Environmental Clearance
Six Monthly Compliance Report

Mumbai International Airport Limited
Terminal 1, Santacruz (East), Mumbai -400099

of

Chhatrapati Shivaji Maharaj International Airport
(CSMIA)

For
Period of April 2024 to September 2024

SIX MONTHLY COMPLIANCE REPORT
(01.04.2024 to 30.09.2024)
Present Status of Compliance to Conditions stipulated in EC no SEAC-2010/CR.53/TC-2 dated: 1st July 2011 & SIA/MH/MIS/1277 03/2019 dated 31.03.2020.

Earlier EC was granted in 2011 for non-operational landside development and construction of six buildings by SEAC. The amendment in EC vide File no. SIA/MH/MIS/127703/2019 dated 31.03.2020 was obtained for the proposed Non-operational area (Landside) Development of CSMIA - Construction of Building No. 1 in Vile Parle, Building No. 2 in Marol & Sahar, Building No. 3 in Sahar in District Mumbai.

This included construction of Four Buildings (after dropping two buildings from previous EC), for 24,19,188 sq. m. of FSI Area of Entire Non-Operational Area (Landside) Development of CSMIA and for 8,77,696.77 sq.m. of Gross Construction Area of Four Buildings were considered.

The amendment consists of:

- Modifications in plans & drawings of building no. 1, 2 and 3.
- Reduction in Overall Construction Area (BUA / FSI).
- Building No. 5 (Multi-Level Car Park-2) is already constructed & operational as approved in EC vide letter SEAC-2010/CR.53/TC-2 dated: 1st July 2011.
- Building No. 4 (Multi-Level Car Park-1) and Building No. 6 (Multi-Level Car Park-3) havebeen shelved.

The EC also includes other lateral infrastructure consists of Transport infrastructure, Roads (at grades, elevated), underpass, Metro connectivity, utilities/services, drainage, sewerage, water supply, recycled water supply network, STPs, etc. pedestrian infrastructure, skywalks, underpass, Personal Rapid Transit (PRT) system.

Compliance status of the conditions stipulated in EC letter is as below:

S.N.	Conditions	Compliance Status
Specific Conditions:		
I.	As agreed by PP, PP to provide Environmental Information Dissemination Centers in the premises as a part of CER activities	Complied. MIAL has provided Environment Information dissemination in form of display boards, which is being used to displaying Environment & Sustainability related information such as, Environment Monitoring Results, Environment awareness information, Environment & sustainability related initiatives etc. Photographs showing display of Environment Information dissemination is attached as **Annexure 1**

S.N.	Conditions	Compliance Status
Specific Conditions:		
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.	Complied In principal approval from MMRCL has been obtained. Copy of MoU of MIAL with MMRCL is attached as **Annexure 2**
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	Not Applicable. As per MoEF&CC notification dtd 14th October 2021, Eco sensitive zone (ESZ) of Thane Creek Flamingo Sanctuary (TCFS) has been published and the project site falls outside the notified ESZ of TCFS.
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.	Complied. Below mentioned CER related works have been carried out - · Environmental information dissemination display system · Promoted education to underprivileged/tribal children at Gadchiroli · Supported socially backward people by educating them at MCGM school Ville Parle and rural areas of Maharashtra · Project "Shakti" implemented at Kalina for women empowerment. · Tree plantation drive taken at Rabble Forest and SRPF ground for promoting ecological balance. · Distributed LED lamps in tribal areas of Sanjay Gandhi National Park residents Photographs showing CER works is attached **Annexure 3.**
V.	PP shall comply with Standard EC conditions mentioned in the Office Memorandum issued by	Complied.

S.N.	Conditions	Compliance Status
Specific Conditions:		
	MoEF&CC vide F.No.22-34/2018-IA. III dt.04.01.2019.	All the applicable conditions of Standard EC conditions are complied with. Copy of the compliance status is attached as **Annexure 4**
General Conditions:		
I.	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.	Complied. E-waste, generated at MIAL is handled and disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016, amended till dated **Copy of E-waste return filed for the period Apr 23 to Mar 24, showing details of authorized E-waste vendor is attached as Annexure 5**
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.	Complied. The Occupancy Certificate has been obtained for MLCP and same will be taken in to consideration for remaining buildings. Copy of Occupancy certificate for MLCP is attached as **Annexure 6.**
III.	This Environmental Clearance is issued subject to obtaining NOC from Forestry & Wildlife angle including clearance from the standing committee of the National Board for Wildlife as if applicable & this environment clearance does not necessarily implies that Forestry & Wildlife clearance granted to the project which will be considered separately on merit.	Not Applicable. As per MoEF&CC notification dated 14th October 2021, Eco sensitive zone (ESZ) of Thane Creek Flamingo Sanctuary (TCFS) has been published and the project site falls outside the notified ESZ of TCFS.
IV.	PP has to abide by the conditions stipulated by SEAC& SEIAA.	Complied. All the applicable conditions granted under the Environment Clearance granted by SEIAA are compiled and half yearly compliance report is being submitted to all the regulatory authorities regularly. The last Compliance report for the period Oct 23 to Apr 24 was submitted on 28th May 2024. Copy attached as **Annexure 7.**
V.	The height, Construction built up area of proposed	Complied

S.N.	Conditions	Compliance Status
Specific Conditions:		
	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 to 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.	Construction of MLCP has been carried out inline to the Occupancy certificate granted, Copy of the same is attached as **Annexure 6.**
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.	Complied "Consent to Establish" was obtained in Jan 2014 from MPCB, which has been renewed vide dated 21/09/2022 and it is valid till 20/09/2027. Copy of the same is attached as **Annexure 8.** Subsequently CTO for MLCP was obtained with its earlier validity till 30.10.2021, and same was renewed vide order dated Operate No – CAC-CELL/UAN.No.0000138070/CR/2208001592 dated 31.08.2022, valid till 31.08.2026. Copy of the same is attached as **Annexure 8A.** Same will be taken into consideration for the rest of the buildings.
VII.	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	Agreed to Comply The said compliance conditions will be taken into consideration during 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.	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.

S.N.	Conditions	Compliance Status
Specific Conditions:		
IX.	The solid waste generated should be properly collected and segregated. Dry/ inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	Complied. MIAL follows 5 R principle of waste management (Reduce, Reuse, Recycle Reprocess and Recover) to attain ZWL status. MIAL has implemented a standard operating process for collection, segregation, storage, and disposal of waste. **Annexure 9- Standard Operating Procedure for Waste Management at CSMIA** **Annexure 9A -Waste Segregation at Airport**
X.	Disposal of muck during construction phase should 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.	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.
XI.	Arrangement shall be made that wastewater and storm water do not get mixed.	Complied Wastewater generated is being carried to 4 MLD STP for further treatment and reuse for horticulture purposes. Storm water generated is routed through Storm water drainage developed as a part of CSMIA. Copy attached as **Annexure 13.**
XII.	All the topsoil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.
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.	Agreed to Comply. The said compliance conditions will be taken into consideration during the construction phase.
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.	Complied. Green area has been developed inline to Airport Contextual plan, considering Wildlife hazard. **Annexure 10- Grid Map with Landscape**

S.N.	Conditions	Compliance Status
Specific Conditions:		
		Annexure 10A- Landscape Images
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.	Agreed to comply
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.	Agreed to Comply. The said compliance conditions will be taken into consideration during the construction phase.
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.	Agreed to Comply. The said compliance conditions will be taken into consideration during the construction phase.
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.	Agreed to Comply. The said compliance conditions will be taken into consideration during the construction phase.
XIX.	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	Complied Diesel required for operating DG sets are stored in Underground tanks and approval from concerned authority is being taken. Copy of PESO License for Diesel Storage is attached as **Annexure 11.**
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	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.

S.N.	Conditions	Compliance Status
Specific Conditions:		
	should be operated only during non-peak hours.	
XXI.	Ambient noise levels should conform to residential standards both during day and night.	Complied. At CSMIA, noise monitoring is being carried out at 10 locations by MOEF & NABL accredited lab. All the results have been observed to be within standards. **Annexure 12 - Environmental Monitoring Reports**
XXII.	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.	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.
XXIII.	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 27'" August 2003. (The above condition is applicable only if the project site is located within the I00Km of Thermal Power Stations).	Complied As applicable, Fly Ash Notification, amended till date, will be taken in to consideration for development of remaining buildings.
XXIV.	Ready mixed concrete must be used in building construction.	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.
XXV.	Storm water control and its re-use as per CGWB and BIS standards for various applications	Complied. Storm water management system has been developed focusing on rainwater harvesting by means of (1) RWH storage tank (2) Ground water Recharging pits. Rainwater Collected in storage tank is being used for domestic purposes.

S.N.	Conditions	Compliance Status
Specific Conditions:		
		Layout showing Storm water drainage along with Rainwater harvesting is attached as **Annexure 13**
XXVI.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Agreed to Comply The said compliance conditions will be taken into consideration during the construction phase.
XXVII.	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Not applicable
XXVIII.	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 discharged 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 discharged 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.	Complied. MIAL has installed state of the art STP of 04 MLD capacity to treat wastewater generated. Wastewater generated is 100% recycled and Recycled water is being analyzed by MoEF & NABL accredited laboratory and all results are observed to be within limits. Treated water is being reused for Horticulture. Environment monitoring Reports for treated water is attached as **Annexure 12** For STP Details of CSMIA**, Annexure 17**
XXIX.	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.	Complied Water is being sourced through CIDCO. An occupancy certificate has been obtained from the local authority for MLCP and same will be taken into consideration for remaining buildings.

S.N.	Conditions	Compliance Status
Specific Conditions:		
XXX.	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Agreed to Comply. Based on feasibility, dual plumbing system will be implemented for development of remaining buildings, for separation of grey and black water.
XXXI.	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.	Complied Following Water Conservation systems have been implemented at MLCP Water less urinals, Water reducer taps etc. Further, the same will be taken into consideration for the remaining 3 buildings. Photographs showing Water conservations system installed at MLCP is attached as **Annexure 14**
XXXII.	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.	Agreed to Comply The said compliance condition will be taken into consideration for development of the remaining buildings.
XXXIII.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.	Agreed to Comply The said compliance condition will be taken into consideration for development of remaining buildings.
XXXIV.	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	Complied CFL/TFL is used for illumination at the MLCP building. Rooftop solar power of capacity 268 kWp has also been installed. Energy conservation measures will be taken into consideration for remaining buildings. Photographs showing energy conservation measures installed at MLCP is attached as **Annexure 15**.

S.N.	Conditions	Compliance Status
Specific Conditions:		
	streetlights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.	
XXXV.	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.	Complied DG set has been installed in MLCP as part of backup power for elevators and common areas. The stack height has been maintained as per safety norms. MIAL have obtained CTO from MPCB **Annexure 8A- Consent to Operate.** **Annexure 16- DG Enclosures and Stack.**
XXXVI.	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.	Complied At CSMIA, noise monitoring is being carried out at 10 locations by MOEF & NABL accredited lab. All the results have been observed to be within standards. **Annexure 12 - Environmental Monitoring Reports**
XXXVII.	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.	Agreed to Comply The MLCP is constructed for ensuring internalized parking to prevent traffic congestion in public spaces. The capacity of Multi-Layer Car Parking (MLCP) Parking is ~900 number of vehicles. The said compliance condition will be taken into consideration for development of remaining 3 buildings.
XXXVIII.	Opaque wall should meet prescriptive requirement as	Agreed to Comply

S.N.	Conditions	Compliance Status
Specific Conditions:		
	per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-airconditioned spaces by use of appropriate thermal insulation material to fulfil requirement.	The said compliance condition will be taken into consideration for development of remaining 3 buildings.
XXXIX.	The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Agreed to Comply The said compliance condition will be taken into consideration for development of the remaining 3 buildings.
XL.	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.	Agreed to Comply.
XLI.	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.	Agreed to Comply.
XLII.	Six monthly monitoring reports should be submitted to the Regional Office MoEFCC, Nagpur, with copy to this Department and MPCB.	Complied, Last compliance report for the period Oct 2023 – Mar 2024 was prepared and submitted to all the concerned regulatory authorities on 28.05,2024. **Annexure 7**
XLIII.	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	Complied. MIAL has installed state of the art STP of 04 MLD capacity to treat the wastewater generated. Recycled water is being analyzed by MoEFCC & NABL accredited laboratory and all results are observed to be within limits. Treated water is being reused for Horticulture, purpose. Solid waste management Plan has been implemented by means of adopting 5R principle of Waste Management to attain

S.N.	Conditions	Compliance Status
Specific Conditions:		
	appropriate authority shall be obtained.	Zero Waste to Landfill. All the recyclable waste are sent to the authorized recyclers and food waste is converted to compost by Organic Waste Converter and is being used for horticulture. Green area is maintained across CSMIA inline to Airport Contextual plan. Occupancy Certificate has been obtained from the local authority. **Annexure 6- Occupancy Certificate for MLPC** **Annexure 17- STP details at CSMIA**
XLIV.	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.	Complied. MIAL have set up an OWC for converting food waste into compost, which is being used for horticulture purpose. **Annexure 18 -Organic Waste Converter**
XLV.	Local body should ensure that no Occupation Certification is issued prior to operation of STP/ MSW site etc. with due permission of MPCB.	Complied. Occupancy Certificate has been provided by the local authority.
XLVI.	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.	Complied. Environment Clearance received dated on 31.03.2020. is already informed to the local authority. Compliance report is regularly being submitted to all the related regulatory authority as part of the six-monthly compliance. Covering Letter of last submission attached as **Annexure 7.**
XLVII.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	Agreed to Comply
XLVIII.	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Complied. Organogram of environment management cell is enclosed. **Annexure 19- Organogram of environment management cell.**

S.N.	Conditions	Compliance Status
Specific Conditions:		
XLIX.	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.	Complied. As part spent, implementation of environmental protection measures and EMP, INR of 12.44 Cr, was spent during the period April 24 to September 24. A copy of EMP expenditure is attached. **Annexure 20- Environmental Expenditure**
L.	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	Complied. EC copies are available on Company's website. https://csmia.adaniairports.com/all-reports.aspx>> Environment Compliance reports.
LI.	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.	Complied Compliance reports are regularly submitted to all the related regulatory authorities as part of the six-monthly compliance. Covering Letter of last submission attached as **Annexure 7.**
LII.	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	Complied. EC copies are available on Company's website. https://csmia.adaniairports.com/all-reports.aspx>> Environment Compliance reports.

S.N.	Conditions	Compliance Status
Specific Conditions:		
	put on the website of the Company by the proponent.	
LIII.	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, 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.	Complied. Compliance report is regularly being submitted to the related regulatory authority as part of the six-monthly compliance. Copies are displayed on company website. https://csmia.adaniairports.com/all-reports.aspx>> Environment Compliance reports. Critical pollutant is being monitored and displayed at a convenient location through display board as attached **Annexure 1.**
LIV.	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.	Complied. Compliance report is regularly being submitted to the related regulatory authority as part of the six-monthly compliance. Copy attached annexure. Covering Letter of last submission attached as **Annexure 7.**
LV.	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	Complied. Environment statement is submitted on MPCB portal, Copies are attached. Same is also displayed on company website. **Annexure 21- Environmental Statement Form-V** https://csmia.adaniairports.com/all-reports.aspx>> Environment Compliance reports.

S.N.	Conditions	Compliance Status
Specific Conditions:		
	Regional Offices of MoEFCC by e-mail.	

Environmental Information Display Board


Condition under HazardousWaste-MT/A
Qnty
Recycling

MOU 16/9/15

MUMBAI METRO LINE 3

CONSTRUCTION OF 3 METRO STATIONS AT CHHATRAPATI SHIVAJI INTERNATIONAL AIRPORT, MUMBAI

MEMORANDUM OF UNDERSTANDING

Between

MUMBAI METRO RAIL CORPORATION LIMITED ("MMRC")

&

MUMBAI INTERNATIONAL AIRPORT PRIVATE LIMITED ("MIAL")

September, 2015

Contents

For MMRC: _____ For MIAL: _____

महाराष्ट्र MAHARASHTRA ◑ 2015 ◑ NB 500820

मो. भ. सि. मयेकर

Memorandum of Understanding

Mumbai Metro Line 3: Construction of 3 Metro Stations at CSIA.

This **Memorandum of Understanding (MoU)** is made and executed on this the 16th day of September, 2015 at Mumbai, by and between:

MUMBAI METRO RAIL CORPORATION LIMITED, a company incorporated under the Companies Act, 1956 and having its registered office at NAMTTRI Building, Plot No. R-13, E Block, Bandra Kurla Complex, Bandra East, Mumbai-400051 (herein after referred to as "**MMRC**" which expression shall mean and include its successors)

And;

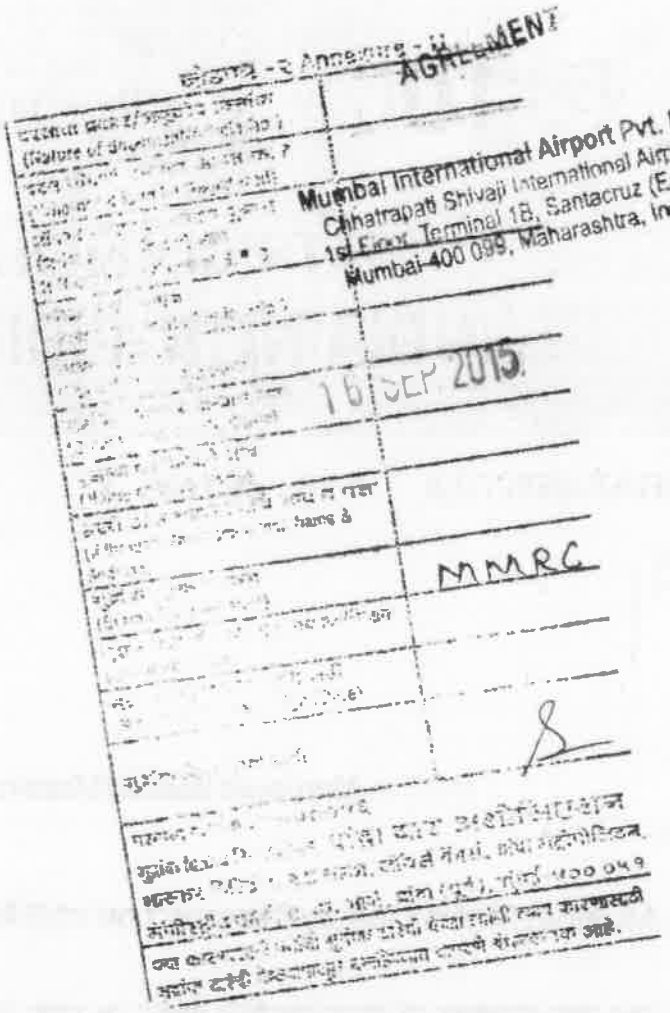
For MMRC

Mumbai Metro Rail Corporation Limited

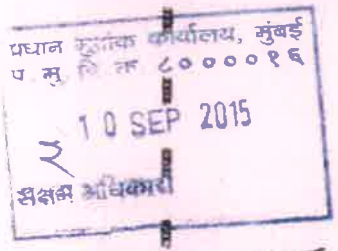
For MIAL:

16 SEP 2015

000181



महाराष्ट्र MAHARASHTRA ◑ 2015 ◑ NB 500821



श्री. भ. सि. मयेकर

MUMBAI INTERNATIONAL AIRPORT PRIVATE LIMITED, a company incorporated under the Companies Act, 1956 and having its registered office at Terminal 1B, Chhatrapati Shivaji International Airport, Santacruz, Mumbai 400099 (hereinafter referred to as **"MIAL"**, which expression shall, unless the context otherwise requires, include its successors and permitted assigns) of the Other Part;

Both, **MMRC** and **MIAL** are individually referred to as a **"Party"** and collectively referred to as the **"Parties"**.

