industries which legitimately exist in the area. A list of industries in this regards shall be prepared by the Association which will have the following details.
  - Name of Industry
  - Office Address
  - Location of Industry
  - Licensing Authority and Licensed capacity as on October 2017.
  - Status of Consent under Water Act along with order number.
  - Status of consent under Air Act along with order number.
  - Production capacity as per consent orders.
  - Total industrial Effluent to CETP as per consent order.
- (xiii) It shall be ensured that the Membership is restricted to only those industries included in and for capacities and discharges, as on October, 2017, as per the consent orders in the list above. Any modification will be done only after getting the E.C. Modified.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.

- (xviii) 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.
- (xix) The treated effluent from CETP shall be blended with treated sewage prior to its discharge in river.
- (xx) Domestic water requirement is 5 KLD, which will be met through Jamnagar Municipal Council water supply, whereas, the balance water requirement for chemical solution preparation shall be met through recycled treated effluent.
- (xxi) The estimated quantity of hazardous waste i.e. ETP sludge to be generated from CETP facility @ 10 MT/Month shall be handled and disposed to nearby authorized TSDF site as per HWM Rules, 2016.
- (xxii) 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.
- (xxiii) The effluent from member units shall be transported through pipeline. 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.
- (xxiv) 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.
- (xxv) The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.
- (xxix) Project proponent should develop green belt all along the periphery of the site with native plant species that are significant and used for the pollution abatement.

23.3.13 **Proposed building construction Project located at Khasra No. 155/4 & 156/6, P. H. No. 38, Mouza Pipla, Tah Nagpur( Gramin) & Dist. Nagpur by M/s. Pyramid Ashok Megastructure Pvt. Ltd. – Environmental Clearance ( IA/MH/NCP/60658/2016; F. No. 21-63/2016-IA-III)**

The project proponent and the accredited Consultant M/s Pollution and Ecology Control Services gave a detailed presentation on the salient features of the project and informed that:

- (i) This is an expansion project. Earlier environmental clearance was not applicable as the total construction area was less than 20,000 sqm.
- (ii) The total plot area is 20,867.260 sqm, FSI area is 22321.578 sqm and total construction area is 31657.360 sqm. The project will comprise of 6 Buildings, 2 Amenity space and 1 club house. Total 242 flats shall be developed. Maximum height of the building is 33.90m.
- (iii) During construction phase, total water requirement is expected to be 15-20 KLD which will be met by Water Tanker during the construction phase, soap 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 133 KLD and the same will be met by 86 KLD Fresh water and 47 KLD Treated waste recycled water. Wastewater generated (102 KLD) uses will be treated in 1 number of STP of total 165 KLD capacity. 97 KLD of treated wastewater will be recycled (33 KLD for flushing, 14 KLD for gardening). About 50 KLD will be disposed through Tanker to the adjacent land of Pyramid Ventures India Pvt. Ltd. for irrigation purpose.
- (v) About 645Kg/day solid waste will be generated in the project. The biodegradable waste (388 Kg/day) will be processed in OWC and the non-biodegradable waste generated (257 Kg/day) will be handed over to authorized vendor of NMC.
- (vi) The total power requirement during construction phase is 20 KW and will be met from MSEDCL and total power requirement during operation phase is 925.65 KW and will be met from MSEDCL.
- (vii) Rooftop rainwater of buildings will be collected in 14 nos. of existing (1.5m x 1.5m x 2.5m) RWH pits and 11 Nos. of RWH with increasing size of 2.5m x 2.5m x 5.0m in proposed expansion phase to increase the ground water aquifer. Pits are of total 400 KLD capacities for harvesting after filtration.
- (viii) Parking facility for 157 four wheelers and 459 two wheelers is proposed to be provided against the requirement according to local norms).
- (ix) Proposed energy saving measures would save about 7.99 % of power.
- (x) It is not located within 10 km radius of Eco Sensitive areas.
- (xi) There is no court case pending against the project.
- (xii) Investment/Cost of the project is Rs. 38 Crore.
- (xiii) Employment potential: 50 numbers of worker required during construction period.
- (xiv) Benefits of the project: Growth in business opportunities to the local and surrounding people such as daily wage labourers, transporters and raw material suppliers due to the proposed development in the area. Demands of community services and commercial development also create additional employment for the poor strata of society by way of maid/servant, sweeper, security guard etc. so the project will provide positive impact on the economic development of the region in terms of employment opportunities. Improvement in internal infrastructure facilities in the area. Health and educational facility, approach and internal road network. Houses, shops; club house services are the major areas to experience positive impact due to the proposed project.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Proposed building construction Project located at Khasra No. 155/4 & 156/6, P. H. No. 38, Mouza Pipla,

Tah Nagpur( Gramin) & Dist. Nagpur by M/s. Pyramid Ashok Megastructure Pvt. Ltd. , in a total plot area of 20,867.260 sqm and total built-up area of 31,657.360 sqm.

- (xi) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC level. However, due to non-availability of SEIAA/SEAC in Maharashtra at that time, proposal considered at Central level by EAC (Infra-2) in the Ministry.
- (xii) The proposal was submitted by M/s Pyramid Ashok Megastructure Pvt. Ltd. on 25<sup>th</sup> November, 2016 in the ToR web portal of MoEF&CC. The same proposal accepted by the Ministry for consideration of TOR and considered by EAC (Infra-2) in its 12<sup>th</sup> meeting held on 26-28 December, 2016. The EAC during deliberation noted that the project does not require ToR as built-up area is less than 1,50,00 sqm and considered the proposal for grant of Environmental Clearance. After deliberation the Committee sought additional information for further consideration.
- (xiii) Further, the Project proponent has submitted proposal under the EC Section of web portal vide dated 18<sup>th</sup> August, 2017 alongwith additional information, as desired by EAC in its 12<sup>th</sup> meeting for further consideration of EC.

*The EAC, after deliberations, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing and landscaping. Excess treated water shall be discharged for irrigation purposes.
- (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 25 Nos. RWH recharge pits (including 14 nos. existing) shall be provided 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. Adequate space shall be provided for OWC 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.
- (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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (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

(xxix) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 86 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws,



