

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No. SIA/MH/MIS/127703/2019
 Environment Department
 Room No. 217, 2nd Floor,
 Mantralaya,
 Mumbai - 400032
 Date 31.03.2020

To,
Director, Urban Planning
Mumbai International Airport Limited
 Chhatrapati Shivaji Maharaj International Airport,
 1st Floor, Terminal 1, Santacruz (East),
 Mumbai - 400099

Subject: Amendment in Environment Clearance for Non-Operational Area (Landside) Development of Chhatrapati Shivaji Maharaj International Airport and construction of Six buildings

Reference: Application no. SIA/MH//MIS/127703/2019

This has reference to your communication on the above-mentioned subject. The proposal was considered by the SEAC-2 in its 126th meeting under screening category 8(b) as per EIA Notification, 2006, and recommended to SEIAA. Proposal was then considered in the 192nd meeting of State Level Environment Impact Assessment Authority (SEIAA).

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

Plot area	Area for Entire Non-Operational Area (Landside) Development of CSMIA = 170.61 Ha Plot Area for Construction of Four Buildings (after dropping 2 buildings from previous EC) = 1,18,301 sq. m.
FSI	FSI Area for Entire Non-Operational Area (Landside) Development of CSMIA = 24,19,188 sq. m. (includes only FSI Area) FSI area of Four Buildings = 5,44,558.77 sq. m.
Non FSI	Non-FSI area of Four Buildings = 3,33,137.08 sq. m.
Total Built up area	Gross Construction Area (of Four Buildings) = 8,77,696.77 sq. m.
Building configuration	<ul style="list-style-type: none"> • Proposed Building No. 1 (T1-C04): 3 Basements + Ground + 9 Upper Floors (Height: 37.40 m), FSI area: 57,956 sq. m, Gross construction area: 87,868.92 sq. m. • Proposed Building No. 2 (T2-C05): 2 Basements + Lower Ground + 10 Upper Floors (Height: 42.70 m), FSI area: 3,27,378.00 sq. m., Gross construction area: 5,38,000.00 sq. m. • Proposed Building No. 3 (NS-C01): 2 Basements + Lower Ground + 9 Upper Floors (Height: 34.25 m), FSI area-1,55,201.58 sq. m., Gross construction area: 2,20,647.85 sq. m. • Building 5 (T1-PO1) (Already constructed as per previous EC): MLCP (Height: 16.40 m), FSI area: 4,023.19 sq. m, Gross construction area: 31,180.00 sq. m.
Total population	53,408
Water requirement	<ul style="list-style-type: none"> • For Area development: Fresh water from MCGM: 7038 CMD Recycled water – Flushing: 3163 CMD Recycled water – Gardening: 853 CMD

	<p>Recycled water – HVAC: 5444 CMD Total water requirement: 16498 CMD</p> <ul style="list-style-type: none"> • For proposed four buildings: Fresh water from MCGM: 1338 CMD Recycled water – Flushing: 925 CMD Recycled water – Gardening: 93 CMD Recycled water – HVAC: 778 CMD Total water requirement: 3134 CMD • Firefighting – Underground water tank: 1650 CMD • Firefighting – Overhead water tank: 150 CMD
Sewage generation	<p>For entire development: 9497 CMD For proposed four buildings: 2129 CMD</p>
STP Capacity & Technology	Total Capacity for Landside Development: 9.5 MLD (SBR Technology)
STP location	<p>STP-1 (near T1 Terminal): 2 MLD (Constructed and Operational - Total capacity 4 MLD, 2 MLD for Airport Operation), STP-3: 1.5 MLD (proposed), STP-4: 4.0 MLD (Constructed), STP-5: 0 MLD (dropped), STP-6: 0 MLD (dropped), STP (T2)-8: 2.0 MLD (Constructed and Operational (Total Capacity 10 MLD, 8 MLD for Airport Operation)</p>
RG area required & provided – mother earth & podium	<p>Proposed RG area = 33.78 Ha (18% of plot area as against stipulated 10%) Number of trees proposed for plantation = 16,890</p>
Energy requirement	<p>Source: TATA Power Co. Ltd. For entire development: 120 MVA For proposed four buildings: 35 MVA</p>
Energy saving total By solar	<p>Energy Conservation Measures:</p> <ul style="list-style-type: none"> • Higher insulation levels in walls and roofs • High performance glazing • Efficient lighting design • Efficient packaged HVAC system • Artificial lighting control via daylight sensor • Adoption of high efficiency LED light fittings • Use of photovoltaic panels to generate electricity <p>By Solar:</p> <ul style="list-style-type: none"> • CSMIA has installed a solar power system of 4.58 MW capacity on rooftop. As a result of our initiatives we have increased the solar power generation capacity using rooftop area and reduction in CO₂ emission. • Within CSMIA land side area roof top solar power panel are installed at two locations T1 MCLP and at Kalina facility building that generates total 274 KW power.
No. of DG sets & capacities	<p>For entire development: 3.2 MVA for residential and 80 MVA for commercial areas. (40% for all essential services in residential areas and 100% backup for commercial areas). For proposed four buildings: 6 nos. of 2,500 KVA, 10 nos. of 2,000 KVA, 4 nos. of 1,850 KVA, 5 nos. 1,500 KVA</p>
Solid waste generation	<p>For entire development: 21.35 MT/day For proposed four buildings: 5.5 MT/day (T1-C04: 0.56 MT/day, T2-C05: 1.65 MT/day, NS-C01: 3.13 MT/day, T1-PO1: 0.16 MT/day)</p>
Bio-degradable generation	<p>For entire development: 8.54 MT/day For proposed four buildings: 2.2 MT/day</p>