WHEREAS

1. The Government of India (GoI) vide Resolution dated 10th October 2014 has incorporated Mumbai Metro Rail Corporation Limited, a special purpose vehicle for speedy and focused implementation of Metro Projects in Mumbai, inter alia, Metro Rail Line 3.

For MMRC: For MIAL:

16 SEP 2015

000182

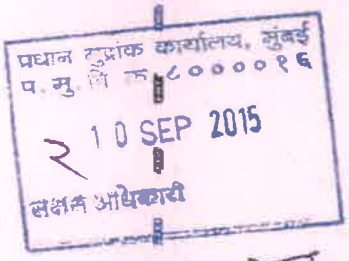
परिशिष्ट - २ Annexure - II

दस्ताचा प्रकार/अनुच्छेद क्रमांक (Nature of document/Article No.)	AGREEMENT
दस्त नोंदणी करणार आहेत का? (Whether it is to be Registered)	
नोंदणी करणार ... [illegible]	Mumbai International Airport Pvt. Ltd. Chhatrapati Shivaji International Airport 1st Floor, Terminal 1B, Santacruz (East), Mumbai-400 099, Maharashtra, India.
[illegible]	
[illegible] (Con...)	
[illegible]	16 SEP 2015
[illegible]	
[illegible]	
[illegible]	MMRC
[illegible]	
[illegible]	
[illegible]	[signature]

[illegible] ... भारतीय स्टेट बँक ... मुंबई ... (पूर्व), मुंबई-४०० ०५१

ज्या कारणासाठी ... मुद्रांक खरेदी केला त्यांनी त्याच कारणासाठी मुद्रांक खरेदी केल्यापासून ... वापरणे बंधनकारक आहे.

महाराष्ट्र MAHARASHTRA ◑ 2015 ◑ NB 500822



मो. भ.सि. मयेकर

2. As a part of Mumbai Metro Plan, MMRC is engaged in construction of Metro Line 3, from Colaba to SEEPZ as approved by the Government of India (GoI) in terms with the Government Order bearing number No. K-14011/I/2002-MRTS dated May 17th, 2007, to be completed and made operational before 2020.

3. As per the Metro Line 3 alignment approved by the GoM, three underground stations at (i) CSIA T1 Terminal Forecourt, (ii) Sahar Road and (iii) CSIA T2 Terminal Forecourt will be located within CSIA Land.

4. AAI has granted MIAL the exclusive right and authority, during the term of OMDA (including any renewal thereof), to operate, maintain, develop, design, construct, upgrade, modernize, finance and manage Chhatrapati Shivaji International Airport, Mumbai ("**CSIA**" or the "**Airport**") in terms

For MMRC:

For MIAL:

16 SEP 2015

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AGREEMENT

Mumbai International Airport Pvt. Ltd.
Chhatrapati Shivaji International Airport
1st Floor, Terminal 1B, Santacruz (East),
Mumbai-400 099, Maharashtra, India.

16 SEP 2015

MMRC

of Operation, Management and Development Agreement dated April 4, 2006 (the "**OMDA**"). They have also executed Lease Deed dated April 26th, 2006 ("**Lease Deed**") by which the entire Airport land, as described therein have been demised to MIAL by AAI.

5. MMRC and MIAL, understand and acknowledge that Metro Line 3 from Colaba to SEEPZ via CSIA, is a key project for the city of Mumbai as well as CSIA, for airport connectivity to CSIA.

6. MMRC will undertake the development, design, construction, operation and maintenance of Metro Line 3, including three stations within CSIA site area i.e. CSIA T1 Terminal Forecourt Station, Sahar Road Station and CSIA T2 Terminal Forecourt Station (collectively "**Metro Stations**").

7. For the purpose of construction of three Metro Stations at CSIA (as defined herein below), Parties herein, have agreed to co-operate with each other and arrived at an understanding as set out below.

NOW THEREFORE, in consideration of mutual promises, representations and warranties, covenants which the Parties agree and accept to be good and valid consideration, the Parties agree to the following terms and conditions.

1. DEFINITIONS AND INTERPRETATION

1.1. Definitions

In this MoU, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

1.1.1. "**AAI**" shall mean the Airports Authority of India, as constituted under the Airports Authority of India Act, 1994;

1.1.2. "**AERA**" means Airports Economic Regulatory Authority constituted under Airports Economic Regulatory Authority Act, 2008;

1.1.3. "**Affiliate**" means, with respect to any Party, any other entity that, directly or indirectly;

a. controls such Party ;
b Is controlled by such Party;
c. Is controlled by the same person who, directly or indirectly, controls such Party.

1.1.4. "**Airport**" means the Chhatrapati Shivaji International Airport (CSIA), as located on the Airport Site.

For MMRC: _____

For MIAL: _____

1.1.5. **"Airport Site"** shall mean the underlying land forming part of the Demised Premises as defined in OMDA and Lease Deed.

1.1.6. **"Airport Metro Facilities"** shall be all works and facilities of Metro Line 3 including at three Metro Stations at CSIA, but not limited to tangible assets such as civil works and systems (including metro stations, tunnels, ventilation shafts and all fixed installation related to Metro Line 3 excluding rolling stock etc), as erected, installed and operational and other facilities forming part of the Metro Line 3 within CSIA Land.

1.1.7. **"Applicable Law"** means all applicable laws, bye-laws, rules, regulations, orders, Government Circulars, ordinances, protocols, codes, guidelines, policies, notices, directions, judgments, decrees or other requirements or official directive of any Governmental Authority or person acting under the authority of any Government Authority, whether in effect on the date hereof or thereafter.

1.1.8. **"Applicable Permits"** means all clearances, permits, authorizations, consents and approvals required to be obtained or maintained under Applicable Laws in connection with the design, engineering, financing, procurement, construction, operation and maintenance of the Metro Line 3 during the subsistence of this MOU.

1.1.9. **"Arbitration Act"** means the Arbitration and Conciliation Act, 1996 and shall include amendments to or any re-enactment thereof as in force from time to time.

1.1.10. **"COD"** or **"Commercial Operations Date"** means July 31, 2020 or thereafter, by which the commercial operations shall have commenced at the Metro Line 3

1.1.11. **"Concessionaire"** means the agency selected by MIAL for carrying out Reserved Activities in Metro Stations.

1.1.12. **"Confidential Information"** shall have the meaning ascribed to the term in Clause 12.8.

1.1.13. **"Contractor"** means the agency / agencies with whom MMRC enters into a contract for construction of Package 6 of Metro Line 3 or part thereof.

1.1.14. **"Contribution"** shall mean a maximum amount of Rs.777 Crores to be paid by MIAL to MMRC in the manner and schedule contained in Clause 2.1.

1.1.15. "Construction Period" means the period from the date of the commencement of construction and until the COD.

1.1.16. **"CSIA Land"** shall mean the land area of CSIA under use for the Metro Line 3 and Metro Stations within the Airport Site, as described in the plan annexed as **Annexure "C"** hereto.

1.1.17. **"Dispute"** shall mean and include any dispute, difference, question or controversy between the Parties arising out of, in connection with or in relation to this MoU.

1.1.18 **"Drawings and Documents"** shall mean all drawings (Concept, Detailed, Schematic, Good For Construction, As Built Drawings), reports, documents, approvals in respect of three (3) Metro Stations as well as related Metro Line 3 Project documents, in particular, ei-

For MMRC: _____

For MIAL: _____

ther prepared by MMRC or their appointed Consultants / Contractors or prepared by MIAL or their appointed Consultants / Contractors or obtained from any other agency / Statutory Body (containing information / approvals pertaining to Metro Line 3 Project) for information, review, approval, execution and record purposes (including, but not limited to, all layout drawings, report, detailed obstruction and approval drawings).

1.1.19. **"Effective Date"** shall mean the date, as stated hereinbefore, on which this MoU has been signed by the Parties.

1.1.20. **"Encumbrances"** means any encumbrances such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to Metro Line 3, physical encumbrances, slums and encroachments on the site where applicable herein.

1.1.21. **"Facilities"** shall mean tangible assets such as civil works and systems (including metro stations, tunnels and all fixed installation related to Metro Line 3), as erected, installed and operational including other facilities forming part of the Metro Line 3.

1.1.22. **"Force Majeure"** shall mean occurrence of an event like war, natural calamity, change in Law / Ordinance prohibiting activity under this MOU or any such event which for reasons other than on account of either Party to this MoU renders the performance of the MoU impossible.

1.1.23. **"GoI"** means the Government of India.

1.1.24. **"GoM"** means the Government of Maharashtra.

1.1.25. **"Good Industry Practice"** means those practices, methods, techniques, standards, skills, diligence and prudence which are generally and reasonably expected of and accepted internationally, from a reasonably skilled and experienced operator or metro system developer or contractor or consultancy firm engaged in the same type of undertaking as envisaged under this MoU and acting generally in accordance with the provisions of the Metro Railway Construction Act, 1974 and Metro Railway (O&M) Act 2002 and would include good engineering practices in the design, engineering, construction and project management and which would be expected to result in the performance of its obligations by the Contractors, Concessionaires and in the operation and maintenance of the Metro Line 3 in accordance with this MoU, Applicable Laws, Applicable Permits, reliability, safety, environment protection, economy and efficiency considering the nature of the works.

1.1.26. **"Governmental Authority"** means any central, state or local government, or any ministry, directorate, department or subdivision thereof and any person exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government or Law or any other governmental entity, instrumentality, agency, authority, corporation, committee or commission under the direct or indirect control of any such central, state or local government.

For MMRC

For MIAL

1.1.27. **"Hazardous Materials"** means any pollutant, contaminant, solid waste, hydrocarbon product or toxic, flammable, explosive, carcinogenic, corrosive or radioactive substance, emission or material, or any similar substance, emission or material as defined and regulated under or subject to any Applicable Law and its future amendments if any.

1.1.28. **"MoCA"** means Ministry of Civil Aviation, Government of India.

1.1.29. **"Metro Stations"** shall mean the three (3) underground stations at (i) CSIA T1 Terminal Forecourt Station, (ii) Sahar Road Station and (iii) CSIA T2 Terminal Forecourt Station for ingress / egress to / from Metro Line 3 located within the Airport Site / CSIA Land, with all associated utilities, access roads etc.

1.1.30. **"Metro Line 3"** shall mean the proposed fully underground rail based Mass Rapid Transit System from Colaba to SEEPZ, Mumbai via BKC and Chhatrapati Shivaji International Airport (CSIA), as described in detail in **Annexure A** hereto.

1.1.31. **"MoU"** means this Memorandum of Understanding signed between MMRC and MIAL.

1.1.32. **"MoUD"** means Ministry of Urban Development, Government of India.

1.1.33. **"O&M"** means the operation and maintenance of the Metro Line 3 during the Operations Period and includes but is not limited to the function of collection and appropriation of tariff and performance of other related services incidental thereto, in accordance with the Applicable Laws.

1.1.34. **"OMDA"** means Operation, Management and Development Agreement dated April 4, 2006 (the "OMDA") entered into between Airports Authority of India ("**AAI**") and MIAL.

1.1.35. **"Operations Period"** means the period commencing from the COD and expiring on the Termination Date.

1.1.36. **"Over Site Development"** means MIAL's Commercial development on Metro Stations Plots inclusive of superstructure and basement construction, over Metro Stations.

1.1.37. **"Package 6"** means Mumbai Metro Line 3 contract package MM3-CBS-UGC-06 framed by MMRC in consultation with MIAL, consisting three underground stations at (i) T1 Terminal Forecourt, (ii) Sahar Road and (iii) CSIA T2 Terminal Forecourt, at CSIA and associated tunnels and all related works including enabling works, for part of Metro Line 3.

1.1.38. **"Project"** means the design, development, financing, procurement, construction, erection, installation, operation and maintenance of the Metro Line 3, including but not limited to the following;

a. All basic civil structures, including tunnelling, stations and casing including all enabling works;
b. All systems;
c. Rolling stock; and
d. Undertaking all other activities and provision of related services as may be re-

For MMRC:

For MIAL:

quired to complete the construction and undertake the operation and maintenance of the Metro Line 3.

1.1.39 **"Recipient"** shall have the meaning ascribed to the term in Clause 12.8.

1.1.40. **"Reserved Activities"** shall mean following activities at the locations inside the Metro Stations and within limits, as specified in this MoU:

a. Advertising activities,
b. Development activities,
c. Retail activities,
d. Routing services / utilities / provisions,
e. Connecting metro stations to commercial and other buildings/areas, and
f. All other commercial activities in whatsoever form and manner.

1.1.41. **"Steering Committee"** shall have the meaning ascribed to it in Section 2.7.

1.1.42. **"Taxes"** means all taxes, duties, cess, imposts, fees, levies (including without limitation all Indian central and state government taxes, octroi, excise duties, customs duties, sales tax, value added tax, countervailing duties, works contract tax, service tax and building construction workers' cess etc, imposed from time to time under the laws of India.

1.1.43. **"Term"** means the period from the Effective Date until the Termination Date.

1.1.44. **"Termination Date"** means the date on which this MoU expires pursuant to the provisions of this MoU or is terminated by mutual consent.

1.1.45. **"Works"** shall mean all the work necessary for the design, development, funding, financing, procurement and construction of structures, including Metro Stations, other civil structures including but not limited to tunnelling and casing, utilities, access roads, underpass, skywalks, service plants, services and enabling works in relation to the Project.

1.2. Interpretation

In this MoU, unless the context otherwise requires:

1.2.1. The singular includes the plural and vice versa and any word or expression defined in the singular shall have a corresponding meaning if used in the plural and vice versa. A reference to any gender includes other gender.

1.2.2. A reference to any document, agreement, deed or other instrument (including, without limitation, references to this MoU), includes a reference to any document, agreement, deed or other specified instrument as may be varied, amended, supplemented, restated, novated or replaced, from time to time.

1.2.3. A reference to any Law includes any amendment, modification, re-enactment or change in interpretation or applicability of such Law and a reference to any statutory body or authority includes a reference to any successor as to such of its functions as are relevant

For MMRC:

For MIAL:

in the context in which the statutory body or authority was referred to.

1.2.4. Where a word or phrase has a defined meaning, any other part of speech or grammatical form in respect of the word or phrase has a corresponding meaning.

1.2.5. References to a particular article, clause, paragraph, sub-paragraph, section, schedule or annexure shall, except where the context requires otherwise, be a reference to that article, clause, paragraph, sub-paragraph, section, schedule or annexure in or to this MoU, as the case may be.

1.2.6. The words 'include' and 'including' are to be construed without limitation. The terms 'herein', 'hereto', 'hereunder', and words of similar purport refer to this MoU as a whole. Where a wider construction is possible, the words 'other' and 'otherwise' shall not be construed ejusdem generis with any foregoing words.

1.2.7. In this MoU, headings are for the convenience of reference only and are not intended as complete or accurate descriptions of the content thereof and shall not be used to interpret the provisions of this MoU.

1.2.8. A reference to any document, agreement, deed or other instrument (including, without limitation, references to this MoU), means a reference to such document, agreement, deed or other instrument and to all appendices, annexes, schedules and parts attached or relatable thereto, all of which shall form an integral part of such document, agreement, deed or other instrument as the case may be.

1.2.9. Where in this MoU, provision is made for the giving or issue of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificates or determination shall be in writing. Any obligation not to do something shall be deemed to include an obligation not to suffer, permit or cause that thing to be done. An obligation to do something shall be deemed to include an obligation to cause that thing to be done.

1.2.10. A right conferred by this MoU to do any act or thing shall be capable of being exercised from time to time.

1.2.11. A reference to a 'month' shall mean a calendar month and a reference to 'day' shall mean a calendar day of twenty four consecutive hours beginning at 00.00 hrs (midnight) and ending at 24.00 hrs (midnight) as referred to in local time at Mumbai, India unless otherwise specified. The rule of interpretation which requires that an MoU be interpreted against the person or Party drafting it shall have no application in the case of this MoU.

1.2.12. If any provision in this Clause 1 is a substantive provision conferring rights or imposing obligations on any Party, effect shall be given to it as if it were a substantive provision in the body of this MoU.

For MMRC: _____

For MIAL: _____

1.2.13. References to a person (or to a word importing a person) shall be construed so as to include:

i. Individual, firm, partnership, trust, joint venture, company, corporation, body corporate, unincorporated body, association, organization, any government, or state or any agency of a government or state, or any local or municipal authority or a body constituted through Statute or other Governmental Authority (whether or not in each case having separate legal personality);
ii. That person's successors in title and assigns or transferees permitted in accordance with the terms of this MoU; and
iii. References to a person's representatives shall be to its officers, Personnel, legal or other professional advisers, subcontractors, agents, attorneys and other duly authorized representatives.

1.2.14. Unless otherwise specified, date or the time periods within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends or the date falls and by extending the period to the following Business Day if the last day of such period is not a Business Day.

2. OBJECT AND CONSIDERATION

2.1. In consideration of MMRC undertaking and implementing the development, design, construction, installation, commission of Metro Line 3, in particular three (3) Metro Stations at CSIA & other Facilities those within CSIA Land, inclusive of operations and maintenance of the entire system in particular, the Metro Stations, which shall be beneficial to MIAL, MIAL has agreed to contribute a total of Rs. 777 crores (**"Contribution"**) towards the cost of construction of the three metro stations within CSIA Land including Electro- Mechanical (E&M) System costs in the manner set out herein below, subject to the terms and conditions contained herein which MMRC and MIAL both agree and accept. The payment of the said Rs. 777 (Seven Hundred and Seventy Seven) Crores shall be made by MIAL as under:

(i) Rs.518 crores towards funding of costs of two metro stations i.e. CSIA T1 Terminal Forecourt Station and CSIA T2 Terminal Forecourt Station through levy and collection of Development Fee amounting to Rs.518 Crores and the same shall be subject to determination and approval of AERA;

(ii) Rs 259 crores (being Rs.200 Crores + Rs.59 Crores as detailed in the schedule below) towards funding costs of Sahar Road Metro Station which amount to be paid by MIAL to MMRC.

The detailed process for payment of abovementioned 777 crores shall be as proposed hereinafter.

2.1.1. Both the parties agree that this contribution shall be made by MIAL, subject to AERA's approval to AAI / MIAL for funding of cost of two metro stations through levy

For MMRC: For MIAL:

and collection of Development Fee. Agreed Schedule of payments is as under:

Period (by 31st March each year)	Cost of T1 & T2 Forecourt Stations (Subject to and as per AERA's Approval for Development Fees) (in crores)	Sahar Road Station (In crores)
Year 1 :2015-16	Rs 30.00	Rs 25.00
Year 2 :2016-17	Rs 70.00	Rs 35.00
Year 3 :2017-18	Rs 75.00	Rs 35.00
Year 4 :2018-19	Rs 75.00	Rs 35.00
Year 5 :2019-20	Rs 75.00	Rs 35.00
Year 6 :2020-21	Rs 75.00	Rs 35.00
Total Amount	**Rs. 400.00**	**Rs. 200.00**
E&M (Electro-Mechanical) Systems Cost		
Year : 2021-22	Rs. 59.00	
Year: 2022-23	Rs. 59.00	
Year: 2023-24	Rs. 59.00	
Total Amount	**Rs. 177.00**	

Above Schedule is based on assumption that construction work shall commence in the year 2015-16 and shall be completed by the year 2020-21. At any point of time, if there is delay in construction schedule as envisaged by MMRC or there is stoppage of work, MIAL shall approach MMRC for modifying above schedule mutually.

In case aggregate DF collection during the 1st to 6th year is more than Rs. 400 crores MIAL shall pay such excess amount to MMRC (the excess amount collected each year). In such case payment towards Rs. 177 crores will be adjusted accordingly.

Payment to consultants made by MIAL as per clause 2.10 shall be adjusted from payment to be made to MMRC by MIAL. Such payment to the consultant will be assumed to be equitably distributed for all the three stations.