	<p>whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</p> <p>(xii) 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.</p> <p>(xiii) 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. Adequate area shall be provided for green belt development as per norms.</p> <p>(xiv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.14	<p><b>Netaji Subhas Medical College and Hospital (Unit of Sitwanto Devi Mahila Kalyan Sansthan) at : Mauza - Amhara Bihta Dist.: Patna (Bihar) by M/s Netaji Subhas Medical College and Hospital – Environmental Clearance (IA/BR/NCP/67609/2017; F.No. 21-323/2017)</b></p> <p><i>Project Proponent did not attend meeting.</i></p>
23.3.15	<p><b>Expansion of MDI Complex, Form I Plot No – 25, Sector – 16A, Noida, Uttar Pradesh by M/s Bharat Heavy Electricals Limited (BHEL)– Environmental Clearance (IA/UP/NCP/67669/2017; F.No. 21-324/2017)</b></p> <p>The project proponent and the accredited Consultant M/s Envirta Sustainable Solutions India Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) Bharat Heavy Electricals Limited (BHEL) has proposed the expansion of its existing MDI Complex, which is located at Plot No – 25, Sector – 16A, Noida, Uttar Pradesh.</p> <p>(ii) The project will be built on a plot area measuring 42,479.917 sqm (10.49 Acre). The project will result in the development of a new corporate tower, guard room and ESS area in addition to the existing buildings (H.R.D.I, MPL and PERI). The Co-ordinates of the project site are 28°34'25"N &amp;, 77°18'57"E.</p> <p>(iii) The total area of site is estimated 42,479.917 sqm (10.49 Acre) while total existing and proposed built up area of the project is 16,201.08 sqm and 78,850.33 sqm with ground coverage of 8,433.56 sqm (19.853%) and 10,343.16 sqm (24.348%) respectively. The population of the proposed project is estimated to be 3,199 including staff and visitors. During construction phase water will be supplied by private water tankers, whereas during operation phase water supply will be provided through the Municipal water supply. Total water requirement will be approx. 192 KLD, out of which domestic water requirement will be 139 KLD. Fresh water requirement will be 97 KLD which is 70% of the domestic water demand. One-time fresh water requirement will be 192 KLD.</p> <p>(iv) It is expected that 120 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 which will be recycled within the project site. Out of 96 KLD of treated wastewater 42 KLD will be utilized in flushing, 53 KLD for horticulture during non rainy season and rest 1 KLD will be discharge in CSTP. During rainy season 42 KLD for flushing and rest 54 KLD will be discharge in CSTP.</p> <p>(v) Total of 3 rainwater harvesting pits &amp; 4 rainwater harvesting tanks are proposed for</p>

artificial ground water recharge and rainwater reuse respectively. Total parking required as per MoEFCC norms is 958 ECS, total parking required as per Noida Bye Laws is 1,274 ECS and total proposed parking is 1,353 ECS.

- (vi) The power supply shall be supplied by Noida Power Corporation Limited (NPCL). The maximum load for the project will be approx. 3979 kW and will be supplied by 2 no's of transformers of capacity 2,000 kVA each. There is provision of 4 no. of DG sets of total 4,500 kVA (1 \* 1,000 kVA + 2 \* 1,000 kVA + 1 \* 500 kVA) capacity for power back up in the project.
- (vii) The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.
- (viii) During the operation phase, waste will comprise domestic waste and estimated quantity of the waste shall be approx. 797 Kg per day (including STP sludge) (@ 0.15 kg per capita per day for the floating population, 0.25 kg per capita per day for the staff members and landscape wastes @ 0.2 kg/acre/day).
- (ix) Total green area measures 16,280.81 sqm i.e. which is 51% 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 i.e. 300 Nos. as compared to 140 Nos. required as per MoEFCC norms.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Expansion of MDI Complex, Form I Plot No – 25, Sector – 16A, Noida, Uttar Pradesh by M/s Bharat Heavy Electricals Limited (BHEL), in a total plot area of 42,479.917 sqm and total built-up area of 78,850.33 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Uttar Pradesh. However, due to non-availability of SEIAA/SEAC in Uttar Pradesh, proposal considered at Central level by EAC (Infra-2) in the Ministry.
- (iii) The committee was given to understand that this is an expansion project. 16,201.08 sqm areas was already constructed when the EIA notification was not applicable, (Partly in 1994 and in 2005).

*The EAC, after deliberations, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 and landscaping. Excess treated water shall be discharged into municipal drain.
- (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 04 RWH after filtration tanks in addition to 03 nos. of RWH recharge pits 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 250 sqm area shall be provided for OWC 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.
- (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 27<sup>th</sup> August, 2003 and 25<sup>th</sup>

January, 2016. Ready mixed concrete must be used in building construction.

- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (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
- (xxix) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 supply Water Supply shall not exceed 97 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (vii) No sewage or untreated effluent water would be discharged through storm water

	<p>drains.</p> <p>(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.</p> <p>(ix) 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.</p> <p>(x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</p> <p>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</p> <p>(xii) 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.</p> <p>(xiii) 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 16280.81 sqm area shall be provided as green area.</p> <p>(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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.16	<p><b>Proposed Group Housing project “Ganpati Smart city” Khasra No. 6/2, 1/4, 1/5, 1/13, 8 to14, 16 to 26, 42 to 53, 56 Mauza Babarpur Mustkil, Tehsil &amp; District- Agra, U.P by M/s Ganpati Infrastructure Development Co. Ltd.) – Environmental Clearance (IA/UP/NCP/67414/2017; F.No. 21-325/2017)</b></p> <p>The project proponent and the accredited Consultant M/s Paramarsh gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The project is located at 27°14'2.50"N Latitude and 77°57'13.57"E Longitude. This is a new project. The total plot area is 63,000.00 sqm and total construction area of</p>

1,28,298.68 sqm. The project will comprise of Affordable Housing Project “Ganpati Smart City” buildings. Total 1924 flats shall be developed. Maximum height of the building is 27m.

- (ii) During construction phase, total water requirement is expected to be 50-100 KLD which will be met by water tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of wastewater. Temporary sanitary toilets will be provided during peak labour force.
- (iii) During operational phase, total water demand of the project is expected to be 863KLD and the same will be met by the 270 KLD recycled water. Wastewater generated (680 KLD) uses will be treated in STPs of total 700 KLD capacity. 680 KLD of treated wastewater will be recycled (219 KLD for flushing 38 KLD for gardening, 4 KLD for Power Genset and 9 KLD for firefighting). About 410 KLD will be used in road side plantation and road washing.
- (iv) About 5.0 TPD solid wastes will be generated in the project. The bio-degradable waste (3.0 TPD) will be processed in OWC and the non-biodegradable waste generated (2.0 TPD) will be handed over to authorized local vendor.
- (v) The total power requirement during construction phase is 500 kVA and will be met from state electricity board and total power requirement during operation phase is 3000 kVA and will be met from state electricity board. Backup power supply-500 KVA Gas based power generator set.
- (vi) Rooftop rainwater of building will be collected in 04 RWH tanks of total 25.12 m<sup>3</sup> capacity for harvesting after filtration.
- (vii) Parking facility for 653 ECS four wheelers and 2315 sqm area for two wheelers is proposed to be provided against the requirement of 648 ECS and 2012 sqm area respectively(according to local norms)
- (viii) Proposed energy saving measures would save about 10-20% of power.
- (ix) It is not located within 10 km of eco-sensitive areas.
- (x) There is no court case pending against the project.
- (xi) Investment/cost of the project is Rs. 87.90 Crores.
- (xii) Employment potential- 1000 persons.
- (xiii) Benefits of the projects – Approximate 1000 employment (directly and indirectly) will be generated. Local market/convenient shopping complex will be established and infrastructural facility like road, water supply, sewerage will generate and institution facility like hospital, educational will also be established nearby.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project ‘Proposed Group Housing project “Ganpati Smart city” Khasra No. 6/2, 1/4, 1/5, 1/13, 8 to14, 16 to 26, 42 to 53, 56 Mauza Babarpur Mustkil, Tehsil & District- Agra, U.P by M/s Ganpati Infrastructure Development Co. Ltd.), in a total plot area of 63,000.00 sqm and total built-up area of 1,28,298.68 sqm.
- (ii) The project/activity is covered under category ‘B’ of item 8(a) ‘Building and Construction Projects’ of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Uttar Pradesh. However, due to non-availability of SEIAA/SEAC in Uttar Pradesh, proposal considered at Central level by EAC (Infra-2) in the Ministry.

