## STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No. SIA/MH/MIS/146165/2020 Environment Department Room No. 217, 2<sup>nd</sup> Floor, Mantralaya, Mumbai- 400032. Date: 31.03.2020.

To.

Mumbai Metro Rail Corporation Ltd.

E Block BKC, Bandra Kurla Complex, Bandra East, Mumbai

Subject

: Environment Clearance for Redevelopment project of affected buildings at Kalbadevi

and Girgaon stations of Mumbai Metro Line 3 on plot bearing C.S. No. 663, 664, 1/665,665, 671, 666, 667, 668, 669, 662, 662/1 of Bhuleshwar by Mumbai Metro Rail

Corporation Ltd.

Reference

: Application no. SIA/MH/MIS/146165/2020

This has reference to your communication on the above mentioned subject. The proposal was considered by the SEAC - 2 in its 131<sup>st</sup> meeting under screening category 8 (a) B2 as per EIA Notification, 2006 and recommend to SEIAA. Proposal then considered in 197<sup>th</sup> meeting of State Level Environment Impact Assessment Authority (SEIAA).

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

Sr. No	Description	Details
1.	Project Name & with Site Address	Redevelopment project of affected buildings at Kalbadevi station of Mumbai Metro Line 3 on plot bearing C.S. No. 662,1/662 of Bhuleshwar Division in "C" Ward by Mumbai Metro Rail Corporation Ltd.
2.	Plot Area (sq. m)	1643.82 m <sup>2</sup>
3.	FSI Area (sq. m)	16582.51 m <sup>2</sup>
4.	Non-FSI Area (sq. m)	10052.68 m <sup>2</sup>
5.	Proposed built-up area (FSI + Non FSI) (sq. m)	26635.19 m <sup>2</sup>
6.	Building Configuration	Composite Residential Building: K3 (Wing A & B): Basement (Services) + Ground + 1 <sup>st</sup> (Commercial & Amenities) + 2 <sup>nd</sup> & 3 <sup>rd</sup> (Services) + 4 <sup>th</sup> To 37 <sup>th</sup> (Residential)
7.	No. of Tenements & shops	Rehab: Flats: 218 Nos. Shop: 5 Nos. Sale: Flats: 73 nos.
8.	Total population	Rehab: 1105 nos. Sale: 365 nos.
9.	Total Water Requirement (CMD)	196
10.	Sewage Generation (CMD)	184 market pental and all and a series of the series of th
11.	STP Capacity & Technology	STP Capacity: 200 KLD

	Times a process	MBBR Technology
12.	STP Location	3 <sup>rd</sup> (Service floor)
13.	Total Solid waste Quantities	Wet Waste: 263 Kg/day Dry Waste: 394 Kg/day Total: 657 kg/day Disposal:  • Biodegradable waste will be treated in OWC.  • Non-Bio-degradable waste will be handed over to authorized local vendor for recycling.
14.	R.G Area in sq.m	- I (attended and the state of the following the
15.	Power requirement	Connected load: 5114.4 KW Maximum Demand: 1673.6 KW
16.	Energy Efficiency	Total Energy Savings: 31 % By Solar Energy: 5%
17.	D.G. set capacity	Alternate power supply from DG
18.	Parking 4W & 2W	4W: 76 Nos; 2W: 00
19.	Rain water harvesting Scheme	96 cum of RWH tank
20.	Project Cost in (Cr)	130 Cr
21.	EMP Cost	Capital Cost – 335.00 Lakhs O & M Cost – 34.5 Lakhs
22.	CER Details	0.75 % of Project cost (i.e 9,75,000 lacs)

3. The proposal has been considered by SEIAA in its 197<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:**

- I. PP to increase the solar energy saving to 5%.
- II. PP to ensure that proposed STP should be 40% open to sky for adequate ventilation.
- III. PP to use maximum treated waste water to reduce disposal to 35%.
- IV. PP to provide to cover minimum 25% of total parking arrangement with electric charging stations by providing charging points at suitable places.
- V. 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.
- VI. PP to ensure that CER plan gets approved from Municipal Commissioner.
- VII. 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.
- VIII. SEIAA decided to grant EC for FSI: 16582.51 m2, Non-FSI: 10052.68 m2 and Total BUA: 26635.19 m2 (Plan Approval no -P-2642/2019/662 & others/C-Ward/Bhuleshwar/337/1/NAV)

## **General Conditions:**

- E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
- II. 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.
- III. 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.

- PP has to abide by the conditions stipulated by SEAC& SEIAA.
- 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.
- VI. 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.
- All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase. VIII.
- 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. IX.
- 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.
- 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. XI.
- Arrangement shall be made that waste water and storm water do not get mixed.
- All the topsoil excavated during construction activities should be stored for use in horticulture / XII. landscape development within the project site.
- Additional soil for levelling of the proposed site shall be generated within the sites (to the extent XIII. possible) so that natural drainage system of the area is protected and improved. XIV.
- Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept. XV.
- 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. XVI.
- 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.
- 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. XVIII.
- 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. XIX.
- The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken. XX.
- 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.
- Ambient noise levels should conform to residential standards both during day and night. Incremental XXI. 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.
- 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).
- Ready mixed concrete must be used in building construction.
- Storm water control and its re-use as per CGWB and BIS standards for various applications. XXIII.
- Water demand during construction should be reduced by use of pre-mixed concrete, curing agents XXIV. XXV.
- The ground water level and its quality should be monitored regularly in consultation with Ground 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 XXVII. 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.
- 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 XXIX.
  - Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or XXX. pressure reducing devices or sensor based control.
  - 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 XXXIII. 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.
- 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 XXXIV. 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.
- Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible XXXV. levels to comply with the prevalent regulations.
- 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-XXXVII. conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- The building should have adequate distance between them to allow movement of fresh air and XXXVIII. passage of natural light, air and ventilation.
  - Regular supervision of the above and other measures for monitoring should be in place all through XXXIX.

- 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.
- 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated
- 5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.
- 6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative
- 7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification,
- 8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
- 9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability
- 10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D -Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Secretary, SEIAA) (Member

## Copy to:

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

the construction phase, so as to avoid disturbance to the surroundings.

XL. 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.

XLI. Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.

XLII. 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.

XLIII. 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.

XLIV. Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.

XLV. A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.

XLVI. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.

XLVII. A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

XLVIII. 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.

XLIX. 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>

L. 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.

LI. 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 proposal. The clearance letter shall also be put on the website of the Company by the proponent.

LII. 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.

LIII. 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.