2.1.2. MIAL's contribution shall be towards the cost of complete architectural and structural building works & finishes including building services like Environmental Control System (ECS), power supply, lighting, fire detection and suppression system etc.; for Metro Stations only and shall exclude all systems related to metro rail operations like Rail Systems, Tunnelling, Electrical & Mechanical related to operations, Traction, Track Work, Signalling & Telecommunications, Platform Screen Doors (PSD), Rolling Stock, Tunnel Ventilation, HV Power Supply & Railway Electrification, Auxiliary Substations including Supervisory Control and Data Acquisition (SCADA), Automatic Fare Collection etc.

2.1.3. The design and construction schedule of the Metro Stations at CSIA shall be finalised

For MMRC

For MIAL

by MMRC in consultation with MIAL taking into consideration MIAL's requirement, the airport development needs and complex site conditions, access and the developments proposed above the three metro stations. However, it shall be ensured that all construction works adhere to the station standards being adopted by MMRC for the Metro Line 3 Project and are compatible with the system proposed by MMRC. The acceptance, technical certification of the work and co-ordination for changes required at micro level, for CSIA Stations, station-tunnel interface and interface with other system contractors shall be done by MMRC.

2.1.4. All Metro Stations access works, associated underpass, skywalks required for station access for Package 6, at CSIA shall be taken up by MMRC in a separate package, as being done at other metro stations, and utility diversions for Metro Line 3 tunnel work shall be done within CSIA land with consent of MIAL, as it may impact critical operating facilities at the airport. Such consent will not be withheld by MIAL unreasonably.

2.1.5. If any deviations from the specifications of MIAL which are agreed with MMRC are noticed, MIAL shall immediately notify MMRC of such deviations and thereupon MMRC shall take necessary corrective measure.

2.1.6. Contractor appointed by MMRC shall provide Detail Design & GFC documents for the Metro Stations at CSIA to MMRC. MMRC will provide these details for MIAL's concurrence, which shall not be withheld except in case of deviation from agreed terms. MMRC shall then give final approval of these documents and the Contractor shall construct the Metro Stations in accordance with the same.

2.1.7. MMRC will allot to MIAL commercial rights over maximum 500 sq mt area in each of the three (3) Metro Stations, and MIAL shall have no objection for availing of remaining areas required for O&M and any other activities including commercial by MMRC

2.1.8. MMRC shall through MMRDA or otherwise, ensure required clearance and removal of encroachments on the CSIA Land required for the project for the implementation of Package 6, construction of staging areas / construction yard, etc. including for enabling works. MIAL shall extend cooperation in the matter.

2.1.9. Parties shall constitute a Steering Committee to ensure smooth execution of the project in CSIA land and to enable MIAL's participation in decision making for design and project implementation for three Metro Stations at CSIA.

2.2. In order to enable MMRC to carry-out the O&M activities in relation to the Project, in accordance with the terms and conditions contained herein, MIAL hereby agrees to grant to MMRC during the Term, which MMRC agrees and accepts, the right to enter the CSIA Land and use the facilities solely to undertake the Project in accordance with the term and conditions contained herein and after prior written approval of MIAL.

2.3. The Parties further agree that MMRC shall have full rights, during the Term and in accordance to the terms and conditions of this MoU:

For MMRC: For MIAL:

2.3.1. To undertake any of its rights under this MoU on its own or enter into contracts or grant concessions, subject to Clause 4; and

2.3.2. To demand and collect appropriate charges from the users of the Metro Line 3 in accordance with the Applicable Laws.

2.4. Notwithstanding anything contained herein and subject to Clause 2.1.9, MIAL shall have unequivocal and unqualified rights and entitlement to undertake, carry out, license, assign and transfer or to deal with in any other manner the Reserved Activities in the Airport Metro Facilities, in retails areas in Metro Stations, superstructure & basements above Metro Stations, and on the CSIA Land of Metro Station plots, without affecting security and operations of Metro. Metro Station related utility ducts, vent shafts, access systems shall be permitted by MIAL to pass through the basement / areas above Metro Stations.

2.5. Notwithstanding anything contained in this MoU and subject to clause 2.1.1, the total amount to be incurred by MIAL, shall not exceed the Contribution, and is subject to AERA's approval to MIAL for funding of cost of two metro stations through levy and collection of Development Fee amounting to Rs.518 Crores.

2.6. **Acceptance of CSIA Land:**

2.6.1. For the purposes of this MoU, MMRC has and shall be deemed to have obtained for itself all necessary information as could be reasonably obtained as to the risks, contingencies and all other circumstances which may influence or affect its rights and obligations hereunder and its other rights and obligations under or pursuant to this MoU.

2.6.2. MMRC acknowledges and hereby accepts the inputs, cost, time, resources, risks and hazards associated with the performance of its obligations hereunder and hereby agrees that MIAL shall not be liable for the same in any manner whatsoever to MMRC, other than as expressly provided in this MoU.

2.6.3. MMRC shall, at its own cost and expenses, lay and maintain utilities as required for Metro Line 3 & the three (3) Metro Stations at CSIA on CSIA Land upon obtaining prior written approval from MIAL, which shall not be with held unreasonably, and MMRC shall at its own cost operate the same. Provided that MMRC shall provide MIAL, in writing, for information and record purposes, the layout for the proposed utilities and such other details, as may be required by MIAL in this regard. MMRC agrees that MIAL may at its reasonable discretion cross and / or overlay the utilities laid down by MMRC, including but not limited for the purposes of performing the Reserved Activities provided that this will not affect construction and operation of Metro in any way,

2.6.4. MIAL shall furnish to MMRC all the available information it has in connection with the site conditions, encroachments if any, in respect of or over the land or any other information in relation to the said land which will have effect on the Metro rail work.

For MMRC:

For MIAL:

2.6.5. Deemed Knowledge and Disclaimer

Subject to the provisions of this MoU, MMRC shall be fully and exclusively responsible for, and shall bear the financial, technical, commercial, legal and other risks in relation to the Metro Line 3 regardless of whatever risks, contingencies, circumstances and/or hazards may be encountered (foreseen or not foreseen) and notwithstanding any change(s) in any of such risks, contingencies, circumstances and/or hazards on exceptional grounds or otherwise and whether foreseen or not foreseen and MMRC shall not have any right whether express or implied to bring any claim against, or to recover any compensation or other amount from MIAL in respect of the Metro Line 3 in particular, the Metro Stations other than for those matters in respect of which express provision is made in this MoU.

2.7. Steering Committee:

2.7.1. In order to ensure smooth and efficient implementation of the Project, Parties shall establish a Steering Committee (**"Steering Committee"**) for Package 6 for smooth execution of the project. This Steering Committee shall be chaired by MD, MMRC, and shall have two (2) representatives each of MIAL and MMRC. The decisions taken by the Steering Committee shall be binding on the Parties. The meetings, quorum, decisional process etc. of the Steering Committee shall be decided by the Steering Committee.

2.7.2. The fundamental rules, regulations and procedures of the Steering Committee have been set out in **Annexure B** hereto. Steering Committee shall enable MIAL's participation in decision making for design and project implementation for the three Metro Stations at CSIA.

2.8. Approval of AAI, MoCA and AERA

2.8.1 MIAL shall obtain approvals from AAI, MoCA and AERA, wherever necessary, for T1 Terminal Forecourt Station and T2 Terminal Forecourt Station.

2.8.2 MMRC shall arrange to obtain formal approval of AAI for underground right of way and utilization of CSIA Land for Metro 3 Project (including Metro Stations) for the proposed Metro Line 3 Project passing through CSIA site area. MIAL shall provide necessary assistance in this regard. MMRC shall obtain all required approvals / NOCs from Central, State and local agencies, including from Bureau of Civil Aviation Security (BCAS) etc.

2.9. MMRC agrees and acknowledges that they shall use Metro Stations within CSIA only for right of way as contemplated hereunder and shall have no ownership rights of any kind over any part(s) of the CSIA Land including but not limited to the three (3) Metro Stations and Metro Line 3 alignment within CSIA. It is clarified that MIAL shall have absolute right to develop the land area over the Metro Stations (Over Site Development on Metro Stations,

For MMRC: For MIAL:

including basements and superstructures) MIAL shall ensure that development of the Land above Metro Stations does not cause any safety concerns and or adversely affect the works / maintenance and operation of metro railway. For this purpose, the development proposals and plans will be shared with MMRC. MMRC shall provide NOC for MIAL's Over Site Development on Metro Station plots (for basements and superstructure).

2.10. MMRC acknowledges and hereby accepts that any work done by MIAL for the preparation of Concept Plans, design and construction co-ordination through its Consultant/s shall be a part of MIAL's contribution for the said Metro Stations (3 stations) subject to clause 2.1 and shall be part of MMRC's cost for the Project. For the avoidance of doubt it is clarified that MIAL's total contribution of Rs.777 Crores (Rupees Seven Hundred and Seventy Seven crores only) shall include cost of such works undertaken by MIAL. It is further clarified that the aforesaid MIAL's contribution shall include cost of Concept Plans, & construction co-ordination through Consultants being undertaken by MIAL, and be incurred / spent directly by MIAL from time to time from the contribution referred to above. Any amount spent as above shall be taken into consideration while computing amount as stipulated under Clause 2.1 .

2.11. MIAL's participation in the Project shall be limited to maximum of Rs. 777 (Rupees Seven Hundred and Seventy Seven) Crores only, till completion of the Project, as provided under Clause 2.1.1, & Clause 2.1.4 and any additional amount required for enabling works or otherwise beyond this amount, shall be contributed by MMRC. MIAL's payment of Rs 518 Crores out of Rs 777 Crores is subject to AERA's approval to MIAL for funding of cost of two metro stations through levy and collection of Development Fee amounting to Rs.518 Crores.

2.12. Subject to Clause 2.1.1 & Clause 2.1.4, if MIAL fails to pay the contribution as per agreed terms under this MoU, except when AERA does not approve funding of two metro stations through Development Fees amounting to Rs.518 Crores, MIAL shall pay interest at the rate of 10% pa during the delayed period. Until MIAL pays its entire contribution with interest accrued as may be, MIAL shall not be entitled to use 500 Sq mt of station area for commercial rights provided for in Clause 2.1.7. If MMRC executes any incidental works (excluding proposed structural system with loading and structural requirements of MIAL's Over-site developments as given in MIAL's Concept Plan details / MMRC Tender Documents. i.e. foundations, columns, beams, slabs, retaining walls, etc within the foot print of Metro Station development) which are necessary for MIAL's other commercial/development works, MIAL shall make such additional payments to MMRC. The extent and cost of such works shall be decided and recommended by the Steering Committee.

2.13. MMRC hereby agree that in the event it fails to provide complete operational connectivity (i.e. from Colaba to SEEPZ) to Metro Stations at CSIA, as part of Project or terminates the Project fully or partly or abandons the Project for any reason whatsoever, except for Force Majeure reasons, MMRC shall reimburse within one year without interest thereon from the date of such failure the amounts paid by MIAL under this MoU. MMRC shall forthwith va-

For MMRC: _____

For MIAL: _____

cate the site and shall have no rights whatsoever on any work or part thereof executed/completed as on date of such failure

3. REPRESENTATIONS AND WARRANTIES

3.1. Representations and Warranties

Each Party hereby represents and warrants to the other Party that on the Effective Date:

i. It is duly organized and validly existing under the laws of India and has been in continuous existence since incorporation;

ii. It has full power and authority to execute, deliver and perform its obligations under this MoU and to carry out the transactions contemplated hereby;

iii. It has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorize the execution, delivery and performance of this MoU.

iv. The obligations of each Party under this MoU shall be legally valid, binding and enforceable obligations against each other in accordance with the terms hereof;

v. It has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Governmental Agency which may result in any impairment of its ability to perform its obligations and duties under this MoU; and

vi. It has complied with all Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have any unfavourable effect on its financial condition or its ability to perform its obligations and duties under this MoU;

3.2. Disclosure:

In the event at any time after the date hereof, any event or circumstance comes to the attention of either Party that renders any of its above mentioned representations or warranties untrue or incorrect, then such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect or adversely affect or release any obligation of either Party under this MoU.

4. OBLIGATIONS AND COVENANTS

4.1. Covenants of MMRC

4.1.1. MMRC shall at its own cost and expense observe, undertake, comply with and perform, in addition to and not in derogation of its obligations elsewhere set out in this MoU, the following:

i. Shall take into consideration the Domestic & International peak hour re-

For MMRC: _____

For MIAL: _____

quirements at CSIA, to schedule frequency of train operations to CSIA, particularly at night and early morning, to facilitate airport passengers and employees.

ii. Undertake and implement the Project and operate and maintain Metro Line 3 in particular, the Metro Stations through selected operator or by itself, so as to facilitate the connectivity of the Airport from Colaba to SEEPZ, in accordance with Applicable Laws and Good Industry Practice,

iii. Make sure that no Encumbrances created in respect of the Airport Metro Facilities and Project area of Metro Line 3 within CSIA.

iv. Remove promptly from CSIA Land all surplus construction machinery and materials (including, without limitation, hazardous materials and waste water), rubbish and other debris (including without limitation accident debris) and keep CSIA Land in a neat and clean condition during work under the Project;

v. Comply with Applicable Laws, including those under the Metro Railway (Construction of Works) Act, 1978 and Metro Railway (Operations & Maintenance) Act, 2002.

vi. Ensure security of all the three (3) Metro Stations, of all areas of Metro Stations, including access to Metro Stations through Metro Operator / designated security agency.

4.1.2. In case MMRC performs corrective action and/or repairs, rebuilds and / or replaces any part of the facilities pursuant to its obligations under this Contract, the part so corrected, repaired, rebuilt or replaced will be at the cost and expense of MMRC, without there being any recourse against MIAL. In the event of MMRC causing any damage to a facility, the same shall be rectified by MMRC in the shortest possible time.

4.2. Covenants of MIAL

4.2.1. MIAL shall undertake, comply with and perform, in addition to and not in derogation of its obligations elsewhere set out in this MoU, the following:

I. MIAL shall provide all the Concept Plans and Construction Details related to Architectural building works & finishes including Building Services like ECS, Power Supply, Lighting, Fire detection and Suppression system etc and its revisions if necessary, to MMRC to ensure that no delay is caused on such account in implementation of the Project.

II. MIAL shall pay Rs 777 Crores of its contribution as per Clause 2.1.1 to MMRC in instalments as stipulated therein.

III. MIAL shall prepare its Concept Plans of Metro Stations in conformity with the construction/ operation/ maintenance activity performed by MMRC and shall provide the same to MMRC.

IV. Any proposal for additional specifications / requirements of MIAL shall be routed through the Steering Committee.

V. MIAL shall endeavour to take all the possible measures/ assistance to facilitate the Project work by the schedule COD.

VI. MIAL shall provide Right of Way for the Metro Station land area to MMRC, as

For MMRC: _____ For MIAL: _____

per Schedule agreed in the letter of MIAL addressed to MMRC enclosed at Annexure E.

4.2.2. MIAL will use commercial rights over upto 500 Sq mt area at each of the three (3) CSIA Metro Stations subject to Clause 2.1.7 and Clause 2.4.

4.2.3. MIAL declares that it has not entered into any agreement, deal or transaction etc. in respect of the land coming under the Project which may have the effect of prohibiting any activity under this MOU.

5. CONSTRUCTION, OPERATION & MANAGEMENT

5.1. Implementation of the Project

5.1.1. Metro Line 3 Works for three (3) proposed Metro Stations on CSIA Land:

i. MMRC shall be responsible for the necessary design, development, financing, (including MIAL contribution of Rs 777 Crores) procurement, construction, erection, installation, operation and maintenance of the Metro Line 3 inclusive of the three (3) proposed Metro Stations on CSIA Land, and undertake the Project and all other activities, services and facilities that are required for the Metro Line 3, in accordance with the terms and conditions contained herein. MIAL in no way whatsoever, be liable for any claims or damages, on account of construction of Metro Line 3 by MMRC, except if specifically provided in this MoU. Claims if any, including third party claims at all times shall be the responsibility of MMRC

ii. MIAL and MMRC hereby agree that MMRC shall undertake the development, design, construction, operation and maintenance of the Metro Line 3, inclusive of Metro Stations (i.e. CSIA T1 Terminal Forecourt, Sahar Road and CSIA T2 Terminal Forecourt) for which concept Drawings shall be provided by MIAL. MMRC appointed Contractor shall provide Detail Design & GFC documents for all the 3 Stations at CSIA, and shall construct the Stations, all operational areas related to Metro Railway operations for execution of works including those related to rail system packages and Operations & Maintenance on terms and conditions set forth in this MoU. The columns of CSIA Metro Stations shall be constructed as per loading requirements for MIAL's Over Site Development, inclusive of superstructure and basements. The loadings and structural requirements for the same shall be as per details provided by MIAL.

iii. MMRC shall undertake necessary tasks to clear the site area at its own cost / Metro 3 project cost and use it for the Project on a temporary basis. No workers' accommodation / transit camps shall be allowed in this area. MMRC shall approach MIAL in writing for permission which shall not be unreasonably refused for use of CSIA Land for such enabling works on case to case basis. MIAL shall grant necessary permissions without delay to facilitate timely completion of the Project.

iv. MMRC/ its Contractors shall make their own arrangement for all temporary services for the Construction (water, power, any other utility). MMRC to ensure a clause in the Tender Document / Contract for EPC Contractors to make their own arrangement for temporary services for the Construction (such as water, power, any other utility).

v Muck/Soil disposal shall be cleared by MMRC contractor. Storage of soil shall not

For MMRC: _____ For MIAL: _____

be permitted on CSIA Land.

5.1.2. MIAL shall, be responsible for preparation of the concept plans, specifications of proposed three (3) Metro Stations on CSIA Land.

5.1.3. Subject to the provisions contained herein MMRC shall undertake necessary measures to clear the site area of construction yard as part of Project Cost and use it for the project on a temporary basis. MMRC shall ensure required slum clearance for the implementation of Package 6.

5.2. Applicable Permits, Taxes and Other Considerations:

5.2.1. MMRC will ensure that all materials, equipment, machinery, etc. installed and/or used in relation to the Project including the construction or repair of the Metro Line 3 will be of sound and merchantable quality, that all workmanship shall be in accordance with Good Industry Practices applicable at the time of installation, construction or repair and that each part of the construction will be fit for the purpose for which it is required.

5.2.2. MMRC will ensure that due regard will be given to safety precautions, fire protection, security, transportation, delivery of goods, materials, plant and equipment, and control of pollution.

5.2.3. MMRC shall pay all applicable and due Tax, fees (including any license fees) and other charges, dues, levies, cess, assessments or outgoings payable in respect of the Project. In operation stage, MIAL shall pay applicable tax, fees, etc only on commercial areas allotted to MIAL under cl. 2.1.7. at each station.

5.3. Maintenance of Work Sites:

5.3.1. MMRC shall keep CSIA Land and all construction thereupon reasonably clean and otherwise free from accumulation of waste materials and other debris resulting from performance of the Works. MMRC shall remove from CSIA Land all waste materials and other debris, as well as all tools, construction equipment, machinery and surplus material and shall return CSIA Land area in a neat, clean and usable condition.

5.3.2. MMRC shall take all measures to maintain the health and safety of persons and to prevent injury to persons or damage to any property on the Airport Site, or in the vicinity thereof, as a result of MMRC performing the works, including the protection of the existing facilities or facilities or work in progress by MMRC or others in compliance with all Applicable Laws and in accordance with terms and conditions contained in various Applicable Permits.

5.4. Protection of Existing Utilities:

5.4.1. MMRC shall protect from damage all existing structures, improvements or utilities

For MMRC: For MIAL:

at or near or under CSIA Land, and shall repair and restore any damage thereto resulting from MMRC's execution of their works, any such repair or restoration to be at MMRC's cost and expense. MMRC shall perform the Works in respect of the Project in such a way as not to disrupt or interfere with MIAL's existing works and Airport development and operational activities. MMRC shall at its own risks and costs, but with prior written approval of MIAL, which shall not be unreasonably withheld, carry out the relocation of the utilities, underneath the Airport Site, as required for the purposes of the Project.