*The EAC, after deliberations, 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) Necessary NOC/Clearance from TTZ Authority shall be obtained before commencement of the project.
- (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, 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.
- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 FAB Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, road washing, DG cooling, fire fighting demand and landscaping. Excess treated water shall be discharged into municipal drain.
- (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 5 Nos. of RWH recharge pits shall be provided 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 60 sqm area shall be provided for OWC 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.
- (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 will not be allowed. Standby power shall be either gas based or solar base 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 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxviii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxix) 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
- (xxx) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 ground water with prior permission from CGWA Water Supply shall not exceed 644 KLD.

- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xii) 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.
- (xiii) 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 18,816.26 sqm area shall be provided as green area.
- (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

	<p>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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.17	<p><b>Proposed Trauma Centre for AIIMS at Safdarjung Enclave, New Delhi by M/s All India Institute of Medical Sciences (AIIMS)– Environmental Clearance (IA/DL/NCP/62761/2017; F.No. 21-105/2017-IA.III)</b></p> <p>The project proponent and the accredited Consultant M/s Ind Tech House Consultant gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) The project is located at 28°33'56.21"N Latitude and 77°12'03.27"E longitude. This is a new project. The total plot area is 60500.5 sqm. The project will comprise of construction of 5(3+1+1) blocks i.e. 3 hospital blocks + 1 residential block + 1 Gas Manifold of 3B+G+9 floors. FAR area is 181499.61 sq m and total construction area of 302121.94 sqm. Total 1841 beds will be provided. During construction phase, Drinking water source – Through authorized tankers.</li> <li>(ii) During operational phase, total water demand of the project is expected to be 2896 KLD and the same will be met by the 1214 Recycled Water. Wastewater generated (1328 KLD + 192 KLD) uses will be treated in STP of total 1595 KLD capacity &amp; ETP of 210 KLD capacity. 1214 KLD of treated wastewater will be recycled (47 KLD for flushing, 71 KLD for gardening, 40 KLD for DG Cooling &amp; 1056 KLD for HVAC).</li> <li>(iii) About 3.0 TPD solid wastes will be generated in the project. The biodegradable waste (1.80 TPD) will be processed in OWC and the non-biodegradable waste generated (1.20 TPD) will be handed over to authorized local vendor. Total Bio-Medical waste generation will be 0.55 TPD.</li> <li>(iv) The total power requirement during construction phase will be met through DG sets total power requirement during operation phase is 25000 KW and will be met from BSES.</li> <li>(v) Rooftop rainwater of buildings will be collected in 13 RWH tanks of total 359.16 m<sup>3</sup>/h capacity for harvesting after filtration.</li> <li>(vi) Parking facility for 3630 four wheelers is proposed to be provided (according to local norms).</li> <li>(vii) Proposed energy saving measures would save about % of power.</li> <li>(viii) Okhla Bird Sanctuary, 8.96 km E from the project site.</li> <li>(ix) No Court case is pending against the project.</li> <li>(x) Investment/Cost of the project is Rs. 2163 Crores.</li> <li>(xi) 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.</li> <li>(xii) Benefit of the Project: This will help in improving the quality of life of economically weaker sections of the local area. Further, this project will also provide Medical facility at higher level.</li> </ul>

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Proposed Trauma Centre for AIIMS at Safdarjung Enclave, New Delhi by M/s All India Institute of Medical Sciences (AIIMS) in a total plot area of 60500.5 sqm and built-up of 302121.94 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.
- (iii) The ToR for the project was granted on 20.06.2017 vide letter No. 21-105/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

*The EAC, after deliberations, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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, landscaping, DG cooling & HVAC. As proposed, there will be no discharge into municipal drain.
- (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, 13 nos. of rain water harvesting tanks shall be provided 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 350 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.
- (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 Silence Zone 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxviii) Internal Traffic management should be kept smooth by segregating traffic and parking lots for two wheelers, cars and buses and allowing only ambulances and other emergency services/vehicles to move beyond the parking. Separate pedestrian walk ways with no vehicle access should be provided for attendant movements. Battery operated internal transport arrangement from the parking lot to various departments should be provided.
- (xxix) The areas within the premises of the Trauma centre and a radius of 1 Km from the boundary shall be declared as a 'Silence zone' in consultation with the competent Authority prescribed under the Noise Pollution(Regulation and Control) Rules 2000 as amended.
- (xxx) Diesel and Petrol Driven Vehicles, except those carrying patients under emergency

requirements shall not be allowed to move beyond the parking areas.

(xxxi) Access and exit, to and from the parking areas shall be on feeder roads directly without impacting the existing level of service of the feeder roads.

(xxxii) 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

(xxxiii) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 DJB Supply Water Supply shall not exceed 1682 KLD.

(iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.

(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.

(vi) 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.

(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.

(ix) The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and



	<p>the Plastics Waste Management Rules, 2016 shall be followed.</p> <ul style="list-style-type: none"> <li>(x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</li> <li>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</li> <li>(xii) 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.</li> <li>(xiii) 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 20174 sqm (33.34%) area shall be provided for green area development.</li> <li>(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.</li> <li>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</li> </ul>
23.3.18	<p><b>Construction of Proposed Group Housing Project “Gaur Siddhartham” at Plot No. 8/BS-01, Siddharth Vihar Yojna, Ghaziabad (U.P.) by M/s Gaursons India Limited – Environmental Clearance (IA/UP/NCP/64516/2017; F.No. 21-171/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Ascenso Enviro Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) The project is located at 28° 39'18.09" N Latitude and 77° 24'18.98" E longitude. The project is new. The total plot area is 48,750.0 sqm, FSI area is 1,96,574.03 sqm for Group Housing and 18,324.14 sqm for EWS /LIG, total construction area of 3,63,123.25 sqm. The project will comprise of total 13 Buildings blocks. The project consists of 2476 Flats shall be developed in Group Housing and 450 Flats shall be developed for EWS / LIG. Maximum height of the building is 98.20m.</li> <li>(ii) During construction phase, total water requirement is expected to be 250.0 KLD which will be met by STP/WTP. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilet will</li> </ul>

be provided during peak labor force.

