## STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No SIA/MH/MIS/117732/2019. Environment Department Room No. 217, 2<sup>nd</sup> Floor, Mantralaya, Mumbai- 400032. Date **28**:02.2020.

To City And Industrial Development Corporation of Maharashtra Limited (CIDCO)

Subject

: Environment Clearance for Pradhan MantriAwasYojana (PMAY) Housing Scheme is located at Plot no. 77, Sector 17, Kalamboli, Navi Mumbai, Taluka: Panvel, District: Raigad by City And Industrial Development Corporation of Maharashtra Limited (CIDCO)

Reference : Application no. SIA/MH/MIS/117732/2019.

This has reference to your communication on the above mentioned subject. The proposal was considered by the SEAC-2 in its 123<sup>rd</sup> meeting under screening category 8 (b) as per EIA Notification, 2006 and recommend to SEIAA. Proposal then considered in 185<sup>th</sup> meeting of State Level Environment Impact Assessment Authority (SEIAA).

# 2. Brief Information of the project submitted by you is as below:-

Plot area	22570.59 Sq.mt.
FSI	46,998.49 Sq.mt.
Non FSI	56,089.90 Sq.mt.
Total Built up area	1,03,088.39 Sq.mt.
Building configuration	9 Nos. of Buildings- Ground + Podium + Podium Stilt + 19 Floors each, Flats: 1323 nos. and Shops, Community Hall, Bus Depot Facility
To the sulation	9612 nos. (including floating population)
Total population	994 KLD
Water requirement	Samuel 668 KLD Waste water: 200 KLD
Sewage generation STP Capacity & Technology	Sewage: Disposal to existing Nodal STP (50 MLD capacity near Kalamboli Sector 12 for treatment, Waste water:  Treatment in Waste Water Treatment Plant (WWTP)
RG area required & provided – mother earth & podium	Required Recreational Open Space (15%): 3385.59 Sq.mt.
Energy requirement	Connected Load: 5295 KW, Maximum demand: 3272 KW
Energy saving	Energy saying total 21 % Energy saying by solar 3 /6
No. of DG sets & capacities	Residential: 2 of 315 kVA each, 3 of 160 kVA each, 3 of 160 kVA each, 3 of 160 kVA
Solid waste generation	Bio-degradable generation-975 Kg/day, Non-Biodegradable
OWC capacities	Area for solid waste management: 88 Sq.mt.

Parking	2W:Captive: 50 Nos., Bus Depot: 15 Nos, 4W: Captive: 394
	Nos, Bus Depot: 12 Nos, Bus parking: 42 Nos.
EMP cost	Construction Phase: Set up Cost: 50.85 Lacs
	Operation Phase: Set up Cost: 183.68 Lacs, O & M
	Cost: 11.95 Lacs/annum
Rain water harvesting	2 RWH Tanks of total capacity 130 KL
No. of pits & size of pits	8 nos. of recharge pits, Size: 2.0m deep and 1.0m dia. of
	pre-cast RCC rings with 6.5" dia. x 25m deep bore well
CER	Cost for CER: Rs. 4.15 Crores (1.5% of project cost)

3. The proposal has been considered by SEIAA in its 185<sup>th</sup> meeting and decided to accord Environment Clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implantation of following terms and conditions-

## **Specific Conditions:**

- 1. Committee noted that, bus depot is proposed beneath the podium, PP to ensure to provide sound curtains & other acoustic measures to achieve permissible noise level standards.
- 2. PP to reuse the treated water for bus cleaning. Also to provide water treatment plant in project site itself.
- 3. PP to provide adequate mitigation measures to reduce PM10, PM 2.5. Committee noted that, PP has provided 5 air cleaning equipment, PP to add one more equipment near to bus workshop.
- 4. PP i.e CIDCO while handing over bus depot to operator (i.ePanvel Municipal Corporation) should enter into agreement that they also maintain the conditions laid down in the Environmental Clearance.
- 5. PP to upload the list of authorized vendor of the hazardous waste.
- 6. PP to ensure that the slope of the ramp should be 1:12
- 7. PP to provide the charging stations for charging the electric buses. As agreed, PP to try to replace the all diesel/CNG buses by electric buses over the period of 5 years.
- 8. The PP to get NOC from competent authority with reference to Thane creek flamingo sanctuary if the project site falls within 10 Km radius from the said sanctuary boundary. The planning authority to ensure fulfilment of this condition before granting CC.
- 9. PP to ensure that CER plan get approved from Municipal Commissioner/District Collector.
- 10. PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF& CC vide F.No.22-34/2018-IA.III dt.04.01.2019.
- 11. SEIAA decided to grant EC for-FSI-46998.493 m2, Non-FSI- 56089.905 m2 and Total BUA-103088.398 m2 (Plan Approval no- CIDCO/Sr. Arch.(BP-IHP)/2019/364, Date 08.08.2019)

#### **General Conditions:**

- I. E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016
- I. The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
- II. This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to

the project which will be considered separately on merit.

III. PP has to abide by the conditions stipulated by SEAC& SEIAA.

- IV. The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- V. If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- VI. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- VII. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- VIII. The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed of to the approved sites for land filling after recovering recyclable material.
- IX. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- X. Arrangement shall be made that waste water and storm water do not get mixed.
- XI. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- XII. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- XIII. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- XIV. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- XV. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
- XVI. Any hazardous waste generated during construction phase should be disposed of as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- XVII. The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- XVIII. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- XIX. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- XX. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
- XXI. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
- XXII. Ready mixed concrete must be used in building construction.
- XXIII. Storm water control and its re-use as per CGWB and BIS standards for various applications.
- XXIV. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- XXV. The ground water level and its quality should be monitored regularly in consultation with Ground Water

Authority.3

- XXVI. The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/ refused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% grey water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
- XXVII. Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.
- XXVIII. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
  - XXIX. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
  - XXX. Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
  - XXXI. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.
- XXXII. Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed of /sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.
- XXXIII. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
- XXXIV. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night-time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- XXXV. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- XXXVI. Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- XXXVII. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- XXXVIII. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
  - XXXIX. Under the provisions of Environment (Protection) Act, 1986. legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
  - XL. Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.
  - XLI. Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.

- XLII. Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
- XLIII. Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
- XLIV. A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
- XLV. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- XLVI. A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- XLVII. Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
- XLVIII. The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <a href="http://parivesh.nic.in">http://parivesh.nic.in</a>
  - XLIX. Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
  - L. A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
  - LI. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
  - LII. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
  - LIII. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

Memb Secretary, SEIAA)

### Copy to:

- 1. Shri Johny Joseph, Chairman-SEIAA
- 1. Secretary, MoEF & CC
- 2. IA- Division MOEF & CC
- 3. Member Secretary, Maharashtra Pollution Control Board, Mumbai.
- 4. Regional Office MoEF & CC, Nagpur
- 5. District Collector, Raigad.
- 6. Regional Officer, Maharashtra Pollution Control Board, Raigad.