5.4.2. MMRC shall be responsible at its cost and expense for the handling, treatment, storage, removal, remediation, avoidance, or other appropriate action (if any), with respect to Hazardous Materials present at, in or under, or migrating and/or emanating to or from the Airport Site that were brought or caused to be brought on the Airport Site by any act or omission of MMRC or any of its Contractor pursuant to the performance of the Facilities or resulted from any act and/ or omission of MMRC and/ or any Contractor including the payment of any fines and penalties resulting from acts and / or omissions with respect to handling such Hazardous Materials.

5.5. Archaeological and Antiquities Remains:

All archaeological or antiquities remains, including fossils, coins, articles of value or antiquity and structures and other remains or items of geological or archaeological interest discovered on CSIA Land, shall be placed under the care and authority of the MIAL and, to the extent permitted by Applicable Law, shall be the property of MIAL. MMRC shall take all precautions to prevent its staff, labour and other persons from removing or damaging any archaeological or antiquities remains.

5.6. Security Regulations:

MMRC shall comply with the security provisions and procedures in respect of the Airport Metro Facilities as enforced by MIAL, or required or mandated by any other relevant Governmental Authority or Applicable Permits. All costs in this regard shall be part of Project cost.

5.7. Co-operation with MIAL, consultants and contractors:

MMRC shall co-operate with MIAL's consultants, contractors and MIAL's personnel , as well as any workmen of any legally constituted public authority who may be working on or near CSIA Land in respect of any work assigned under this MoU.

5.8. MMRC's Responsibility for access to site:

MMRC shall obtain and maintain all rights of way, easements and such other access rights outside the Airport Site necessary and required for it, its Contractors and suppliers and such other personnel (including personnel transporting goods or supplies) to be used in connection with the facilities to access CSIA Land. MMRC shall ensure that such access roads to CSIA Land shall not be exclusive to MMRC's use and access, but shall be available for use by MIAL and such other persons as shall need to access the CSIA Land in connection with the Facili-

For MMRC: _____ For MIAL: _____

ties or this MoU subject to the condition that it should not affect the Project in any way. The cost of providing the access shall be part of Metro 3 Project cost.

5.9. Design and Engineering:

5.9.1. MMRC shall design and engineer the Airport Metro Facilities to be created on CSIA Land including the three (3) Metro Stations. MIAL shall prepare and provide concept plans of the Metro Stations at CSIA to MMRC. The Detail Designs and Construction Drawings shall be developed through MMRC appointed consultants and by Design & Build Contractor as per the concept plans.

5.9.2. MMRC shall provide to MIAL, in respect of alignment/viaduct, tunnelling, scheduling and other related aspects of the alignment, for co-ordination, review, information and record purposes, such detailed drawings (including, but not limited to, all layout drawings, detailed construction drawings and approval drawings) (collectively, the "Drawings and Documents") as may be reasonably required by MIAL.

5.9.3. MMRC shall provide schedule & roll out of the Metro Line 3 project with key milestones, particularly for Package 5, 6 and 7, i.e. package related to CSIA Metro Stations, and surrounding packages and revisions if any, as they may impact CSIA's Airport development schedule. MMRC shall accommodate and address MIAL's requirement on the same.

5.9.4. MMRC agrees and undertakes that it shall complete all testing and commissioning related activities in respect of the Project at no additional cost (other than the contribution under Clause 2.1) or expense to MIAL for MMRC's Scope of Work.

5.9.5. MMRC further agrees and undertakes that it is entirely MMRC's responsibility to obtain a certificate from the Commissioner of Metro Railway, upon successful passing of performance test and commissioning of the Project for entire Metro Line 3 including related works carried out for the Stations on CSIA Land.

5.10. Implementation of O&M works:

MMRC or its nominated agency shall operate and maintain all areas related to the CSIA Metro Stations at site level, ground level, concourse level, platform level, underpasses, skywalks if any, and all access including all services, from ground to Metro Stations including E&M system passing through parking areas. MMRC shall operate, maintain and undertake all the O&M activities in relation to the Metro Line 3 at its risk, cost and responsibility by itself, or through its Contractors and if required, modify, repair or otherwise make improvements to the Metro Line 3 in compliance with all the requirements set forth in this MoU, Good Industry Practice, Applicable Laws and Applicable Permits:

i). As far as possible Ensuring required frequency of train operations to CSIA, particularly at night and early morning, as per CSIA Domestic and International peak hour requirements

For MMRC: _____ For MIAL: _____

to facilitate Airport Passengers, visitors and Employees within its operational exigencies.

5.11. Sub-contracts and Sub-concessions

5.11.1. MMRC shall indemnify MIAL in respect of the contractors appointed by MMRC. In the event, any contract or concession granted in relation to the Metro Line 3 by MMRC is not co-terminus with this MoU. MMRC shall be liable and responsible to such counter-parties of MMRC and keep MIAL indemnified.

5.12. Completion Assurance

MMRC shall take all possible measure to commission the Project on or before the COD.

6. COMMERCIAL DEVELOPMENT RIGHTS

6.1. Retention of Commercial Development Rights:

The Parties hereby expressly agree that MMRC will allot to MIAL commercial rights over an area upto 500 sq mt at each of the three (3) CSIA Metro Stations, further MIAL shall have absolute right to develop the land area of all three Metro Stations as given in Clause 2.9.

6.2. Facilities at Metro Stations:

6.2.1. Security facilities at Metro Stations Security screening and checking of Metro Line 3 passengers / other users entering the concourse, from external access points shall be the responsibility of MMRC or MMRC appointed operator. MMRC shall ensure all necessary equipments and security arrangements for the same as per law. Cost of any systems or measures required for the same shall be part of the Project and / or cost of Metro Line 3 operations.

6.2.2. FIDS Interface for Airport Passengers. MMRC acknowledge and agrees that MIAL is entitled to install FIDS equipment in prominent locations in all Metro Stations as mutually agreed by MMRC and MIAL for providing aircraft arrival /departure information for the convenience of Airport passengers.

6.2.3. MMRC / Metro operator shall be solely responsible for maintenance, upkeep all other facilities and services as may be required for efficient operation of Metro Stations and for the entire area handed over to MMRC / Metro operator.

7. INSURANCE

7.1. Insurance:

MMRC and MIAL shall mutually keep each other harmless against any claims or third party liability with regard to their respective agencies involved in construction activities during the Construction Period and the Operation Period.

For MMRC _____ For MIAL: _____

7.2. Waiver of Subrogation:

All insurance policies supplied by the MMRC and MIAL shall include a waiver of any right of subrogation of the insurers there under against, inter alia, both the parties and its assigns, subsidiaries, Affiliates, employees, insurers and underwriters and of any right of the insurers of any set-off or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under any such policy.

8. TERM, EXPIRY & TRANSFER

8.1. Term and Expiry

8.1.1. This MoU shall be co-terminus with OMDA.

8.1.2. In the event that the term of the OMDA is extended from 2nd May 2036 for a further period, MMRC shall extend the Term hereof by a written notice for an equivalent additional term on the same terms and conditions as contained herein.

9. LIABILITY AND INDEMNIFICATION

9.1. Liability in respect of Metro Line 3:

MMRC shall be solely responsible for the construction, operation and management of the Metro Line 3 and the Project including 3 (three) Metro Stations at CSIA, and shall have the overall responsibility and liability with respect to Metro Line 3. In no event shall MIAL have any liability or be subject to any claim for damages arising out of the construction operation and maintenance of Metro Line 3 and the Project.

9.2. Indemnity:

MMRC and MIAL hereby agree and undertake that from the Effective Date and during the Term and thereafter, they shall indemnify and keep indemnified and otherwise save harmless, both the parties, its agents and employees, from and against all claims, demands made against and / or loss caused and / or damages suffered and/or cost charges / expenses incurred or put to and/or penalty levied and / or any claim due to injury to or death of any person and / or loss or damage caused or suffered to property owned or belonging to, both the parties, its agents and employees or third party as a result of any acts, deeds or thing done or omitted to be done by, both the parties or as a result of failure on the part of both the parties to perform any of its obligations under this MoU or on the both the parties committing breach of any of the terms and conditions of this MoU or on the failure of the both the parties to perform any of its statutory duty and / or obligations or failure or negligence on the part of both the parties to comply with any statutory provisions or as a consequence of any notice, show cause notice, action, suit or proceedings, given, initiated, filed or commenced by any third party or Government Authority or as result of any failure or negligence or default of both the parties or the Contractor(s) (including but not limited to contractor(s) and / or sub-contractors and / or invitees as the case may be), in connection with or arising out of this MoU and / or arising out of or in connection with both the parties use and occupation of Airport Site and / or Metro Line 3.

For MMRC: _____

For MIAL: _____

9.3. It is expressly understood by the Parties that this Clause shall survive the termination or expiry hereof.

10. OMDA PROVISIONS

10.1. OMDA Requirements

10.1.1. MMRC hereby expressly understands and acknowledges that the right of MIAL to enter into this MoU with MMRC is subject to the provisions of the OMDA and MMRC further agrees that this MOU is subject to the provisions of OMDA.

10.1.2. Upon the termination or expiry of the OMDA howsoever caused, all the rights and obligations of MIAL under this MoU shall stand transferred to and vested in AAI, in terms of the OMDA.

10.1.3. Under the OMDA, AAI has step in rights in the event of an emergency (as communicated by GOI, in writing through AAI or otherwise, at its sole discretion), wherein it can temporarily assume control of the Airport in place of MIAL. During the period in which AAI assumes control of the Airport, AAI shall be deemed to be MIAL for the purpose of discharging rights and the obligations of MIAL. The duties and obligations of MIAL shall be suspended during such period and AAI shall operate and maintain the Airport in accordance with the provisions of this MoU.

10.1.4. Under the provisions of the OMDA, AAI has a right, upon termination/ suspension of the OMDA, to acquire the land, buildings, structures and other assets at the Airport, including the rights and obligations under this MoU in the manner provided under the OMDA.

10.1.5. In the event of AAI exercising, during the term of this MoU, the right as referred to in Clause 10.1.1 and 10.1.2 above, for any reason whatsoever, including termination due to breach of any agreement by MIAL, all such land, buildings, structures and/or other assets at the Airport (including the rights and obligations) shall forthwith stand transferred/reverted to AAI or to such other person as AAI may nominate in this regard, without there being any requirement of further actions of the parties.

10.1.6. MMRC undertakes to transfer to AAI or such other person as AAI may nominate, without any protest or demur, all such assets, in respect of which AAI exercises the rights as referred to in Clause 10.1.3 above under the OMDA. It is clarified that, subject to approval of MoCA and AAI, the asset of MMRC created in CSIA land for Metro Line 3 shall remain as property of MMRC and shall not be subject to transfer to AAI.

10.1.7. MMRC agrees and acknowledges that in the event AAI exercises rights, as referred to in this Clause 10, the methodology for valuation of such assets for this purpose, shall be as per the relevant provisions of OMDA, subject to MMRC's legal rights under applicable laws.

For MMRC: _____ For MIAL: _____

10.1.8. Further, MMRC recognizes the right of AAI under OMDA to acquire the Transfer Assets and the Non-Transfer Assets (as defined under OMDA), including the reversion of land, and expressly undertakes that it shall transfer the relevant Transfer Asset and/or Non-Transfer Asset (including the reversion of the underlying land), as the case may be, upon the exercise of such right by AAI. MMRC shall ensure that similar provision is incorporated in all contracts executed by MMRC in relation to this Project at the Airport Site (if relevant Subject to confirmation from perusal of the agreement between AAI and MIAL).

10.1.9. Shareholding details: MMRC represents and warrants that its shareholding details are as set forth in Annexure D of this MoU and hereby consents to the submission of such details to AAI.

11. DISPUTE RESOLUTION PROCEDURE

11.1. Disputes:

Amicable Settlement - The Parties shall use their reasonable endeavours to settle any Dispute amicably. If a Dispute is not resolved within ninety (90) days after a written notice of a Dispute by one Party to the other Party then the provisions of Clause 11.2 shall apply.

i. If a Dispute arises between the Parties under this MoU, any Party may notify the other party for amicable resolution of the Dispute.

ii. On receipt of such notice the other party shall inform the Party giving a notice a suitable date for a meeting to resolve the Dispute, which shall not be later than 90 days from the date of the notice.

iii. The meeting shall be attended by authorised representatives of MMRC and MIAL. If necessary the Parties may decide to hold such further meetings as may be deemed necessary.

iv. If the amicable resolution has not taken place within ninety (90) days from the date of the notice, the amicable resolution will be treated as failed there upon provisions of Clause 11.2 shall apply to such dispute.

11.2. Arbitration :

11.2.1. All Disputes arising under this MoU, that remain unresolved pursuant to Clause 11.1, shall be referred to a tribunal comprising three (3) arbitrators under the Arbitration and Conciliation Act, 1996. Each Party to the arbitration shall appoint one arbitrator each and the two arbitrators thus appointed shall choose the third arbitrator who will act as a presiding arbitrator of the tribunal (together forming the "Arbitral Tribunal").

For MMRC

For MIAL

11.2.2. The decision(s) of the Arbitral Tribunal shall be final and binding on the Parties.

11.2.3. The venue of arbitration shall be Mumbai.

11.2.4. This Clause 11.2 shall survive the termination or expiry of this MoU.

11.2.5. The governing law of the arbitration shall be the substantive laws of India.

11.3. Continue performance:

While any Dispute under this MoU is pending, including the commencement and pendency of any Dispute referred to Arbitration, the Parties shall continue to perform all of their respective obligations under this MoU without prejudice to the final determination in accordance with the provisions under this Clause 11.

12. GENERAL

12.1. Amendments :

No amendment or waiver of any provision of this MoU, nor consent to any departure by any of the Parties there from, shall in any event be effective unless the same shall be in writing and signed by the Parties hereto and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which it is given.

12.2. No Waiver; Remedies:

Subject to any express term in this MoU to the contrary, no failure on the part of any Party to exercise, and no delay in exercising, any right, power or privilege hereunder shall operate as a waiver thereof or a consent thereto; nor shall any single or partial exercise of any such right, power or privilege preclude any other of further exercise thereof or the exercise of any other right, power or privilege. The remedies herein provided are cumulative and not exclusive of any remedies provided by applicable law.

12.3. Severance of Terms:

If any provisions of this MoU are declared to be invalid, unenforceable or illegal by any competent arbitral tribunal or court, such invalidity, unenforceability or illegality shall not prejudice or affect the remaining provisions of this MoU which shall continue in full force and effect and in such event, the Parties shall endeavour in good faith to forthwith agree upon a legally enforceable substitute provision as will most closely correspond to the legal and economic contents of the unenforceable provision.

12.4. Language:

All notices, certificates, correspondence or other communications under or in connection with this MoU, any other Project Agreement or the Project shall be in English.

For MMRC: _____ For MIAL: _____

12.5. Notices:

Any notice to be given hereunder shall be in writing and shall either be delivered personally or sent by registered post, facsimile transmission, electronic mail or other means of tele communication in permanent written form. The addresses and numbers for service of notice shall be given to the parties at their respective addresses set forth below:

i. In case of MMRC:

Mr. R. Ramana
Executive Director (Planning), MMRC
Bandra-Kurla-Complex (BKC), Bandra (East),
Mumbai - 400 051.

ii. In case of MIAL:

Mr. R. K. Jain
Chief Executive Officer, MIAL
First Floor, Terminal 1B,
Chhatrapati Shivaji International Airport, Santacruz, Mumbai 400099

Or such other address or facsimile number as may be notified by that Party to any other Party from time to time, and shall be deemed to have been made or delivered ; (i) in the case of any communication made by letter, when delivered by hand, by recognized international courier or by mail (registered, return receipt requested) at that address and (ii) in the case of any communication made by electronic mail or facsimile, when transmitted properly addressed to such mail ID or facsimile number. In case any Party changes its address, communication numbers, or directed attention as set forth above, it shall notify the other Parties in writing prior to the adoption thereof.

12.6. Governing Law :

This MoU shall be governed by and construed in accordance with the laws of India, and Courts in Mumbai shall have exclusive jurisdiction to try any issues arising out of this MOU.

12.7. Original Document:

This MoU is made in two (2) counter parts, each having the same contents and the Parties have read and thoroughly understood the contents hereof and have hereby affixed their respective signatures and seals before witnesses.

12.8. Confidentiality :

For purposes of this MoU, **"Confidential Information"** shall mean all written and/or tangible in-

For MMRC: _____ For MIAL: _____

formation of either of MIAL or MMRC and includes any information which is the property of either Party to this MoU or which otherwise relates to its business, secrets, dealings, transactions or affairs of a Party (in either case **"Owner"**) to the receiving Party (**"Recipient"**) which is confidential, proprietary and/or not generally available to the public. The Parties shall not disclose all or any part of the Confidential Information to any third party, except

i. To its professional advisers and bankers on the undertaking that such professional advisors or bankers shall keep such information confidential, or

ii. If required by law to disclose such Confidential Information.

Notwithstanding the foregoing, information shall not be deemed confidential and the Recipient shall have no obligation with respect to any such information disclosed as above.

12.9. Assignment:

Subject to entitlement of MMRC to enter into a contract for construction / operation and / maintenance of Metro Rail on the basis of Design- Built-Operate, Public Private Partnership, Turnkey or any other or to grant concessions for construction, operation and / maintenance of metro rail, MMRC shall have no right to assign, transfer, mortgage, charge, sub-let, deal with, sub-contract, sub-license or otherwise grant rights in or over all or any rights, all or any of its benefits or all or any of its obligations or liabilities under this MoU or create any other encumbrance upon all or any of its rights hereunder either in full or in part.

12.10. Waiver of Immunity

Both the parties hereby agree that the execution, delivery and performance by it of this MoU constitute private and commercial acts rather than public or governmental acts and accordingly, no immunity from proceedings brought against it or its assets in relation to this MOU shall be claimed on the ground that the execution, delivery and performance by it of this MOU constitute public or governmental acts.

12.11. Change in Law

It is expressly clarified that any event or occurrence after the execution of this MoU that may constitute a 'change in law' or alleged 'change in law' shall not be a ground for any alteration or amendment to any term hereof or of any rights and obligations flowing from this MoU. The rights and obligations hereunder shall not be prejudiced by any event that may constitute a 'change in law' or an analogous event or circumstance.

12.12. Time is of the Essence

Time shall be of the essence of this MoU, both as regards the dates, periods or times of day mentioned and as regards any dates, period or times of day, which may be substituted for them in accordance with this MoU.

For MMRC

For MIAL

12.13 Survival

Clauses 11 and 12 shall continue to bind the Parties notwithstanding the termination or expiry of this MoU.

IN WITNESS WHEREOF, the Parties hereto, acting through their authorized representatives, have caused this Memorandum of Understanding to be signed in their respective names, as of the date first above written.

Mumbai Metro Rail Corporation Limited (MMRC)

Signature: _____

Name: **Mr. R. Ramana**

Designation: **Executive Director (Planning), MMRC**

Mumbai International Airport Private Limited (MIAL)

Signature: _____

Name : **Mr. R.K. Jain**

Designation: **Chief Executive Officer, MIAL**

Witnesses:

1. _____
(R.K. SHARMA)

2. _____
(S.R. Nandargikar)

1. _____
CHANDRAKANT TALDEKHARMA

2. _____
(ASHOK BHARME)

For MMRC: _____

For MIAL: _____

ANNEXURE A

Metro Line 3:

Rail based Mass Rapid Transit System on Colaba-Bandra-SEEPZ Corridor, Mumbai via airport, covering a length of 33.5 km (fully underground) at a completion cost of Rs.23,136 Crores (As approved by GoI), implemented by Mumbai Metro Rail Corporation Limited (MMRC), with 26 total stations under the Legal Framework of the Metro Railways (Construction of Works) Act, 1978, the Railways Act, 1989 and the Metro Railways (Operation and Maintenance), Act, 2002, as amended through the Metro Railways (Amendment) Act, 2009. This line connects with 6 CBDs and CSIA etc. The alignment would have seven interchanges, 3 with Western Railway, one each with Central Railway, Monorail, Metro Line 1 and 2.