- (iii) During operational phase, total fresh water demand of the project is expected to be 1055.25 KLD and the same will be met by Municipal Water supply. Total waste water generated will 1207 KLD out of which 400.0 KLD will be treated in MBBR based STPs of total 500.0 KLD capacity. Treated wastewater will be recycled (362.0 KLD for flushing, 4.9 KLD for gardening). About 807.0 KLD will be disposed in to municipal drain.
- (iv) About 7.6 TPD solid wastes will be generated in the project. The biodegradable waste (4.56 TPD) will be processed in OWC and the non-biodegradable waste generated (3.10TPD) will be handed over to authorized local vendor.
- (v) The total power requirement during construction phase is 400.0 KVA and will be met from State electricity board and total power requirement during 8102.0 KVA operation phase and will be met from State electricity board.
- (vi) Rooftop rainwater of buildings will be collected in 12 RWH structure of total 71.6 m<sup>3</sup>/Hr/structure capacity for harvesting after filtration.
- (vii) Parking facility for 2873 vehicles is proposed to be provided against the requirement of 2633 ECS (according to local norms).
- (viii) Proposed energy saving measures would save about 24% of power.
- (ix) It is not located within 10 km of Eco Sensitive areas.
- (x) There is no court case pending against the project.
- (xi) Cost of the project is Rs. 819.0 Crore.
- (xii) Employment potential is for 500 people.
- (xiii) Benefits of the project: It will improve the environment by creating a more attractive and inter active environment for living, leisure & recreation, create an urban landmark. Also generate direct and indirect employment for local people.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Construction of Proposed Group Housing Project "Gaur Siddhartham" at Plot No. 8/BS-01, Siddharth Vihar Yojna, Ghaziabad (U.P.) by M/s Gaursons India Limited in a total plot area of 48,750.0 sqm and built-up of 3,63,123.25 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.
- (iii) The Standard ToR for the project was granted on 13.06.2017 vide letter No. 21-171/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

*The EAC, after deliberations, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 & gardening. Excess treated sewage will be discharge into municipal drain.
- (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, 12 nos. of rain water harvesting tanks shall be provided 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 150 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.
- (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 area 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (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
- (xxix) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 supply Ghaziabad Water Supply shall not exceed 1055 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.

- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xii) 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.
- (xiii) 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 7787.03 sqm area shall be provided for green area development.
- (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.

**23.3.19 Indirapuram Habitat Centre at Ahinsha Khand- 1, Indirapuram, Plot No- 16 Ghaziabad, U.P. M/S Indirapuram Habitat Centre Pvt Ltd– Environmental Clearance (IA/UP/NCP/62989/2017; F.No. 21-165/2017-IA-III)**

The project proponent and the accredited Consultant M/s PERFECT Enviro Solution Pvt Ltd. gave a detailed presentation on the salient features of the project and informed that:

- (i) The project will be located at Latitude- 28°38'24.86"N and Longitude- 77°22'07.28"E.
- (ii) The project is a Modernization project. The Project has already been granted Environment Clearance vide letter no. 565/SEAC/101/07 Dated 24.04.2008 for the plot area 50,800 sqm (12.55 acre) and built up area 1,66,319.58 sqm. The construction has been done for 1,32,453.56 sqm in the meantime of EC. Due to change in planning and sanctioned plan, built up area will change to 1,67,428.02 sqm which is more than 1,50,000 Sqm, hence as per EIA Notification,2006 the project falls under the activity 8 (b),
- (iii) The project will be comprising of various activities after modernization i.e. socio-culture, recreational & commercial. The Total FAR of the proposed complex after modernization will be 91,785.01 sqm. There will be 2 level of basement of total area 70,711.28 sqm other Non-FAR area will 4,900.45 sqm. The total built-up area after modernization will be 1,67,428.02 sqm. The green belt development area will be kept as 16,256 sqm (32%) after modernization. Maximum no. of floors will be 2B+G+17 for complex and maximum height of building will be 71.97 m. The details are as follows:

	As per Earlier EC (sqm)	Existing (sqm)	Additional (sqm)	Total (sqm)	Impact
Plot Area	50800 (12.5 acre)	50800	-	50800	Same
Ground Coverage (Permissible)	20320 (40%)	20320		20320	Same
Ground Coverage (Achieved)	19745.96 (38.87)	17272.04 (34%)	3085.75	20357.79	Increasing
Permissible FAR					
F.A.R. (Permissible)	60960 (1.2)			60960	Same
F.A.R. (Purchasable)	30480 (0.6)			30480	Same
Proposed FAR					
F.A.R. for Socio-Culture	40237.72	29932.15	11,213.62	41145.77	Increasing
F.A.R. for Recreational	26820.22	19972.70	4896.21	24868.91	Decreasing
F.A.R. for Commercial	22348.5	16496.36	3421.83	25770.33	Increasing
Total Proposed F.A.R.	89406.44 (1.76)	66401.24	25036.11	91785.01	Increasing
NON-FAR & Built-up Area					
Basement Area-I	-	34795.6	1663.43	36459.03	Increasing
Basement Area-II	-	26622.25	7630	34252.25	Increasing
Total Basement	76913.14	61417.85	9293.43	70711.28	Increasing
Non FAR Area	-	4634.47	265.98	4900.45	Increasing
Built-up Area (FAR+BASEMENT)	166319.6	146207.9		162527.57	Decreasing
<b>Built-up Area (FAR+NON FAR + BASEMENT)</b>	<b>166319.6</b>	<b>132453.56</b>	<b>34974.46</b>	<b>167428.02</b>	<b>Increasing</b>
Green Area	16256 (32%)			16256(32%)	Same
No. of Floors	G+18	G+12	12 + 5	G+17	Decreasing

LVL. of Basement	2	2	-	2	Same
Height of Building	71.97 m	47.98 m	23.99 m	71.97 m	Same

- (iv) During the construction of the proposed project, the water shall be supplied from treated water of nearby STP of the complex and the same will be maintained without any adverse impact on the environment. Temporary sanitary toilets shall be provided during peak labor force.
- (v) The total water requirement after modernization will be 624 KLD. The source of water will be Ghaziabad Municipal Supply. The total waste water generation will be 283 KLD. The waste water shall be treated through Sewage Treatment Plant (STP) of total capacity 350 KLD. 269 KLD treated water will be reused in flushing, gardening & HVAC. It will be a zero-discharge process.
- (vi) About 1866 Kg/day Municipal solid waste will be generated in the project after modernization. The biodegradable waste (1306 Kg/ day) shall be treated in Organic Waste Converter provide within the complex, recyclable waste generated (580 Kg/day) will be handed over to authorized recycler and Used Oil of 43 lit/month shall be collected in leak proof containers at isolated place and then it will be given to approved recycler. E- Waste of 2 kg/ month will be collected and given to approved recycler.
- (vii) The total power requirement after expansion will be 9222 KW which will be provided by Paschimanchal Vidyut Vitran Nigam Limited. DD.G. Set of capacities 2 x 2000 KVA shall be installed & the existing D.G. Sets (1x1000 KVA & 2x500 KVA) has been kept acoustically enclosed & installed with anti-vibration pads and will be used during Power failure only. Hence, to avoid the emissions, stack height of 6 m above roof level for each D.G. sets has been installed to reduce the air emissions, meeting all the norms prescribed by CPCB.
- (viii) Rainwater of buildings will be collected in 8 No. of RWH pits for recharging Ground water.
- (ix) Adequate parking provision shall be provided in the project of 2058 ECS as Basement parking (first basement & second basement) & Surface parking.
- (x) No eco-sensitive area lies within 10 km radius. Okhla Bird Sanctuary- 9.65 Km SW.
- (xi) There is no court case pending against the project.
- (xii) Investment/Cost of the project is Rs. 700 Crores.
- (xiii) Employment potential – Labourers during construction phase 150 no. and about 2376 personnel as staff during operation phase.
- (xiv) Benefits of the project: – The proposed complex will have shopping complex. It will increase Infrastructure of the area & will provide better shopping environment and will increase the livelihood of the people.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Indirapuram Habitat Centre at Ahinsha Khand- 1, Indirapuram, Plot No- 16 Ghaziabad, U.P. M/s Indirapuram Habitat Centre Pvt Ltd in a total plot area of 50,800 sqm and built-up of 1,67,428.02 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Uttar Pradesh. However, due to non-availability of SEIAA/SEAC in Uttar Pradesh, proposal considered at Central level by EAC (Infra-2)