Non-Biodegradable	Reusable and recyclable dry waste to be taken away by MPCB authorized vendors. Inert dry waste to be transported to MCGM authorized waste disposal site.
OWC capacity	Food waste would be transferred to organic waste converter at CSMIA and compost from the same will be used for landscaping.
Parking	
2-Wheeler	-
Bicycle	-
4-Wheeler	6,662
EMP cost	Total Capital Cost: Rs. 1190.0 Lakh Total recurring cost: Rs. 176.5 Lakh/annum
Rain water harvesting	Rainwater harvesting system is proposed in the form of water bodies as part of landscape planning within all major green areas, parks & gardens. The capacity shall be based on existing underground water table, drainage gradient and required overflow discharge levels. 35 ML of harvested rainwater will be available for reuse for the entire project development.
No. of pits & size of pits	1500 mm X 1500 mm @ every 25 m in green open spaces
Details of UG tanks & no. of capacity	For Proposed 4 buildings: Capacity of underground fire water tank: 1650 cum
CER	CER applicability for the proposed brownfield project: Project cost: Rs. 2874 Crore CER amount: Rs. 7,18,50,000/- (i.e. 0.25% of capital investment as per MoEF&CC Office Memorandum on CER dated 1 st May 2018) (For 4 buildings, total cost = Rs. 1822 Crore, hence CER amount = Rs. 4,55,50,000/-) The allocated amount for CER will be spent in proportion to the project accomplished. Following activities are envisaged under the proposed CER program: (i) Environmental information dissemination centre in the premises (ii) Providing emergency medical care, Preventive health care, sanitation and safe drinking water (iii) Promoting education to the underprivileged children, supporting socially backward people and helping differently-abled people (iv) Promoting gender equality and empowering women (v) Ensuring environmental sustainability, ecological balance, protection of flora and fauna and conservation of natural resources

3. The proposal has been considered by SEIAA in its 192nd meeting and decided to accord Environment Clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006, subject to implementation of the following terms and conditions:

Specific Conditions:

- I. As agreed by PP, PP to provide Environmental Information Dissemination Centres in the premises as a part of CER activities.
- II. PP to upload the Metro NOC from MMRCL & also to upload the copy of MoU with MMRCL regarding management of waste, actions for disaster etc. in Metro III station.
- III. 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.
- IV. PP to submit CER prescribed by MoEF&CC circular dated 01.05.2018 relevant to the area and people around the project. The specific activities to be undertaken under CER to be carried out in consultation with Municipal Corporation or Collector or Environment Department.

- V. 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.

General Conditions:

- I. 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.
- IV. PP has to abide by the conditions stipulated by SEAC& SEIAA.
- V. 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.
- VII. 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.
- X. 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 wastewater and storm water do not get mixed.
- XII. All the topsoil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.
- XIII. 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.
- 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.
- XVII. 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.
- XXI. 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.
- XXII. 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).
 - XXIII. Ready mixed concrete must be used in building construction.
 - XXIV. Storm water control and its re-use as per CGWB and BIS standards for various applications.
 - XXV. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
 - XXVI. The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
 - XXVII. 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 effluent, 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 effluent, 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.
 - XXVIII. 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.
 - XXIX. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
 - XXX. 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.
 - XXXI. 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.
 - XXXII. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.
 - XXXIII. 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 streetlights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.
 - XXXIV. 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.
 - XXXV. 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.
 - XXXVI. 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.
 - XXXVII. 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.
 - XXXVIII. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
 - XXXIX. 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.

- 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 MoEFCC, Nagpur, 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. 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 costs 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 be 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 local language, 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 <http://parivesh.nic.in>
 - 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 processing the 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 MoEFCC, the respective Zonal Office of CPCB and the SPCB. The critical pollutants namely SPM, RSPM, SO₂, NO_x (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.
 - LIV. 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 MoEFCC 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 under EP Act.

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 reason.
7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, amended time to time.
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 Insurance Act, 1991 and its amendments.
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.


Anil Diggikar
(Member Secretary, SEIAA)

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