Metro Stations at CSIA:

The proposed Metro Line 3 alignment passes through, and serves Chhatrapati Shivaji International Airport (CSIA) site area. In the light of this, Metro Line 3 alignment and stations located within CSIA site area have been prepared as per the needs & requirements of transport connectivity to CSIA and proposed airport development needs The entire Metro Line 3 connecting the city centers (Colaba, BKC) to the airport has been planned as an underground metro line and shall to have three (3) Metro Stations within CSIA site area, one located in the Santacruz Domestic Terminal T1 forecourt, second located in the Sahar International Terminal T2 forecourt to provide access to both domestic and international airport users, and the third located in International Airport Division (IAD) / MIAL Colony in Sahar. The third station is located in IAD colony to provide access to CSIA Cargo Terminal employees / visitors, non aeronautical development related employees / visitors, and residents of NAD, CPWD colonies, gaothans and non CSIA area in Sahar, and the other users of MRTS System. The planned underground Metro Line 3 within CSIA site area is approximately 4.6 km in length.

For MMRC: _____ For MIAL: _____

ANNEXURE B

Steering Committee

Steering Committee shall be constituted between MMRC and MIAL in order to ensure smooth and efficient implementation of the Project. Parties shall establish a Metro Line 3 Steering Committee ("Steering Committee") that will work as a nerve centre (mission control) for all information, processes and decisions on implementation of the Project.

This Steering Committee shall be chaired by MD, MMRC and shall have two (2) each representatives of MIAL and MMRC. The decisions taken by the Steering Committee shall be binding on the Parties. The meetings, quorum, decisional process etc of the Steering Committee shall be decided by the Steering Committee.

Steering Committee shall ensure and enable MIAL's participation in decision making for design and project implementation for Package 6 in general and for the three Metro Stations at CSIA in particular.Steering Committee from time to time shall review the progress of the work being executed by MMRC.

For MMRC: _____

For MIAL: _____

For MMRC:

For MIAL:

ANNEXURE C - DRAWINGS

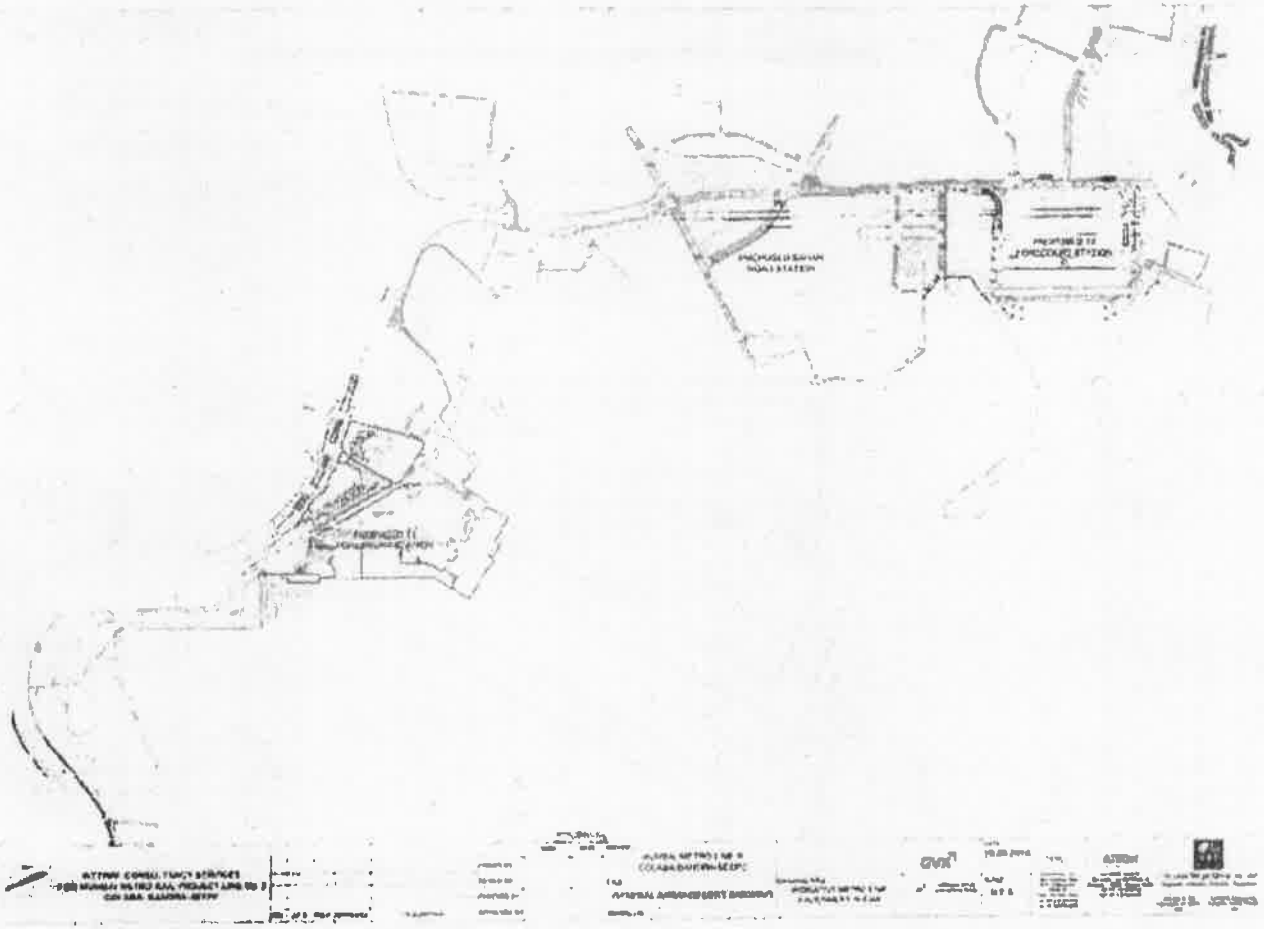


FIGURE 1: INDICATIVE METRO LINE 3 ALIGNMENT IN CSIA

For MMRC:

For MIAL:

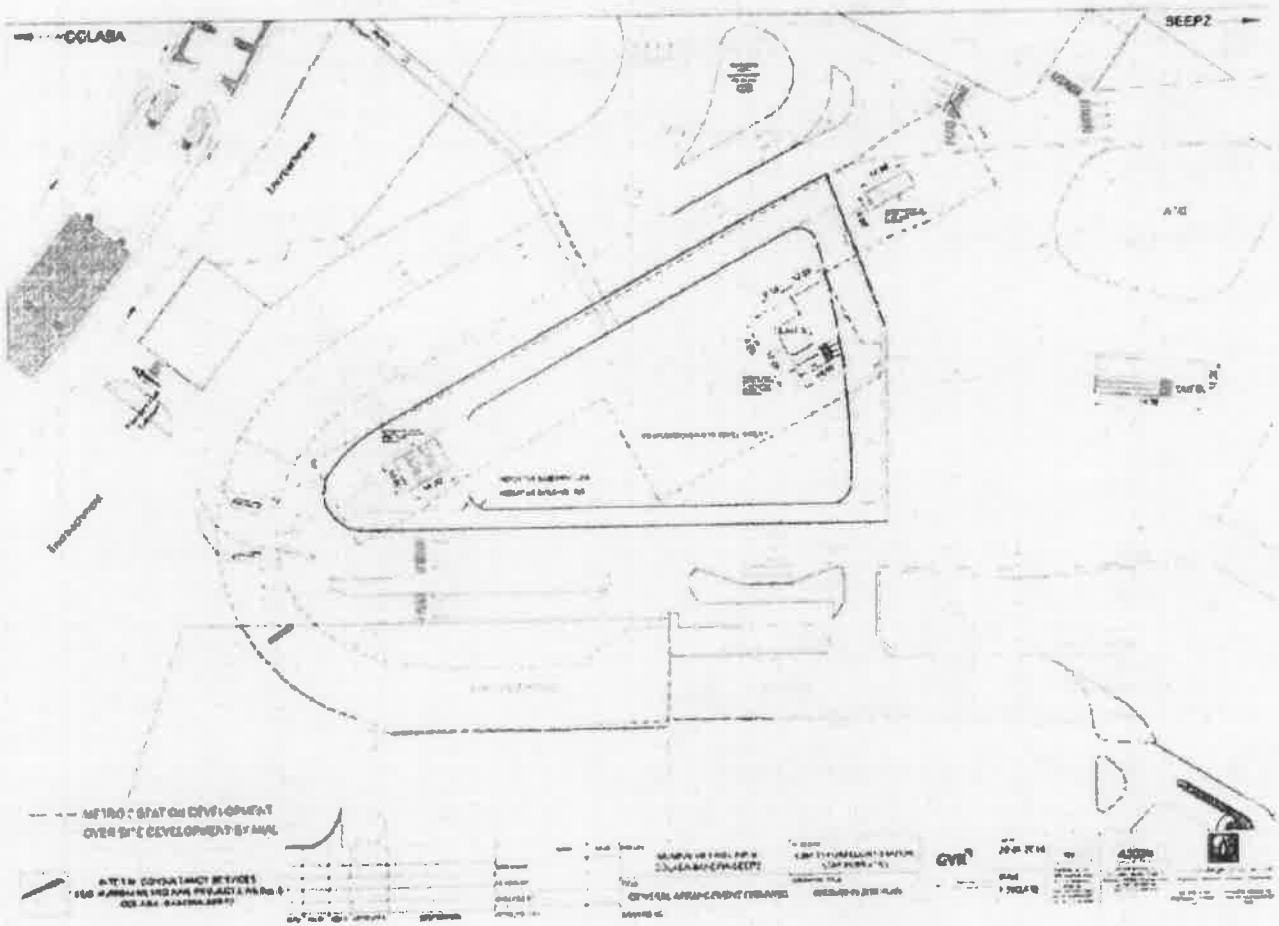


FIGURE 2 INDICATIVE T1 FORECOURT STATION GROUND LEVEL DRAWING

For MMRC:

For MIAL:

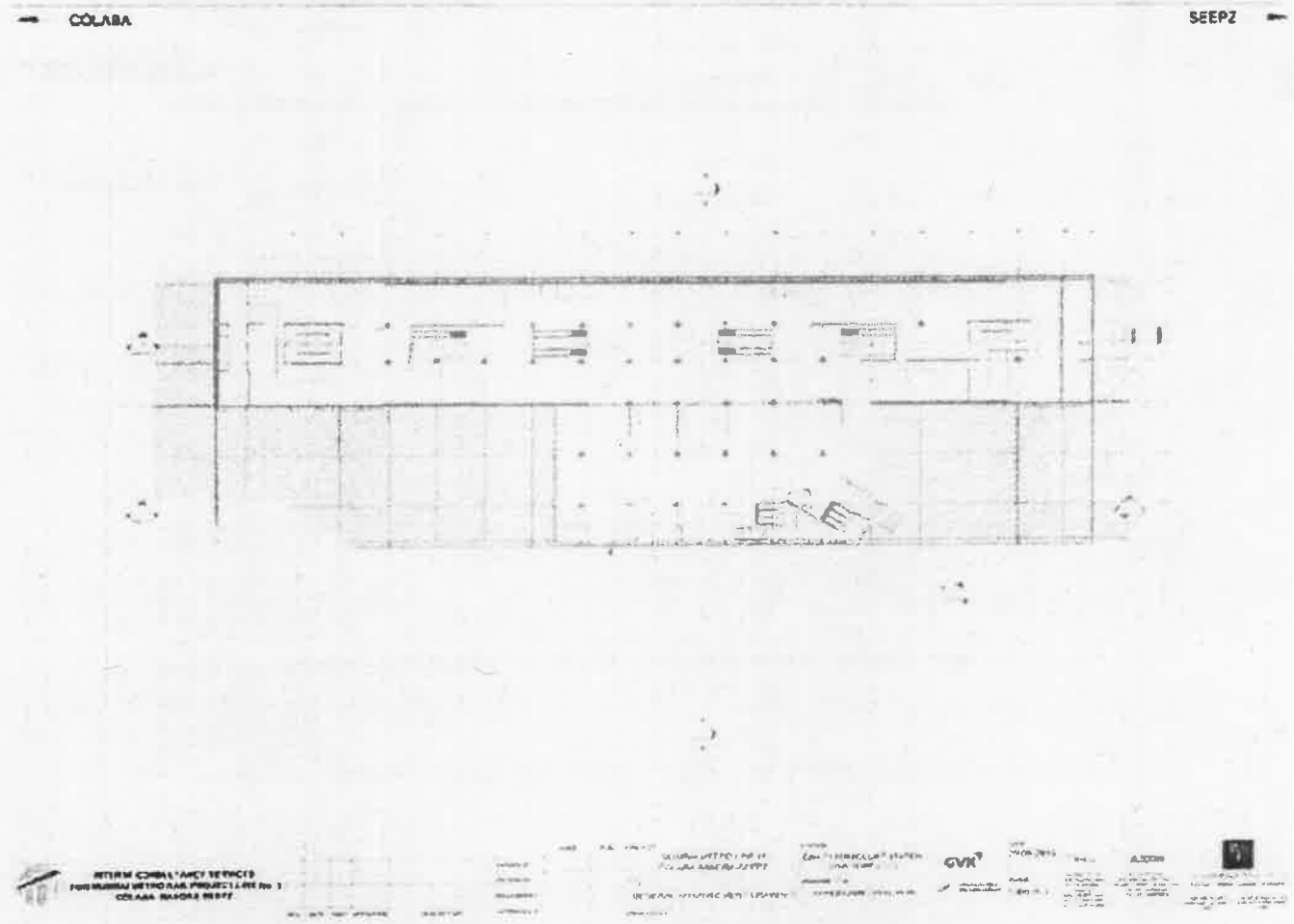


FIGURE 3 INDICATIVE T1 TERMINAL FORECOURT STATION CONCOURSE LEVEL DRAWING

FIGURE 4: INDICATIVE T1 TERMINAL FORECOURT STATION PLATFORM LEVEL DRAWING

For MMRC: _____

For MIAL: _____

MUMBAI INTERNATIONAL AIRPORT PVT. LTD. MUMBAI 400 099.