in the Ministry.

- (iii) The Standard ToR was granted by the Ministry on 13.06.2017 vide letter No. 21-165/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

*The EAC deliberated on the Certified Compliance Report letter F. No. VII/ENV/SCL-UP/25/2017/74 dated 06.07.2017 issued by the MoEF&CC's Regional Office (CR), Lucknow. The Committee noted that the observation in the Compliance report was mentioned as "The Compliance status could be treated as satisfactory". 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, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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, gardening & HVAC. Excess treated sewage will be discharge into municipal drain.
- (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, 8 nos. of rain water harvesting tanks shall be provided 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 100 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.
- (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 Commercial area 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxviii) It shall be ensured that no Parking is allowed on the feeder roads. Necessary plans should be drawn up in consultation with the Traffic Police and implemented to their satisfaction.
- (xxix) 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
- (xxx) Project Proponent should comply with conditions stipulated at Appendix - XIV of the

amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 supply Ghaziabad Water Supply shall not exceed 355 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xii) 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.
- (xiii) 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 16256 sqm area shall be provided for green area development.
  - (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.

**23.3.20 Proposed expansion of Omaxe heights-ii at Village Ahmamau, near Sector – 7, Gomti Nagar Extension, Amar Shaheed Path, Lucknow, Uttar Pradesh by M/s Omaxe Ltd. – Environmental Clearance ( IA/UP/NCP/67815/2017; F.No. 21-326/2017-IA-III)**

The project proponent and the accredited Consultant M/s Min Mec Consultancy Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:

- (i) The project is located at 26°48' 22" to 26° 48'30" N Latitude and 81°00' 18" to 81°00' 23" E longitude.
- (ii) The project is an expansion project. Phase-I of the project is under construction and nearing completion. Existing Phase had received EC vide letter No. 71/Parya/SEAC/2830/2015/DD(Y) dated 13.04.2016 from SEIAA, U.P for a built-up area of 45,572.31 sqm.
- (iii) The total plot area is 17,038.55 sqm (Area under Socio Cultural Institutional & Research Organization landuse - 416.44 sqm, Net Plot area - 16622.11 sqm). Total construction area will be 62653.65 sqm. (Existing Phase: 45572.31 sqm & Proposed Phase: 17081.34 sqm). The expansion is occurring by addition of extra floors on existing buildings. The project will comprise of 5 towers, a club and smaller buildings for services. Total 413 Dwelling Units (Existing Phase: 288 and Proposed Phase: 125) will be developed. Maximum height of the building will become 85 m. The details are as follows:

Sl. No.	Description	Area in ha (%age)		
		Existing	Proposed	Total
	Plot area, ha	Total Plot area = 17038.55 sqm - (4.21 acres) (-) Area under Socio Cultural Institutional & Research Organization landuse = 416.44 sqm Effective Plot area = 16622.11 sq.m.		Same

	Built-up area, sqm	45572.31 sqm	17081.34 sqm	62653.65 sqm
	Dwelling units	288	125	413
1	Ground Coverage	3119.84 (18.77%)	-	3119.84 (18.77%)
2	Green Area	2896.07 (17.42%)	-	2896.07 (17.42%)
3	Water Body	228.19 (1.37%)	-	228.19 (1.37%)
4	Road Area	4658.67 (28.03%)	-	4658.67 (28.03%)
5	Surface Parking Area	2758.54 (16.60%)	-	2758.54 (16.60%)
6	Open Area	2960.8 (17.81%)	-	2960.8 (17.81%)
	<b>Total</b>	<b>16622.11 (100%)</b>	<b>-</b>	<b>16622.11 (100%)</b>

- (iv) During construction phase, total water requirement is expected to be 3000 KL which will be met by treated waste water, commercial tanker suppliers or any other source sanctioned by LDA except for drinking water for construction workers which will be met from borewells. 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 223.71 KLD (Existing Phase: 159.62 KLD; Proposed Phase: 94.03 KLD) and the same will be met by the ground water. Additionally 134.2 KLD recycled water will be available from STP for use. Wastewater generated 167.7 KLD (Existing Phase: 117 KLD, Proposed Phase: 50.7 KLD) will be treated in STP of 200 KLD capacity. 134.2 KLD (Existing Phase : 93.6 KLD, Proposed Phase : 40.6 KLD) of treated wastewater will be recycled - 44.6 KLD for flushing, 2.9 KLD for green area, 4.7 KLD for road washing, 3.1 KLD for Open Area, 4.4KLD for DG cooling and balance 74.5 KLD to other construction projects and green area under master plan. No discharge will be there except during monsoon season, which will be disposed in to municipal drain/natural drain.
- (vi) About 1.31 TPD (Existing Phase: 0.91 TPD, Proposed Phase: 0.39 TPD) solid waste will be generated in the project. The biodegradable waste (0.74 TPD) will be processed in organic waste composter and the non-biodegradable waste generated (0.062 TPD) will be handed over to authorized local vendor. 0.50 TPD shall be recyclable waste.
- (vii) The total power requirement during construction phase is 12 KVA and will be met from UPPCL and total power requirement during operation phase is 1,786KVA (Existing Phase: 1,245 KVA and Proposed Phase: 541 KVA) and will be met from UPPCL.
- (viii) Rooftop rainwater of buildings will be collected in 7 RWH pits. RWH tanks of total 245 KLH capacity for harvesting after filtration.
- (ix) Parking facility for 784 four wheelers and two wheelers is proposed to be provided against the requirement of 770 (according to NBC/LDA norms).
- (x) Proposed energy saving measures would save about 4% of power.
- (xi) It is not located within 10 km of any Eco Sensitive areas such as National Park, Bio sphere reserve, Wild life Sanctuary & Bird Sanctuary.
- (xii) There is no court case pending against the project.