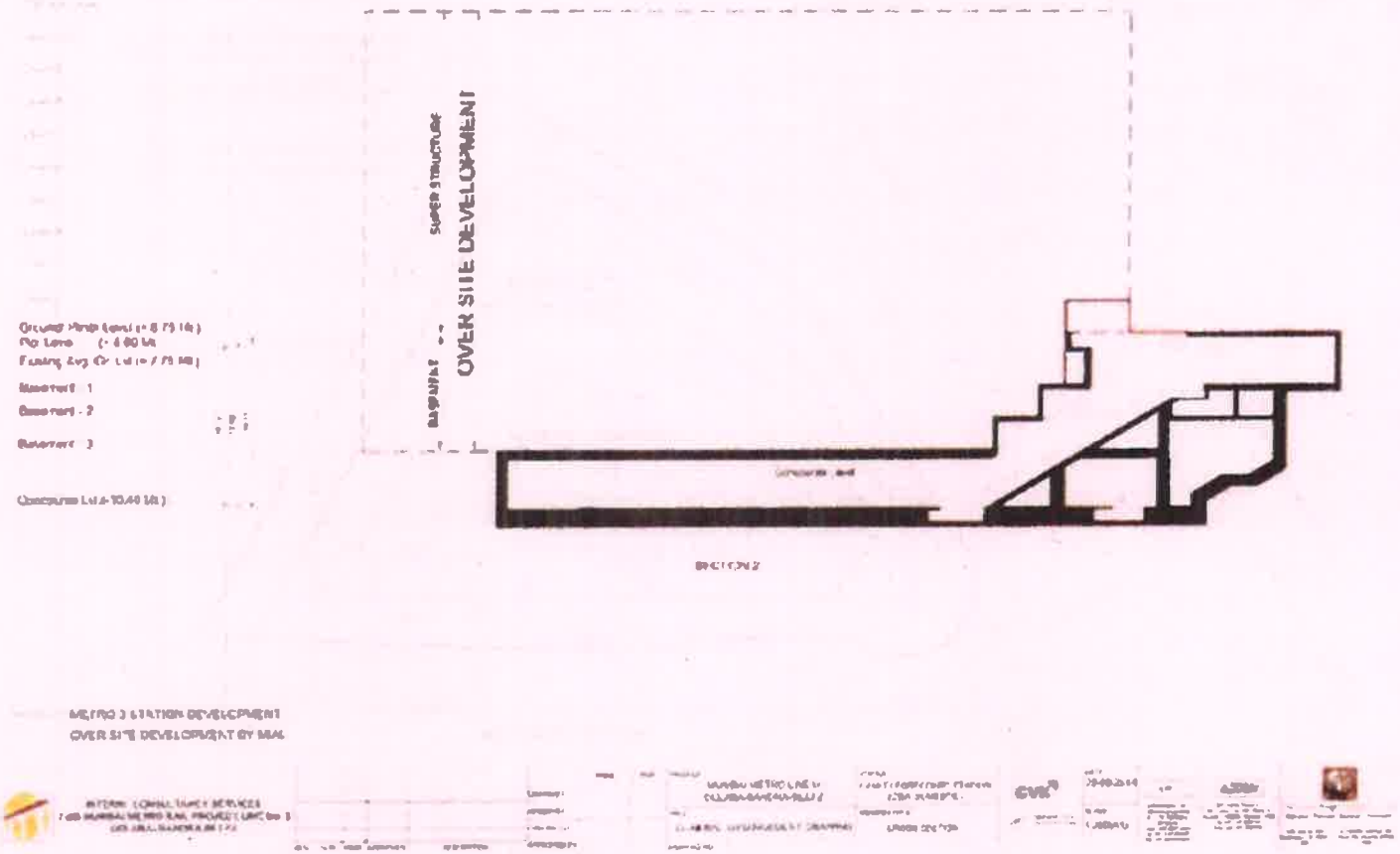


FIGURE 5 INDICATIVE T1 FORECOURT STATION SECTION DRAWING

For MMRC: _____

For MIAL: _____

For MMRC: _____

For MIAL: _____

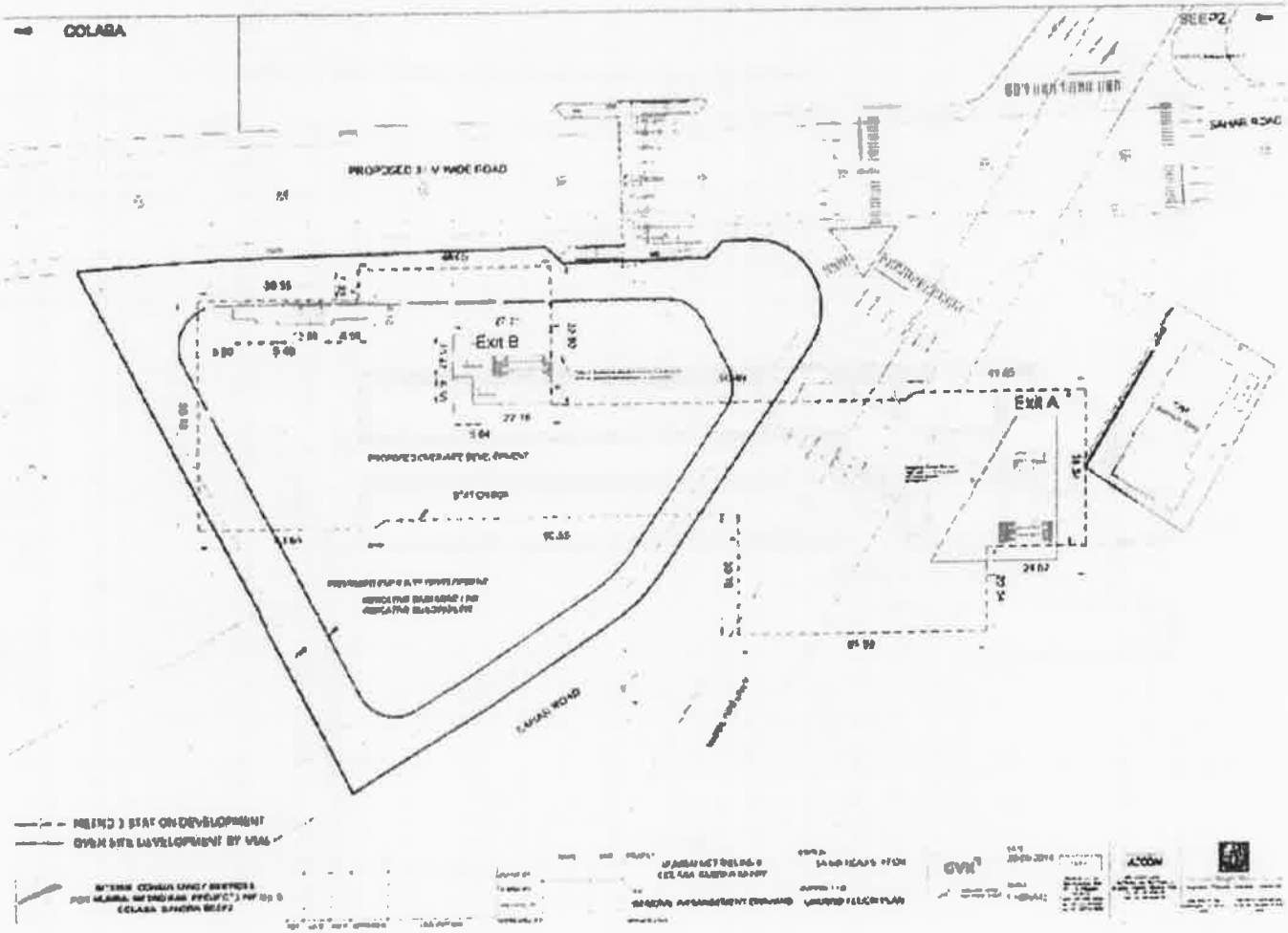


FIGURE 6 INDICATIVE SAHAR ROAD GROUND LEVEL DRAWING

For MMRC: _____

For MIAL: _____

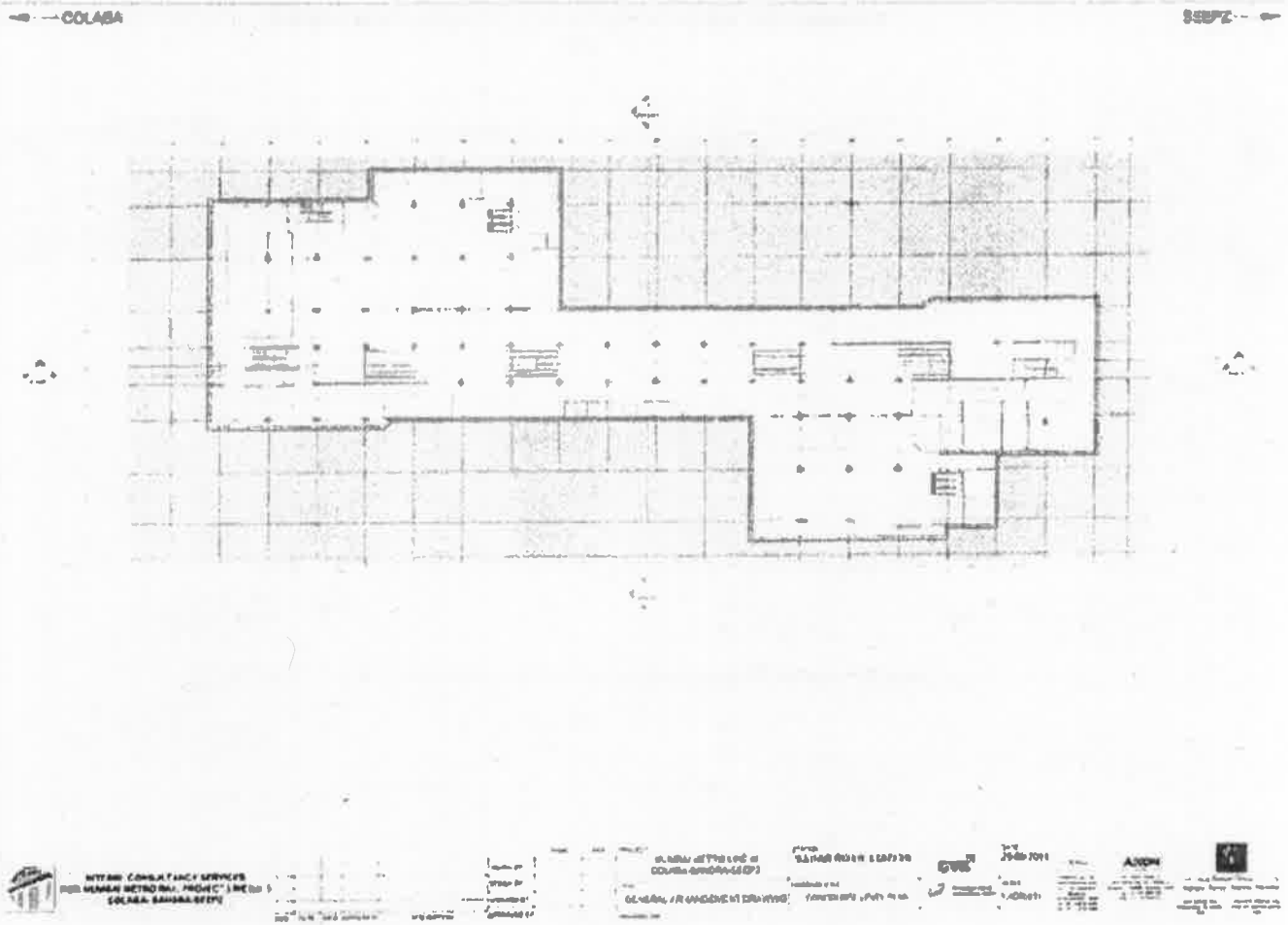


FIGURE 7 INDICATIVE SAHAR ROAD STATION CONCOURSE LEVEL DRAWING

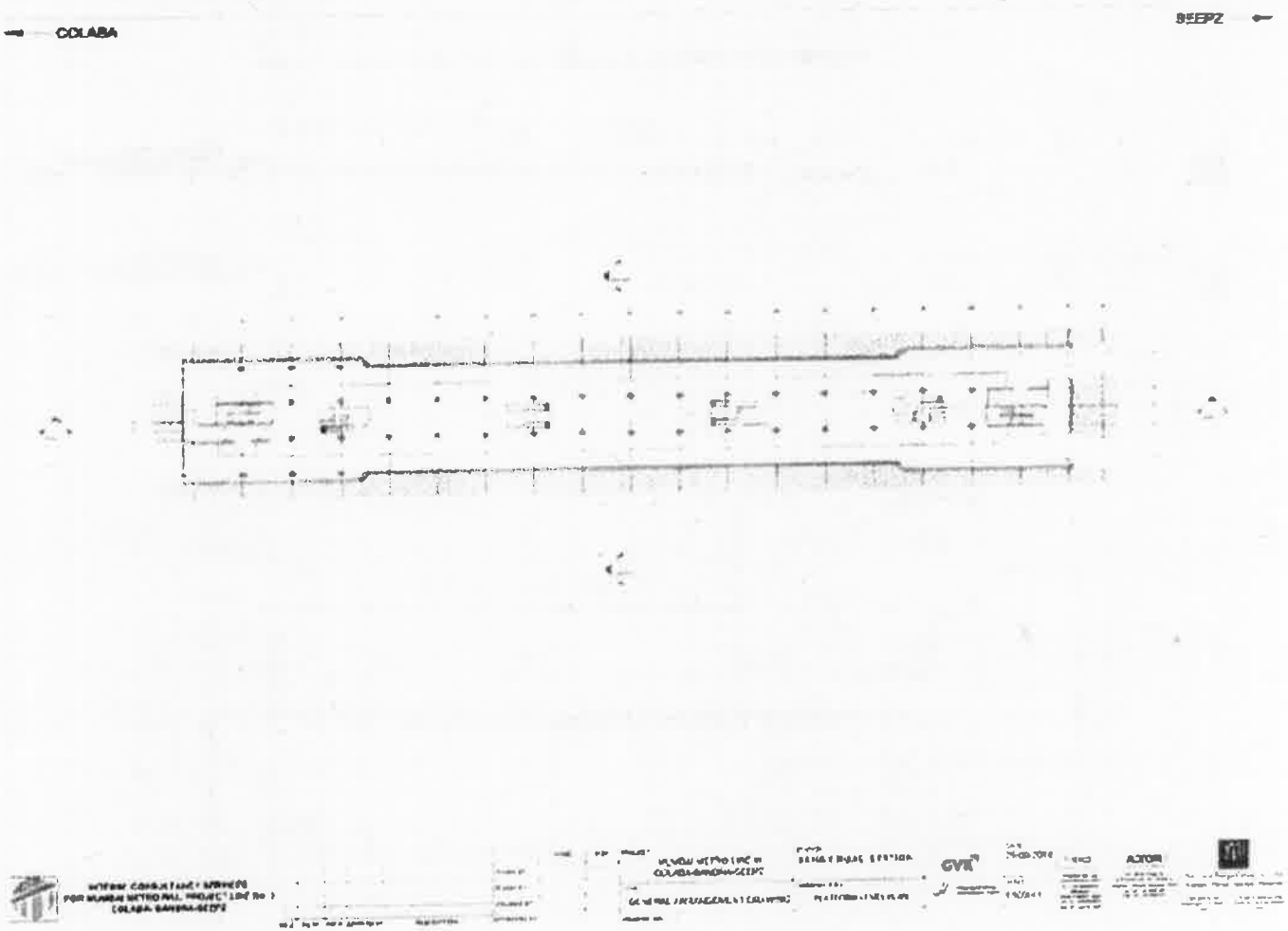


FIGURE 8 INDICATIVE SAHAR ROAD STATION PLATFORM LEVEL DRAWING

For MMRC:

For MIAL:

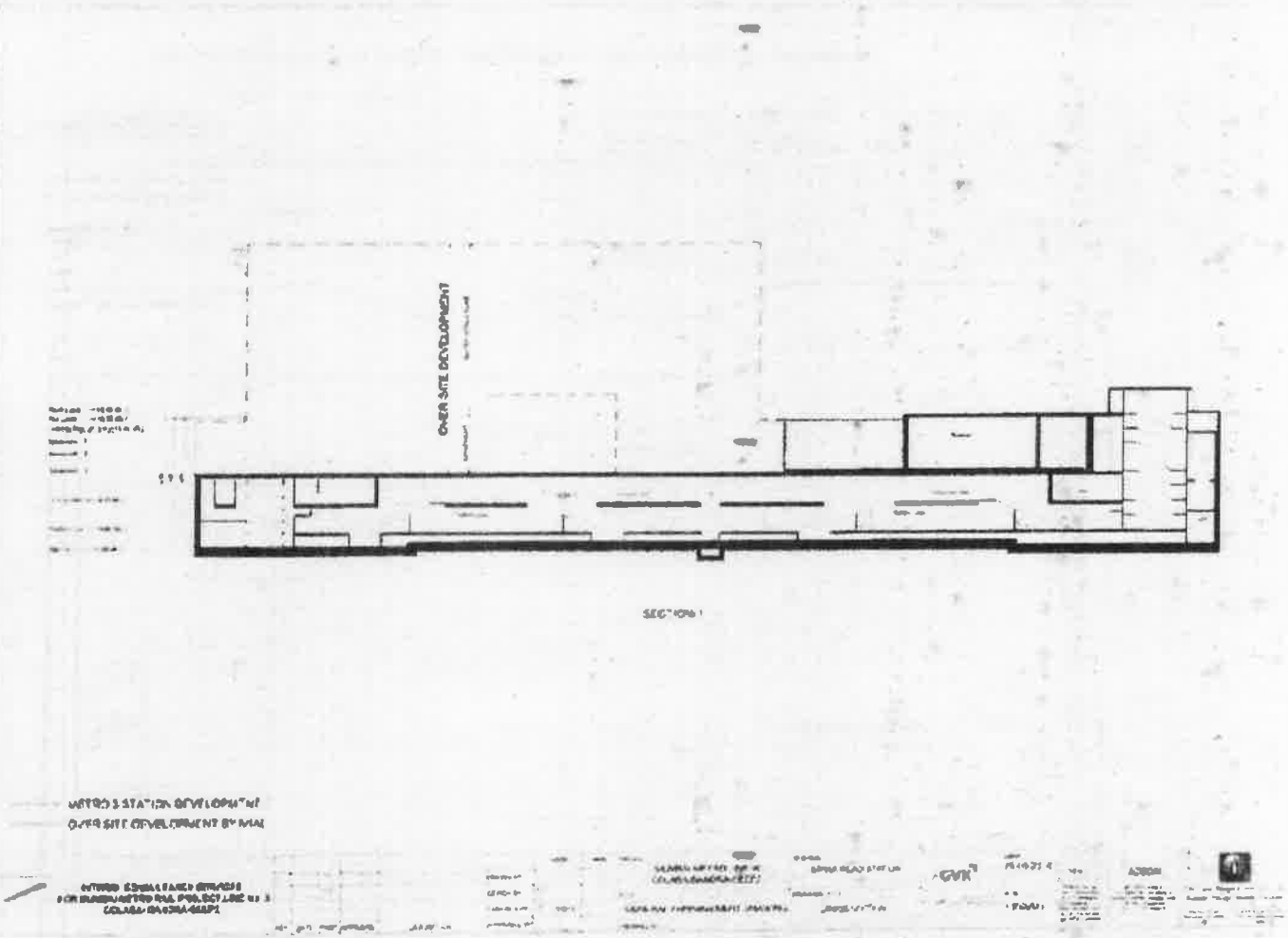


FIGURE 9 INDICATIVE SAHAR ROAD SECTION DRAWING

For MMRC:

For MIAL:

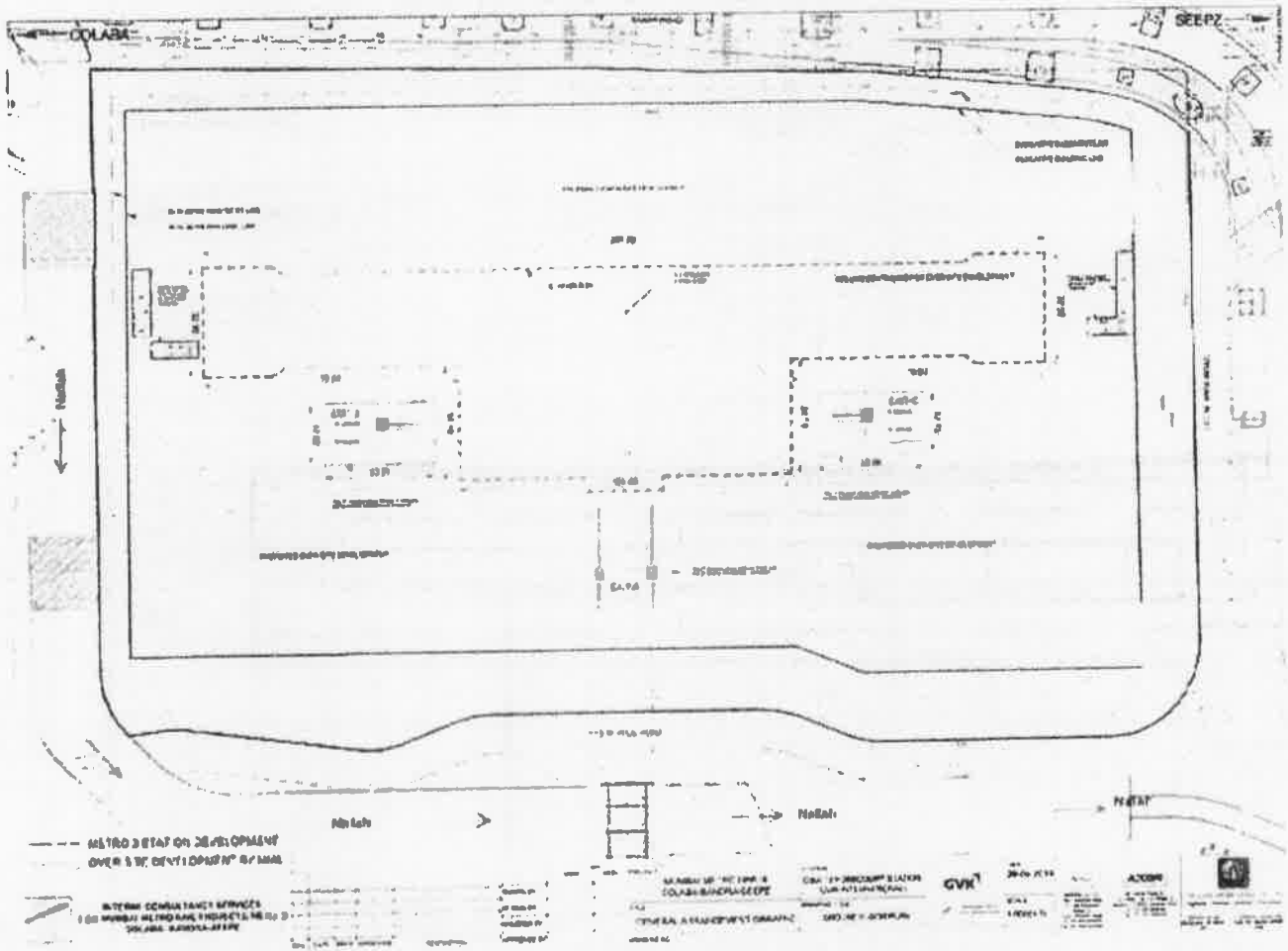


FIGURE 10 INDICATIVE T2 TERMINAL FORECOURT STATION GROUND LEVEL DRAWING

For MMRC:

For MIAL:

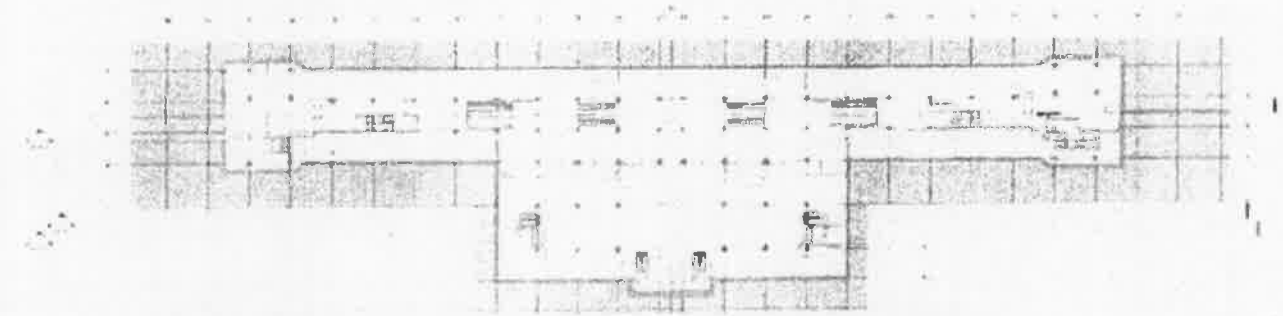


FIGURE 11 INDICATIVE T2 TERMINAL FORECOURT STATION CONCOURSE LEVEL DRAWING

For MMRC:

For MIAL:

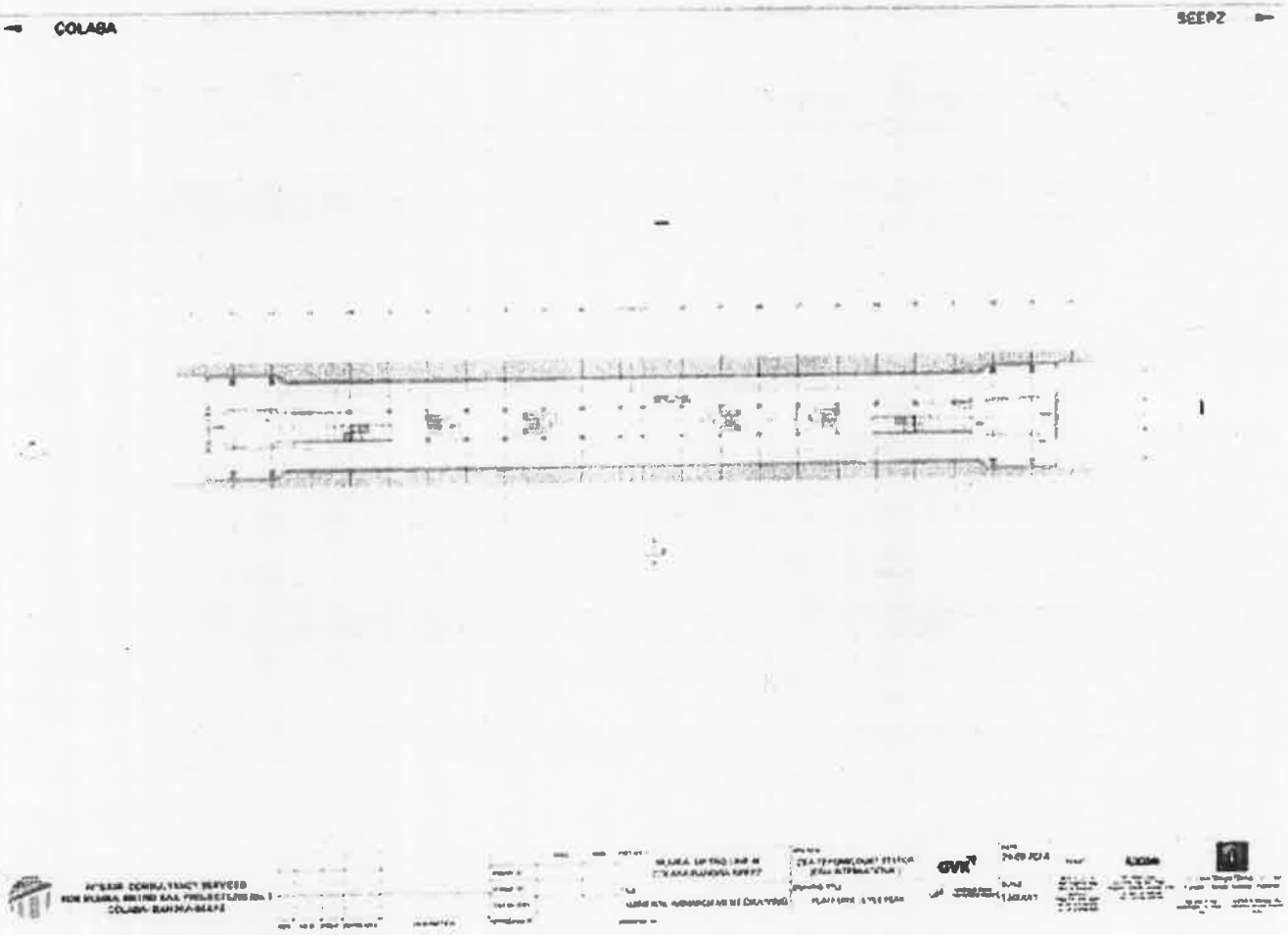


FIGURE 12 INDICATIVE T2 TERMINAL FORECOURT STATION PLATFORM LEVEL DRAWING

For MMRC:

For MIAL:

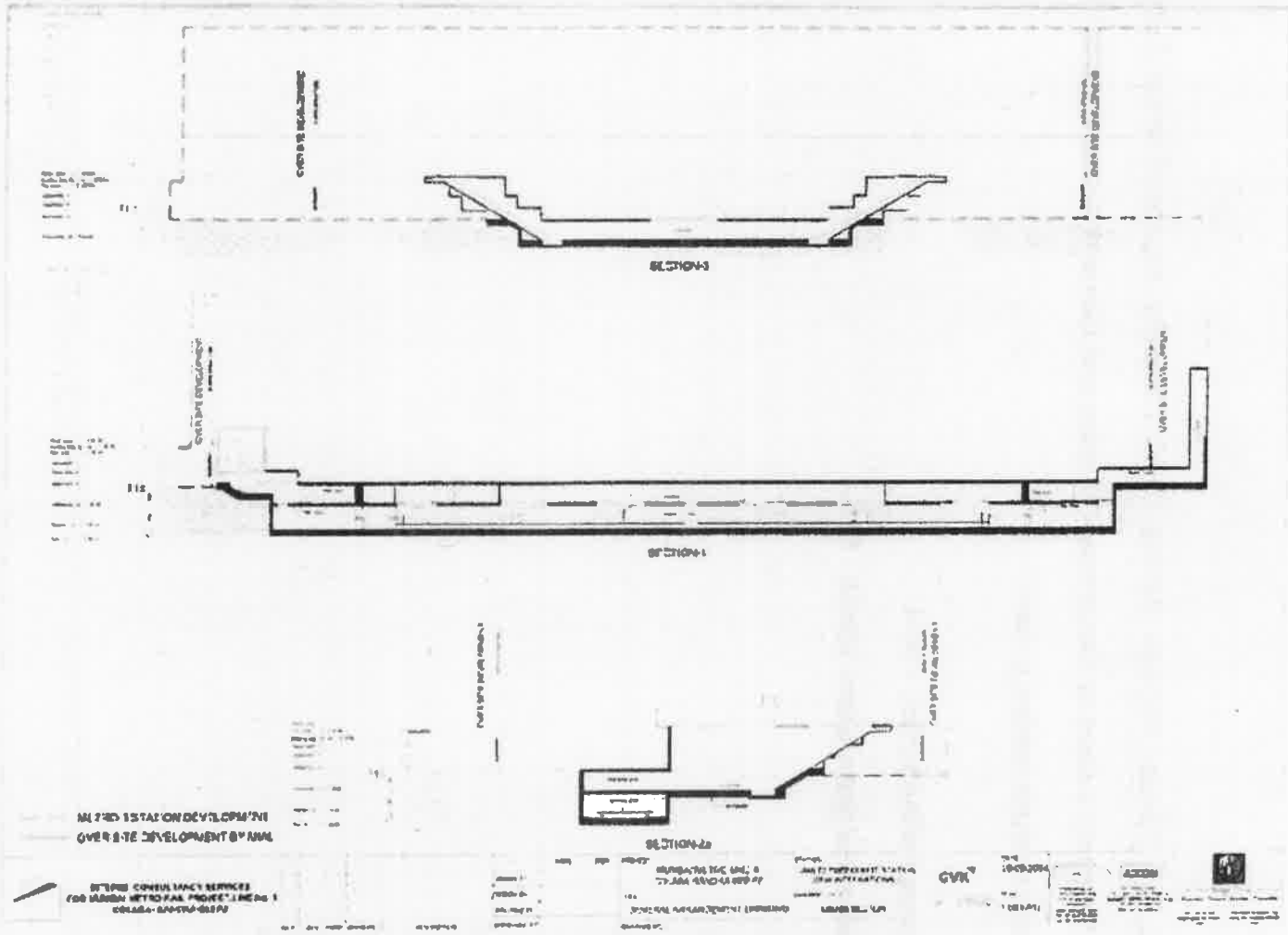


FIGURE 13 INDICATIVE T2 TERMINAL FORECOURT STATION SECTION DRAWING

ANNEXURE D - SHAREHOLDING OF MMRC

MMRC is a Special Purpose Vehicle (SPV) Company registered under Company's Act,1956, jointly owned by Government of India and Government of Maharashtra with the following share holding pattern:

Government of India (GoI) - 50%

Government of Maharashtra (GoM) - 50%

For MMRC: _____

For MIAL: _____

Corporate Environmental Responsibility

Project Details under following categories,

I. Promoting education to the under privileged children, supporting socially backward people and helping differently abled people.
II. Ensuring environmental sustainability, ecological balance, protection of flora and fauna and conservation of natural resources
III. Providing emergency medical care, Preventive health care, sanitization, and safe drinking water.

1. Supporting a School in Nelgunda area, Gadchiroli

Lok Biradari Prakalp (Maharogi Sewa Samiti)

In support of educational and sanitation facilities for tribal children, MIAL supported a school in Nelgunda area, Hemalkasa, Maharashtra.

2. **Supporting Education through Aseema Charitable Trust**

MIAL had partnered with "Aseema Charitable Trust" for a project "**Supporting education of underprivileged children**" in MCGM school in Bandra –Kherwadi area.

This program not only covered their academic education but also overall personality and health development.

3. **Women Empowerment**
   NGO– EKJAA foundation

   MIAL partnered with EKJAA foundation for a project on "Self-defense training -Women empowerment program" in the surrounding slum areas at Kalina.

4. **Afforestation at degraded forest land in Tetavali-Rabale, Navi Mumbai, Maharashtra.**
   NGO Partner: Hariyali

33-acre degraded forest land is assigned by Social Forestry division - Maharashtra Forest Department (GOM) to NGO Hariyali.
MIAL adopted 3 acres of the degraded forest land and planted Indigenous trees and will see its maintenance for 7 years in association with Hariyali.

5. **Distribution of LED Solar lamps in tribal areas of Sanjay Gandhi National Park.**

Solar LED lamps distributed to the tribals living in the SGNP forest. The initiative has immensely help the tribals, who have no access to electricity.

6. **Providing hygienic nutritious mid day meals to underprivileged students from our local community, Maharashtra.**
~6750 high quality and nutritious meals provided to children through MIAL support.

The meals are provided from ISO 9001 certified kitchens and process which reach hot to students.




7. **Education and vocational training for deaf students through, Basic English Literacy Course (BELC) in Two Special Schools & Tailoring Vocation Unit in a Special School for Deaf in Mumbai, Maharashtra**
   NGO Partner: DEEDS Public Charitable Trust, Mumbai
   Approx. 66 deaf students benefited from BELC and Tailoring trainings conducted across three special schools.



8. **Providing education support through scholarships to meritorious underprivileged students from our local community, Maharashtra.**
   NGO Partner: UMANG Foundation
   22 Students were given MIAL Scholarship for further studies.
   Students were selected on their merit and with low-income group, from across Maharashtra.

Students perusing various under graduate and post graduate programs were provided scholarship (HSC, B.A, B.COM,B.SC, B.MS, B.AF, B.E)


9. **Set up a computer lab for underprivileged girl students of Nirmalamata Girls High School, Maharashtra.**
   NGO Partner: CANOSSA Society
   Approx. 700 students at the girls school were benefitted with quality computer education through upgraded new and more numbers of computers.


10. **Constructing Toilets for students of Zilla Parishad School catering to majorly underprivileged students in Shahapur District of Maharashtra.**


NGO Partner: Umang Foundation
Project had ensured proper hygiene & sanitation for students especially girls. Approx. 300 students of the ZP school are benefited and promoted education by decreasing absenteeism due to illness and dropouts of girls due to lack of sanitation facilities.

11. **Initiating Leprosy Elimination Action Programme (LEAP) in Leprosy Referral Centre (LRC) in Mahad & Murud Block each in Raigad District, Maharashtra.**
NGO Partner: ALERT-INDIA




Provision of physiotherapy to existing patients to arrest disability.
Provision of Aids & appliances (MCR-9, Self-Care Kits-27) for disability care.
Awareness materials were provided though ASHA workers to people.

12. **Providing primary health care facility to the underprivileged migrant community, Delhi.**
    NGO Partner: Adharshila
    MIAL provided health care support to migrants from underprivileged background leaving in slums of Delhi from October 2019 to December 2019.
    Through this program MIAL supported the healthcare OPD cost of more than 1000 patients.



13. **Vision Screening & Free Corrective Spectacle distribution to Airport taxi drivers – Road Safety Initiative, Sahar, Mumbai, Maharashtra.**
    NGO Partner – Vision Impact Institute


In June 2017, MIAL in association with NGO partner, organized a free Vision Screening and Spectacle Distribution camp for Airport Taxi Drivers.
More than 800 drivers took benefit of the 2-day eye checkup camp.
685 numbers of free corrective spectacles distributed.
32 drivers referred to Free Cataract Surgery & affordable interventions.

14. Providing Hearing Aid to Senior Citizen, Mumbai, Maharashtra.
NGO Partner – Yuvak Prtishthan

MIAL supported Yuvak Prtishthan a registered Trust with GoM for distribution of "Hearing Aid" to senior citizens in Mumbai, Maharashtra.
Financial support was provided for ~500 no of hearing aid (@ INR 1000/hearing aid).

15. Waste Management for Community Health (Providing 125 waste collection bins to local community ' L Ward ', Jarimari, Mumbai, Maharashtra.

Distributed 125 numbers of waste bins of 120-liter capacity to meat/chicken shops in 'L' Ward in Jarimari in co-ordination with MCGM.

Distribution ceremony jointly held with MCGM by MIAL served as a platform to disseminate message of "Need of proper waste management" to the attendees. All the beneficiaries committed to proper waste management.

16. **Provided Rainwater Harvesting system for the non-potable use/requirement of a Zilla Parishad School catering to majorly underprivileged students in Shahapur District of Maharashtra.**
    NGO Partner: Umang Foundation
    Approximately 45 to 50 thousand liters of water percolated in a day by the installed RWH system which helped in increasing ground water table.




17. Tree Plantation by Miyawaki Method at State Reserved Police Force, Ground by Mumbai International Airport Limited

Location: SRPF GR 8, Goregaon, Mumbai

Around 1507 Nos. total trees planted of 27 native species on 5 June 2023.

Annexure 4- Compliance status of Memorandum issued by MoEF&CC vide F.No.22-34/2018-IA. Ill dt.04.01.2019.

Annexure 4- Standard EC conditions for project/activity 8(a/b): Building and Construction projects/townships and area developments			
	Statutory Compliance	**City side EC 2020**	**Remarks**
	Condition No.	**Condition No.**	
I	i	General condition No. II	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	General condition No. II	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	Specific condition No. III	Not applicable
	iv	Specific condition No. III	Not applicable
	v	Specific condition No. VI	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vi	Specific condition No. XXVII	No ground water extraction is carried out
	vii	-	Complied
	viii	Specific condition No. XIX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ix	General condition No. I and IX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	x	Specific condition No. XXXIII and XXIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
II	**Air quality monitoring and preservation**	**City side EC 2020**	
	i	-	Complied
	ii	Specific condition No. XXII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	-	Complied
	iv	Specific condition No. XXXV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	v	Specific condition No. XXII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vi	-	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vii	-	Noted for compliance
	viii	-	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ix	Specific condition No. XVII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	x	Specific condition No. XXXV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xi	Specific condition No. XXXV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xii	Specific condition No. XXXIX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
III	**Water quality monitoring and preservation**	**City side EC 2020**	
	i	Specific condition No. XIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report

	ii	-	Noted for compliance
	iii	-	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	Specific condition No. XLII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	v	-	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vi	-	Noted for compliance
	vii	Specific condition No. XXX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	viii	Specific condition No. XXXI	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ix	Specific condition No. XXX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	x	Specific condition No. XXIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xi	-	Noted for compliance
	xii	-	Noted for compliance
	xiii	-	Noted for compliance
	xiv	Specific condition No. XXIX	Noted for compliance
	xv	Specific condition No. XXIX	Noted for compliance
	xvi	Specific condition No. XLII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xvii	Specific condition No. XXVIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xviii	Specific condition No. XI	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xix	Specific condition No. XXVIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xx	Specific condition No. XXVIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	xxi	-	Noted for compliance
IV	**Noise quality monitoring and preservation**	**City side EC 2020**	
	i	Specific condition No. XXI and XXXVI	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	Specific condition No. XLII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	-	Noted for compliance
V	**Energy conservation measures**	**City side EC 2020**	
	i	Specific condition No. XXXIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	-	Noted for compliance
	iii	Specific condition No. XXXIX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	Specific condition No. XXXIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report

	v	Specific condition No. XXXIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vi	-	Noted for compliance
VI	**Waste Management**	**City side EC 2020**	
	i	Specific condition No. XLIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	Specific condition No. IX and X	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	Specific condition No. IX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	Specific condition No. XLIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	v	Specific condition No. IX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vi	Specific condition No. XVII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vii	Specific condition No. XXIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	viii	Specific condition No. XXIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ix	Specific condition No. XVII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	x	Specific condition No. XXXIV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
VII	**Green cover**	**City side EC 2020**	
	i	-	Noted for compliance
	ii	-	Noted for compliance
	iii	Specific condition No. XLIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	Specific condition No. XII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
VIII	**Transport**	**City side EC 2020**	
	i	-	Noted for compliance
	ii	Specific condition No. XX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	Specific condition No. XXXVII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
IX	**Human health issues**	**City side EC 2020**	
	i	Specific condition No. X	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	Specific condition No. XXXIX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	Specific condition No. XXXIX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	-	Noted for compliance
	v	-	Noted for compliance
	vi	-	Noted for compliance
X	**Corporate Env. Responsibility**	**City side EC 2020**	

	i	Specific condition No. IV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	Specific condition No. XLII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	Specific condition No. XLVIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	Specific condition No. XLIX	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
XI	**Miscellaneous**	**City side EC 2020**	
	i	Specific condition No. L	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	ii	Specific condition No. LII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iii	Specific condition No. LII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	iv	Specific condition No. LIII	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	v	Specific condition No. LV	Complied. Refer the condition number as mentioned in six monthly EC 2020 report
	vi	-	Noted for compliance
	vii	-	Noted for compliance
	viii	-	Noted for compliance
	ix	-	Noted for compliance
	x	-	Noted for compliance
	xi	-	Noted for compliance
	xii	-	Noted for compliance
	xiii	-	Noted for compliance
	xiv	-	Noted for compliance
	xv	-	Noted for compliance

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM FOR FILING ANNUAL RETURNS

[To be submitted by producer/manufacturer/refurbisher/dismantler/recycler/bulk consumer by 30th day of June following the financial year to which that return relates]

Submitted For

April 2023-March 2024

Apply As

Bulk Consumer

1. Name of the Bulk Consumer

Mumbai International Airport Limited

Address of the Bulk Consumer /recycler

Chhatrapati Shivaji Maharaj International Airport (CSMIA), Terminal 1, Santacruz (East), Mumbai

2. Name of the authorised person

Vinay Bedekar

Full address of authorised person

Chhatrapati Shivaji Maharaj International Airport (CSMIA), Terminal 1, Santacruz (East), Mumbai

Telephone

02266850778

Email

vinay.bedekar@adani.com

Fax

0

3. BULK CONSUMERS:

Type

Others - Others

Quantity(MT)

2.46

4. Name of the destination where E-waste is channelized

Khan Traders / G-10,C Wing Bldg.No.1 Mumbai-400009 / Right E-waste Recycle Private Limited

Address of the destination where E-waste is channelized

Khan Traders / G-10,C Wing Bldg.No.1 Mumbai-400009 / Right E-waste Recycle Private Limited

Place

Mumbai

Date

Jun 14, 2024

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY
मुंबई महानगर प्रदेश विकास प्राधिकरण

No. TCP(P-2)/MIAL/CC/3.14/497/2016 Date: 24 MAY 2016

To,

The Executive Engineer
Building Proposal – WS,
MCGM Office, K&P Ward, R.K. Patkar Marg,
Bandra (W), Mumbai – 400 050.

Sub: Occupancy Certificate to 'Multi Level Car Parking' building on part of plot bearing CTS No. 2085 (pt) at village Vile Parle (E), Mumbai.

Ref : MMRDA's DO no.TCP(P-2)/BKC/Misc/296/102/2009, dated 30/01/2009

Sir,

MMRDA is the Special Planning Authority for Chhatrapati Shivaji International Airport Notified Area (CSIANA). The Metropolitan Commissioner, MMRDA has approved the proposal for issuance of Occupancy Certificate for **'Multi Level Car Parking Building' (i.e. 2basements + ground + 4upper floors)** on part of land bearing CTS No. 2085 (pt) at village Vile Parle (E), Mumbai for Mumbai International Airport Pvt. Ltd., pursuant to the policy enunciated in MMRDA's DO Letter No. TCP (P-2)/BKC/Misc./296/102/2009, dated 30/1/2009.