- (xiii) Investment/ Cost of the project is Rs 7.82 Crore for expansion.
- (xiv) Employment potential: Approximately 16 for commercial activities and additionally other employment like sweepers, gardeners, drivers, security guards etc. will be created.
- (xv) Benefits of the project: Provision of additional housing within the same plot of land and using common infrastructure reduces resource requirement for construction. Employment will be available during construction (labour) and operation (such as drivers, helpers, loader/unloaders, supervisors, store keepers, security etc.)

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Proposed expansion of Omaxe heights-ii at Village Ahmamau, near Sector – 7, Gomti Nagar Extension, Amar Shaheed Path, Lucknow, Uttar Pradesh by M/s Omaxe Ltd. in a total plot area of 17,038.55 sqm and built-up of 62653.65 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Uttar Pradesh. However, due to non-availability of SEIAA/SEAC in Uttar Pradesh, proposal considered at Central level by EAC (Infra-2) in the Ministry.

*The EAC deliberated on the Certified Compliance Report letter F. No. VII/ENV/SCL/UP/1504/2017/157 dated 31.08.2017 issued by the MoEF&CC's Regional Office (CR), Lucknow. The Committee noted that the observation in the Compliance report was mentioned as "The Compliance status could be treated as satisfactory". 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, 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, 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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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, gardening, road washing & DG cooling. Excess treated sewage will be discharge into municipal drain.
- (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, 7 nos. of rain water harvesting recharge pits shall be provided 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 210 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.
- (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 area 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxvii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.

- (xxviii) It shall be ensured that no Parking is allowed on the feeder roads. Necessary plans should be drawn up in consultation with the Traffic Police and implemented to their satisfaction.
- (xxix) 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
- (xxx) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 ground water shall not exceed 136.8 KLD with prior permission from CGWB.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and

	<p>the Plastics Waste Management Rules, 2016 shall be followed.</p> <ul style="list-style-type: none"> <li>(x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</li> <li>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</li> <li>(xii) 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.</li> <li>(xiii) 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 2896 sqm area shall be provided for green area development.</li> <li>(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.</li> <li>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</li> </ul>
23.3.21	<p><b>Redevelopment of Indira Market located at Plot no. 285 (part), Indira Market, Dehradun, Uttarakhand by M/s Saamag MDDA Realty Pvt. Ltd – Environmental Clearance ( IA/UK/NCP/67829/2017; F.No. 21-327/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Aplinka Solutions &amp; Technologies Pvt. Ltd. gave a detailed presentation on the salient features of the project and informed that:</p> <ul style="list-style-type: none"> <li>(i) The project is located at 30<sup>0</sup>19'34.60" N Latitude and 78<sup>0</sup> 2'40.50"E Longitude.</li> <li>(ii) The project is a Redevelopment of Indira market. The total plot area is 16,558 sqm. The Built up area of the project is 64,984 sqm. The Redevelopment of the Indira market includes construction of Building A, B, C, D and E.</li> <li>(iii) During construction phase, total water requirement is expected to be 65 KLD which will be met by private water tanker. During the construction phase, soak pits and waste collecting bins will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.</li> <li>(iv) During operational phase, total water demand of the project is expected to be 126KLD out of which fresh water demand will be 42 KLD and the water requirement will be met</li> </ul>

by Mussoorie Dehradun Development Authority. Wastewater generated (116 KLD) uses will be treated in STP of capacity 140 KLD and 84 KLD treated water will be used for recycling of 82 KLD for Flushing and 2 KLD for Horticulture.

- (v) About 1.01TPD Solid waste will be generated in the project. The biodegradable waste 0.61 TPD will be processed in composting and the non-biodegradable waste generated 0.3TPD will be handed over to authorized local vendor.
- (vi) The total power requirement will be met from Uttarakhand Power Corporation Ltd. and total power requirement during operation phase is 2818 kW
- (vii) Rooftop rainwater of buildings will be taken to collection/de-silting chambers located on ground and 4 nos. of recharge pits will be proposed.
- (viii) Parking facility for 1050 ECS is proposed to be provided against the requirement 909 ECS (as per the approved building plan)
- (ix) Proposed energy saving measures such as Solar Power/lighting, energy friendly lamps, water saving faucets and sensors will be provided to reduce the energy efficiency.
- (x) It is 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. 208.50 crores.
- (xiii) Employment potential: 3636 people
- (xiv) Benefits of the project: Since this is a Commercial project, Employment opportunity will be created. This project caters the need of local people demand for nearby market.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Redevelopment of Indira Market located at Plot no. 285 (part), Indira Market, Dehradun, Uttarakhand by M/s Saamag MDDA Realty Pvt. Ltd. in a total plot area of 16,558 sqm and built-up of 64,984 sqm.
- (ii) The project/activity is covered under category 'B' of item 8(a) 'Building and Construction Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at SEIAA/SEAC, Uttar Pradesh. However, due to non-availability of SEIAA/SEAC in Uttarakhand, proposal considered at Central level by EAC (Infra-2) in the Ministry.

*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 proposals shall strictly conform to the provisions of the Doon Valley notification issued by the MoEFCC.
- (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, 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.
- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the 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 MBBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing &, gardening. Excess treated sewage will be discharge into municipal drain.

- (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, 4 nos. of rain water harvesting recharge pits shall be provided 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 50 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.
- (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) Diesel and other Liquid/solid fuels shall not be used for the generation of power. Power shall be generated through gas based or solar systems 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 during non-peak hours.
- (xxvi) Ambient noise levels shall conform to Residential area 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.

- (xxviii) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxix) It shall be ensured that no Parking is allowed on the feeder roads. Necessary plans should be drawn up in consultation with the Traffic Police and implemented to their satisfaction.
- (xxx) 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
- (xxxi) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 MDDA water supply shall not exceed 42 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.

	<ul style="list-style-type: none"> <li>(vi) 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.</li> <li>(vii) No sewage or untreated effluent water would be discharged through storm water drains.</li> <li>(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.</li> <li>(ix) 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.</li> <li>(x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</li> <li>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</li> <li>(xii) 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.</li> <li>(xiii) 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 1655.8 sqm area shall be provided for green belt development.</li> <li>(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.</li> <li>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</li> </ul>
23.3.22	<p><b>Redevelopment of General Pool Residential Accommodation (GPRA) Colonies at Netaji Nagar by M/s NBCC India Limited Netaji Nagar – Environmental Clearance ( IA/DL/NCP/63718/2017; F.No. 21-150/2017-IA-III)</b></p>



The project proponent and the accredited Consultant M/s ABC Techno Labs India Private Limited gave a detailed presentation on the salient features of the project and informed that:

- (i) The present proposal is for 'Redevelopment of General Pool Residential Accommodation (GPRA) Colonies at Netaji Nagar, Delhi by NBCC India Limited'. The project is located at 28°34'29.11" N Latitude and 77°11'08.36" E Longitude.
- (ii) The total plot area is 4,42,404.80 sqm, FSI area is 7,98,743.82 sqm and total construction area of 14,01,061.58 sqm. The project will comprise of Residential Buildings, Office Blocks and other infrastructure including Netaji Nagar Market, Suvidha Market, Vegetable Market, Local shopping centre, W.T.I, N.P.CO.ED Primary School & Senior School, Sarvodaya Vidyalaya Sr. Sec. school, Barat Ghar, Grih Kalyan Kendra, Community & Service Apartment, Religious Building, Post Office, Dispensary, Zonal Health Center, Sandhya (Old Age Home), SAARTEC Hostel and Maintenance Office). Total 4,882 residential flats shall be developed. Maximum height of the building is 36.6 m.
- (iii) During construction phase, total water requirement is expected to be 54 KLD which will be sourced from outside through tankers by civil contractors. 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 fresh water demand of the project is expected to be 3,141 KLD and the same will be sourced from New Delhi Municipal Council (NDMC). Wastewater generated (4,227 KLD) will be treated in 4 STP's (1675, 901, 778 & 873 KLD) of total 4,227 KLD capacity based on Fluidized Aerobic Bio Reactor (FAB) technology. The treated sewage will be reused for toilet flushing (2,145 KLD), Green belt development (764 KLD) and HVAC (953 KLD). No sewage will be disposed into Municipal drain.
- (v) About 19,863 Kg/day solid waste will be generated in the project. The biodegradable waste (9,335 Kg/day) will be processed in OWC and the non-biodegradable including Recyclable waste generated (10,528 kg/day) will be handed over to Authorized Recyclers. Daily generated STP sludge of 609 kg's will be used as manure for gardening and green belt development.
- (vi) The total power requirement during construction phase is 4,500 KVA and operation phase is 48,041 kW which will be met from New Delhi Municipal Council (NDMC). DG sets of 13 x 500 kVA for Residential units and 15 x 1500 kVA, 1 x 750 kVA & 1 x 500 kVA for office buildings will be installed at the project site.
- (vii) The total rainwater harvesting (RWH) potential estimated in the site is 11,585.92 cum during peak hour rainfall. Rain water harvesting pits of 62 Nos. will be constructed within the project site for recharge of ground water. Surplus water from the recharge pits shall be diverted to the storm water drainage network.
- (viii) Parking facilities for 17,928 ECS is proposed to be provided against the requirement of 15,929 ECS [as per Model Building Bye - Laws, 2016 and Town and Country Planning Organization (TCPO) Norms]
- (ix) Proposed energy saving measures would save about 19.967% of power per annum.
- (x) It is not located within 10 km of Eco Sensitive areas
- (xi) There is no court case pending against the project.
- (xii) Investment/Cost of the project is Rs. 5,466 Crores.
- (xiii) Employment potential - 750 persons
- (xiv) Benefits of the project: The proposed redevelopment project is General Pool

residential accommodation (GPRA) with supporting social infrastructure, General Pool Office Accommodation (GPOA) with advanced facilities under Ministry of Housing and Urban Affairs. The proposed project benefits the surroundings by providing employment opportunities both during construction and operation phase thereby enhancing the socio-economic and standard of living the locality.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Redevelopment of General Pool Residential Accommodation (GPRA) Colonies at Netaji Nagar by M/s NBCC India Limited Netaji Nagar in a total plot area of 4,42,404.80 sqm and total built-up area of 14,01,061.58 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.
- (iii) The ToR for the project was granted on 21.08.2017 vide letter No. 21-150/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

*The EAC, after deliberations, 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 project proponent shall obtain necessary clearance/ permission from concerned authority before felling any tree.
- (iii) The project proponent should comply with the directions given by the Hon'ble National Green Tribunal vide its Order dated 4<sup>th</sup> September, 2017 in the matter of OA No. 553 of 2016 and Order dated 22<sup>nd</sup> September, 2017 in the matter of MA No. 1154 of 2017 in OA No. 553 of 2016.
- (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, 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.

- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Sewage shall be treated in the STP base on Fluidized Aerobic Bio Reactor (FAB) with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, horticulture & HVAC. There will be no discharge into municipal drain.
- (xiv) 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, 62 nos. of rain water harvesting recharge pits shall be provided as per CGWB guidelines.
- (xv) 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 1400 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.
- (xvi) Waste from the vegetable and fruit market, if any, shall be collected and utilised for

Power generation/safe animal feed.

- (xvii) 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.
- (xviii) A First Aid Room shall be provided in the project both during construction and operations of the project.
- (xix) 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.
- (xx) 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.
- (xxi) 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.
- (xxii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxiii) As proposed, no ground water shall be used during construction/ operation phase of the project.
- (xxiv) Approval of the CGWA require before any dewatering for basements.
- (xxv) 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.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) 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.
- (xxix) 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxx) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organization of repute and specializing in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.

(xxxi) The Traffic Management plan shall be implemented simultaneously and commissioned before allowing any occupants possession and start residence in the rehabilitated accommodation.

(xxxii) 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

(xxxiii) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 NDMC Water Supply shall not exceed 3141 KLD.

(iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.

(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.

(vi) 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.

(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

	<p>Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.</p> <p>(ix) 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.</p> <p>(x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.</p> <p>(xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.</p> <p>(xii) 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.</p> <p>(xiii) 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 1,84,769 sqm (41.76) shall be provided.</p> <p>(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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.3.23	<p><b>Redevelopment of General Pool Residential Accommodation (GPRA) at Nauroji Nagar, New Delhi by NBCC India Ltd – Environmental Clearance (IA/DL/NCP/67991/2017; F.No. 21-112/2017-IA-III)</b></p> <p>The project proponent and the accredited Consultant M/s Hubert Enviro Care Systems Pvt Ltd gave a detailed presentation on the salient features of the project and informed that:</p> <p>(i) The present proposal is for 'Redevelopment of General Pool Residential Accommodation (GPRA)' at Nauroji Nagar, New Delhi. The project is located at 28° 34'1.28" to 28°34'09.53" N Latitude and 77°11' 23.25" to 77°11' 51.33" E longitude.</p> <p>(ii) The total plot area is 101010.125 sqm, FSI area is 2,43,778.960 sqm and total construction area of 5,39,391.08 sqm. The project will comprise of 12 towers.</p>

Maximum height of the building is 39.45 m.

- (iii) During construction phase, total water requirement is expected to be 380 KLD which will be met by Out Sourcing. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided for labor force.
- (iv) During operational phase, total water demand of the project is expected to be 2550 KLD and the same will be met by the New Delhi Municipal Council and Recycled Water. Wastewater generated (1370 KLD) uses will be treated in 950 & 850 KLD STPs of total 1800 KLD capacity. 1370 KLD of treated wastewater will be recycled (560 KLD for flushing, 60 KLD for gardening). No disposal into municipal drain.
- (v) About 19.139 TPD solid wastes will be generated in the project. The biodegradable waste (8.61 TPD) will be processed in OWC and the non-biodegradable waste generated (10.53 TPD) will be handed over to authorized local vendor.
- (vi) The total power requirement during construction phase is 1000 KVA and will be met from DPCL/NDMC and total power requirement during operation phase is 30000 KVA and will be met from DPCL/NDMC.
- (vii) Rooftop rainwater of buildings will be collected in 26 RWH pits for harvesting after filtration.
- (viii) Parking facility for 8014 ECS for four wheelers is proposed to be provided against the requirement of 8014 ECS respectively (according to local norms).
- (ix) Proposed energy saving measures would save about  $\approx 40\%$  of power.
- (x) It is located within 10 km of Eco Sensitive areas. i.e., Central Ridge R.F. –  $\approx 5\text{Km}$  – NW and Yamuna River -  $\approx 7.18\text{ Km}$  – ENE.
- (xi) There is no court case pending against the project.
- (xii) Investment/Cost of the project is Rs. 2694 Crore.
- (xiii) Employment potential: 31898 Nos.
- (xiv) Benefits of the project: Employment, Infrastructure Development, Economic Development and Social Infrastructure Development.

*During deliberations, the EAC noted the following:-*

- (i) The proposal is for environmental clearance to the project 'Redevelopment of General Pool Residential Accommodation (GPRA) at Nauroji Nagar, New Delhi by NBCC India Ltd in a total plot area of 101010.125 sqm and built-up of 5,39,391.08 sqm.
- (ii) The project/activity is covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.
- (iii) The ToR for the project was granted on 17.08.2017 vide letter No. 21-112/2017-IA-III.
- (iv) The EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

*The EAC, after deliberations, 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 project proponent shall obtain necessary clearance/ permission from concerned authority before felling any tree.
- (iii) The project proponent should comply with the directions given by the Hon'ble National Green Tribunal vide its Order dated 4<sup>th</sup> September, 2017 in the matter of OA No. 553 of 2016 and Order dated 22<sup>nd</sup> September, 2017 in the matter of MA No. 1154 of 2017 in OA No. 553 of 2016.
- (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, 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.
- (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) Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (viii) 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.
- (ix) 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.



- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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 & HVAC cooling. There will be no discharge into municipal drain.
- (xiv) 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, 26 nos. of rain water harvesting recharge pits shall be provided as per CGWB guidelines.
- (xv) 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 1400 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.
- (xvi) Vegetable and fruit wastes, if any, shall be collected and utilised for Power generation/safe animal feed.
- (xvii) 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.
- (xviii) A First Aid Room shall be provided in the project both during construction and operations of the project.
- (xix) 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.
- (xx) 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.
- (xxi) 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.
- (xxii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxiii) As proposed, no ground water shall be used during construction/ operation phase of the project.
- (xxiv) Approval of the CGWA require before any dewatering for basements.

- (xxv) 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.
- (xxvi) 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.
- (xxvii) 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.
- (xxviii) 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.
- (xxix) 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 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- (xxx) A detailed traffic management and a traffic decongestion plan, to ensure that the current level of service of the roads within a 05 kms radius of the project site is maintained and improved upon, shall be drawn up through an organisation of repute and specialising in Transport Planning. This should be based on 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 this 05 kms radius from the site under different scenarios of space and time and shall be implemented to the satisfaction of the State Urban Development and Transport Departments with the consent of all the concerned implementing agencies.
- (xxxi) The Traffic Management plan shall be implemented simultaneously and commissioned before allowing any occupants possession and start residence in the rehabilitated accommodation.
- (xxxii) 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
- (xxxiii) Project Proponent should comply with conditions stipulated at Appendix - XIV of the amended EIA Notification vide S.O. 3999(E) dated 09.12.2016.

## **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 NDMC Supply Water Supply shall not exceed 1130 KLD.
- (iv) A certified report on the sources and availability of water from the local body supplying water along with the permission received by them for the same shall be submitted. This report shall specify the total annual water availability with the organization (local body), the quantity of water already committed to other development projects, the quantity of water committed for this project and the balance water available for distribution. This should be specified separately for ground water and surface water sources.
- (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.
- (vi) 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.
- (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.
- (ix) 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.
- (x) Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- (xi) 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 heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- (xii) 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.
- (xiii) 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

	<p>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 42350 sqm (41.93%) area shall be provided for green belt development.</p> <p>(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.</p> <p>(xv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.</p>
23.4	<p><b>Discussion on any other item</b></p> <p>The Committee deliberated upon the issue of status of Accreditation of Consultant for the project/activity covered under category 'A' of item 8(b) 'Townships and Area Development Projects' of the Schedule to the EIA Notification, 2006. As per amendment to the EIA Notification vide S.O. 3999(E) dated 09.12.2016, the project/activity covered under item 8 'b' having built up area <math>\geq 3,00,000</math> sqm or covering an area <math>\geq 150</math> ha is now regarded as Category A and would require appraisal at Central level.</p> <p>Earlier item 8(a) and 8(b) were both classified as category 'B' projects under the EIA Notification, 2006 and the said projects were appraised by the State Level Expert Appraisal Committees (SEACs) and approved by the State Environmental Impact Assessment Authorities (SEIAAs). Accordingly, Consultants were accredited for Category 'B' only for item 8(a) and 8(b) by QCI-NABET.</p> <p>The Committee observed that the aforesaid category 'A' has been carved out of the earlier Category B projects under item 8 'b' for which Consultants were already being accorded accreditation by the QCI and therefore in terms of requirements of the EIA notification, a consultant accredited for Category B was also accredited for and authorised to present cases having built up area <math>\geq 3,00,000</math> sqm or covering an area <math>\geq 150</math> ha (now category 'A') before the SEAC prior to the notification of 09.12.2016 as above. The Committee also observed that though technically an item 8 'b' category 'B' consultants may be competent to draw up an EIA and EMP for an item 8 'b' category 'A' project, in view of the existing accreditation, yet an official accreditation from the QCI will be required in this regards. Presently most of the Consultants are accredited for category 'B' only for item 8(a) and 8(b) by QCI-NABET.</p> <p>In this regard, the Committee recommended that from 15<sup>th</sup> November, 2017 or a date specified by the Ministry through its orders, only those Consultants may be permitted for preparation and presentation of EIA/EMP report for Category 'A' projects who have got accreditation for Category 'A' under item no. 8(b) or they have applied to QCI-NABET for the same on the date of presentation. The Ministry may like to issue necessary orders in this regards.</p>

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**LIST OF PARTICIPANTS OF EAC (INFRASTRUCTURE-2) IN 23<sup>rd</sup> MEETING OF EAC  
(INFRASTRUCTURE-2) HELD ON 13<sup>th</sup> October, 2017**

<b>S. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Attendance</b>	<b>Signature</b>
1.	Prof. T. Haque,	Chairman	P	
2.	Shri K. Gowarappan	Member	P	
3.	Dr. Yashpal Singh	Member	P	
4.	Dr. S.K. Bhargava	Member	A	
5.	Dr. Ayi Vaman N. Acharya	Member	P	
6.	Dr. Chandrahas Deshpande	Member	A	
7.	Shri A. P. Singh	Member	P	
8.	Ms. Mili Majumdar	Member	P	
9.	Prof. Dr. Sanjay Gupta	Member	A	
10.	Shri Kushal Vashist	Director & Member Secretary	P	