MMRDA is the Special Planning Authority for Chhatrapati Shivaji International Airport Notified Area (CSIANA). Pursuant to the policy enunciated in MMRDA's D.O. letter no.TCP (P-2)/BKC/Misc/296/102/2009 dated 30/01/2009, this is to inform you that the Metropolitan Commissioner, MMRDA has approved the proposal for issuance of Occupancy Certificate to the **Multi Level Car Parking Building' i.e. 2basements + ground + 4upper floors** on part of land bearing CTS No. 2085 (pt) at village Vile Parle (E), Mumbai, as per the copy of the completion plans shown on drawings no. 1, 2, 3, 4, 5, 6 and 7 enclosed herewith, along with copy of Occupancy Certificate for 'Multi Level Car Parking Building' (i.e. 2basements + ground + 4upper floors) is issued by MMRDA to the Architect Mr. Hiten Sethi.

Yours faithfully,

Chief,
T&CP Division, MMRDA

Encl : 1) Occupancy Certificate for Multi-Level Car Parking Bldg (2basement+grd+4upper flrs).
2) A set of certified completion drawings bearing nos.1, 2, 3, 4, 5, 6 and 7.
3) MMRDA's D.O. letter no. TCP(P-2)/BKC/Misc/296/102/2009, dated 30/01/2009.

Copy to:

1. **Mr. Hiten Sethi (Architect),**
   Hiten Sethi Architects,
   Ground Floor, Yayati CHS, Plot No.9, Sector – 58A,
   Palm Beach Road, Nerul, Navi Mumbai 400 706.
2. **Shri. Charudatta Deshmukh,**
   Director – Urban Planning, MIAL,
   Urban Planning Dept., 2nd Floor, Terminal 1-B,
   Chhatrapati Shivaji International Airport,
   Santacruz (E), Mumbai - 400 099.

Received on 25/05/2016
D No. 112
C/o. Director-Urban Planning
M.I.A.L., CSI Airport, Mumbai - 400 099

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY
मुंबई महानगर प्रदेश विकास प्राधिकरण

No. TCP (P-2)/MIAL/CC/3.14/ 797 /2016 Date: 24 MAY 2016

OCCUPANCY CERTIFICATE

The total built-up area of 4,023.19sqm for **02 basement + ground + 04 upper floors** of **Multi Level Car Parking building** on part of plot bearing CTS No. 2085 (pt) at village Vile Parle (E), Mumbai completed under the supervision of Mr. Hiten Sethi, architect at Hiten Sethi Architects having registration no. CA/93/16484 and Structural Engineer H.R. Mahimtura, having license no. STR/M/63, as reflected in set of as-built drawings having drawing no. 01 to 07 (total drawings 07 nos) is hereby permitted to be occupied on the following conditions:

1) This certificate is liable to be revoked by the Metropolitan Commissioner, MMRDA if –
   a) Any of the conditions subject to which the same is granted or any of the restriction imposed by the Metropolitan Commissioner is contravened or is not complied with;
   b) The Metropolitan Commissioner, MMRDA is satisfied that the same is obtained through fraud or misinterpretation;
2) This permission is issued without prejudice to action, if any, under MR&TP Act, 1966;
3) That any change in the constructed premises any time in future would require prior approval of MMRDA;
4) That any change in the user in future would require prior approval of MMRDA;
5) That if any change in the user mentioned in completion/as built plans found changed at any time without prior permission of MMRDA then this occupancy certificate granted to your premises will be treated as cancelled and appropriate action will be taken;
6) This Certificate shall not entitle the applicant to occupy the land which is not in his ownership in any way;
7) The provisions in the proposal which are not confirming to applicable Development Control Regulations and other Acts are deemed to be not approved;
8) Any condition mentioned in any of the NOC from any Concerned Authority shall be complied with before occupying the property under reference;
9) A set of amended as-built drawings (Drawing nos. 1, 2, 3, 4, 5, 6 & 7 (i.e. total drawings 07 nos) is enclosed herewith;
10) That the certificates under Section 270-A of B.M.C. Act shall be obtained from Hydraulic Engineer, MCGM and a certified copy of the same shall be submitted to this office;
11) The applicant shall comply with MCGM's Circular no. CHE/27921/DP/ Gen; dated 06/01/2014 [in respect of preservation of documents mentioned at sr. no. (a) to (k) therein];
12) The applicant shall obtain NOC/License for Car lift from Lift Inspector, PWD before putting the Car lift into operation and submit the same to MMRDA only after which Acceptance of Building Completion Certificate for the building will be issued by MMRDA.

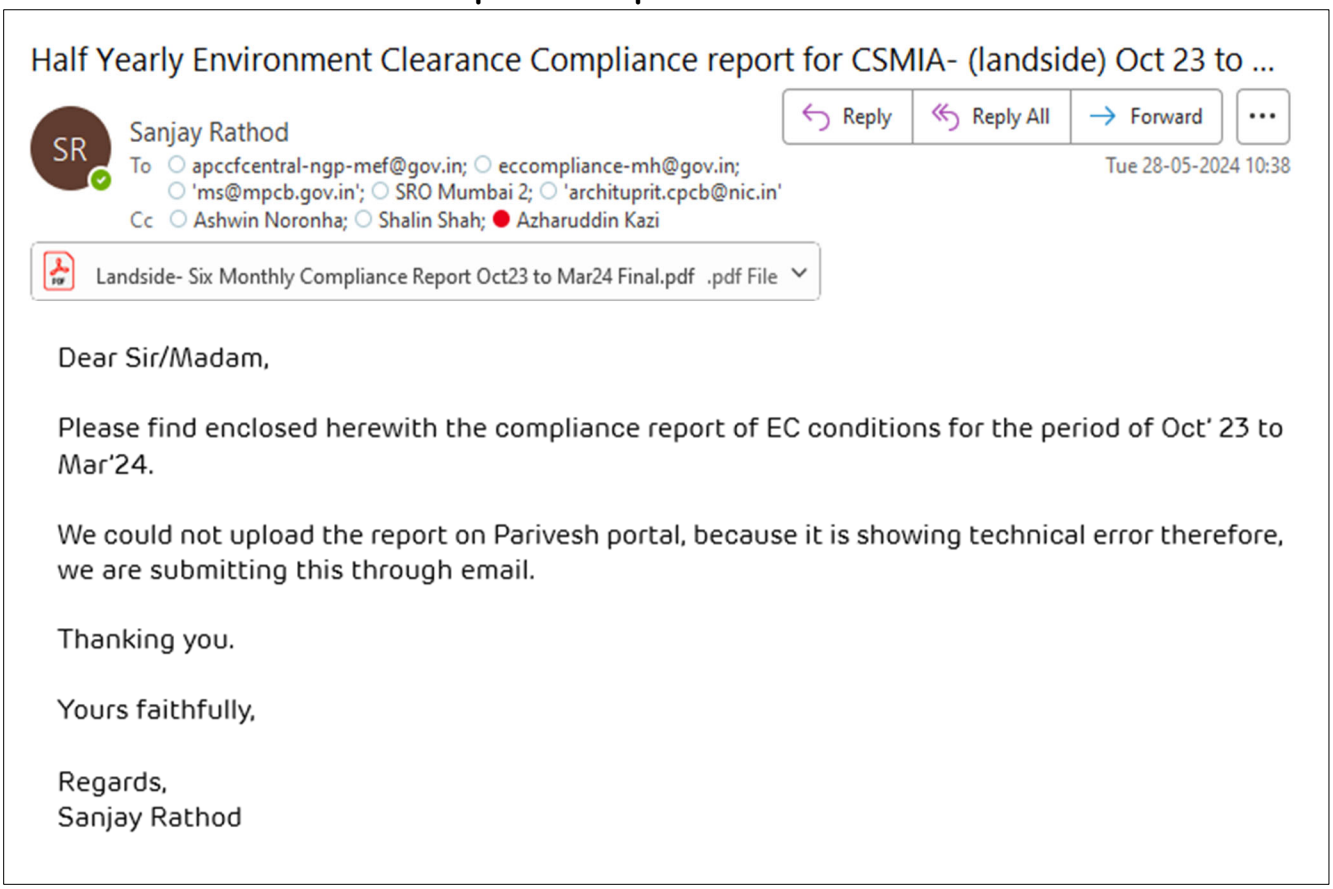
Additional Metropolitan Commissioner
MMRDA

Enclosures: As-built drawing no.1 to 07 (total drawings 07 nos).

Copy to: 1) **Mr. Hiten Sethi (Architect),** ----------(with enclosures)
Hiten Sethi Architect,
Ground Floor, Yayati CHS, Plot No.9, Sector – 58A,
Palm Beach Road, Nerul, Navi Mumbai 400 706.

2) **Shri. Charudatta Deshmukh,** ----------(with enclosures)
Director – Urban Planning, MIAL,
Urban Planning Dept., 2nd Floor, Terminal 1-B,
Chhatrapati Shivaji International Airport,
Santacruz (E), Mumbai - 400 099.

Submission Email for Last Compliance Report



Half Yearly Environment Clearance Compliance report for CSMIA- (landside) Oct 23 to ...

Reply | Reply All | Forward | ...

SR

Sanjay Rathod

To apccfcentral-ngp-mef@gov.in; eccompliance-mh@gov.in; 'ms@mpcb.gov.in'; SRO Mumbai 2; 'archituprit.cpcb@nic.in'

Cc Ashwin Noronha; Shalin Shah; Azharuddin Kazi

Tue 28-05-2024 10:38

Landside- Six Monthly Compliance Report Oct23 to Mar24 Final.pdf .pdf File

Dear Sir/Madam,

Please find enclosed herewith the compliance report of EC conditions for the period of Oct' 23 to Mar'24.

We could not upload the report on Parivesh portal, because it is showing technical error therefore, we are submitting this through email.

Thanking you.

Yours faithfully,

Regards,
Sanjay Rathod

Covering Letter of Last Compliance Report submitted.

Chhatrapati Shivaji Maharaj
INTERNATIONAL AIRPORT
MUMBAI

Ref: MIAL/ENV/F-25/14

28th May 2024

To,
Principal Secretary,
Government of Maharashtra,
Environment department,
Room no. 217, 2nd Floor, Mantralaya Annex,
Mumbai - 400032.

Dear Sir,

Subject: Half yearly Environmental Compliance report of Environment Clearance for Non-Operational Area (Landside) Development of Chhatrapati Shivaji Maharaj International Airport and construction of Six buildings by M/s Mumbai International Airport Ltd. and as amended.

Ref: - Environment clearance no. SIA/MH/MIS/127703/2019 dated 31st March 2020, by SEIAA, GoM & File no. SEAC-2010/CR.53/TC-2 dated-1st July 2011, MoEFF&CC.

With reference to above, please find enclosed herewith the compliance Report of EC conditions for the period from Oct 2023 to March 2024.

Kindly acknowledge the receipt of the EC compliance report.

Thanking you.

Yours faithfully,

For Mumbai International Airport Limited

Head - Environment & Sustainability

Encl: Half yearly Environmental Compliance report and annexure.

CC: 1) Additional PCCF- Ministry of Environment, Forest & Climate Change, Regional office - Nagpur
2) Zonal officer- Central Pollution Control Board, Vadodara
3) Regional officer - Maharashtra Pollution Control Board, Sion (E)

Mumbai International Airport Limited
Chhatrapati Shivaji Maharaj International Airport
1st Floor, Terminal 1B, Santacruz (E),
Mumbai 400 099,
Maharashtra, India
CIN: U45200MH2006PLC160164

Tel +91 22 6685 0900 / 6685 0901
csmia.adaniairports.com

Registered office: Office of the Airport Director, Terminal-1B, CSMI Airport, Mumbai – 400099, Maharashtra, India

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

Infrastructure/RED/L.S.I
No:- Format1.0/CAC-CELL/UAN No.0000139579/CE/2209001403

Date: 21/09/2022

To,
Mumbai International Airport Ltd., Chhatrapati Shivaji Maharaj International Airport, 1st floor, CTS No. 2085 (Part), 1405 (Part) & 145-A(Part), 145-A(Part), Terminal 1-B, Santacruz (East), Mumbai-400099.

Your Service is Our Duty

Sub: Consent to Establish for proposed development of Chhatrapati Shivaji Maharaj International airport under Red/LSI category.

Ref:

1. Environment Clearance accorded by Env. Dept, GoM vide letter No. SIA/MH/MIS/127703/2019 dtd. 31/03/2020.
2. Renewal of Consent to Operate accorded by the Board vide letter Format1.0/CAC-Cell/UAN No. 0000116725/CR-2202000148 dtd. 02/02/2022.
3. Minutes of Consent Appraisal Committee meeting held on 30/08/2022.

Your application NO. MPCB-CONSENT-0000139579

For: Grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal of Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I,II,III & IV annexed to this order:

1. **The Consent to Establish is granted for a period upto commissioning of project or up to 5 year whichever is earlier.**
2. **The capital investment of the project is Rs.1822 Cr. (As per undertaking submitted by pp).**
3. **The Consent to Establish is valid for proposed construction of Mumbai International Airport named as Mumbai International Airport Ltd., Chhatrapati Shivaji Maharaj International Airport, 1st floor, CTS No. 2085 (Part), 1405 (Part) & 145-A(Part), 145-A(Part), Terminal 1-B, Santacruz (East), Mumbai- 400099 on Total Plot Area of 17,06,100 SqMtrs for Construction BUA of 8,46,516.77 SqMtrs out of Total Construction BUA of 8,77,696.77 SqMtrs as per EC granted dated 31/03/2020 including utilities and services**

Sr.No	Permission Obtained	Plot Area (SqMtr)	BUA (SqMtr)
1	EC- dtd. 31/03/2020	1706100.00	877696.77
2	C to R - dtd. 02/02/2022	7700.00	31180.00

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal
1.	Trade effluent	Nil	Nil	Nil

Sr No	Description	Permitted	Standards to	Disposal
2.	Domestic effluent	2129	As per Schedule - I	The treated sewage shall be 60% recycled for secondary purposes and remaining shall be utilized on land for gardening and/ or connected to local body sewer line with water metering system.

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
S-1 to S-6	DG Sets of 2500 kVA x 6	06	As per Schedule -II
S-7 to S-16	DG Sets of 2000 kVA x 10	10	As per Schedule -II
S-17 to S-20	DG Sets of 1850 kVA x 4	04	As per Schedule -II
S-21 to S-25	DG Sets of 1500 kVA x 5	05	As per Schedule -II

6. **Conditions under Solid Waste Rules, 2016:**

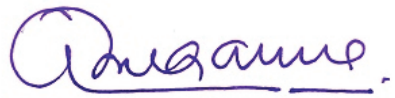
Sr No	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Bio-degradable Waste	2.2 MT/Day	OWC followed by composting facility.	Used as Manure.
2	Non-biodegradable Waste	3.3 MT/Day	Segregation	Handed over to Auth. Vendor.

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:**

Sr No	Category No.	Quantity	UoM	Treatment	Disposal
1	5.1 Used or spent oil	10000	Ltr/A	Recycle	Handed over to Auth. reprocessor.

8. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
10. PP shall provide STP of adequate capacity to achieve the treated domestic effluent standard for the parameter BOD-10 mg/lit including disinfection facility.
11. The treated sewage shall be 60% recycled for secondary purposes such as toilet flushing, air-conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and/ or connected to local body sewer line with water metering system.
12. PP shall provide organic waste digester along with composting facility/bio-digester (biogas) for the treatment of wet garbage.
13. PP shall make provision of charging ports for electric vehicles at least 40% of total available parking slots.

14. PP shall submit BG of Rs. 25 Lakh towards compliance of EC and Consent conditions.



Signed by: Ashok Shingare
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2022-09-21 14:44:27 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	3644000.00	MPCB-DR-12557	27/06/2022	RTGS

Copy to:

1. Regional Officer, MPCB, Mumbai and Sub-Regional Officer, MPCB, Mumbai II
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have provided Sewage Treatment Plant of designed capacity 5500 CMD with SBR technology for the treatment of 2129 CMD of sewage.

B] The Applicant shall operate the sewage treatment plant (STP) to treat the sewage so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr.No	Parameters	Limiting concentration not to exceed in mg/l, except for pH
1	pH	5.5-9.0
2	BOD	10
3	COD	50
4	TSS	20
5	NH4 N	5
6	N-total	10
7	Fecal Coliform	less than 100

C] The treated sewage shall be 60% recycled for secondary purposes such as toilet flushing, air-conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and/ or connected to local body sewer line with water metering system.

2) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.

3) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

4) **The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act,1974 and as amended, and other provisions as contained in the said act.**

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	778.00
2.	Domestic purpose	2263.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00

5) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1) **As per your application, you have proposed to provide the Air pollution control (APC)system and also proposed to erect following stack (s) and to observe the following fuel pattern-**

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
S-1 to S-6	DG Sets of 2500 kVA x 6	Acoustic Enclosure	10.00	HSD 2550 Ltr/Hr	1	SO2	1224 Kg/Day
S-7 to S-16	DG Sets of 2000 kVA x 10	Acoustic Enclosure	8.94	HSD 3400 Ltr/Hr	1	SO2	1632 Kg/Day
S-17 to S-20	DG Sets of 1850 kVA x 4	Acoustic Enclosure	8.60	HSD 1260 Ltr/Hr	1	SO2	604.80 Kg/Day
S-21 to S-25	DG Sets of 1500 kVA x 5	Acoustic Enclosure	7.75	HSD 1275 Ltr/Hr	1	SO2	612 Kg/Day

2) The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards.

Total Particular matter	Not to exceed	150 mg/Nm3

3) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacemenalteration well before its life come to an end or erection of new pollution control equipment.

4) The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

5) **Conditions for utilities like Kitchen, Eating Places, Canteens:-**

a) The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting.

b) The toilet shall be provided with exhaust system connected to chimney through ducting.

c) The air conditioner shall be vibration proof and the noise shall not exceed 68 dB(A).

d) The exhaust hot air from A.C. shall be attached to Chimney at least 5 mtrs. higher than the nearest tallest building through ducting and shall discharge into open air in such a way that no nuisance is caused to neighbors.

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent(C2E/C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Establish	Rs. 25 Lakh	15 days	Towards Compliance of EC & C to E conditions.	Monthly	Commissioning of the project or 5 years whichever is earlier.

** The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent. **# Existing BG obtained for above purpose if any may be extended for period of validity as above.**

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

Conditions during construction phase

A	During construction phase, applicant shall provide temporary sewage and MSW treatment and disposal facility for the staff and worker quarters.
B	During construction phase, the ambient air and noise quality shall be maintained and should be closely monitored through MoEF approved laboratory.
C	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.

General Conditions:

1. The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2. The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act 1986 and Solid Waste Management Rule 2016, Noise (Pollution and Control) Rules, 2000 and E-Waste (Management & Handling Rule 2011.
3. Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
4. Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

5 Conditions for D.G. Set

a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.

b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.

c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.

d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f) D.G. Set shall be operated only in case of power failure.

g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.

6 Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rule 2016 & E-Waste (M & H) Rule 2011.

7 Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.

8 Applicant shall submit official e-mail address and any change will be duly informed to the MPCB.

9 The treated sewage shall be disinfected using suitable disinfection method.

10 The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.

11 The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

This certificate is digitally & electronically signed.

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

Infrastructure/RED/L.S.I
No:- Format1.0/CAC-CELL/UAN No.0000138070/CR/2208001592

Date: 31/08/2022

To,
Mumbai International Airport Ltd.,
Chhatrapati Shivaji Maharaj International Airport, 1st floor, Terminal 1-B, Santacruz (East), Mumbai- 400099.

Your Service is Our Duty

Sub: Renewal of Consent to Operate for Building No. 5 Multi-level Car Parking-2, Santacruz (part of non-operational area (landside) development of Chhatrapati Shivaji Maharaj International Airport, out of total six buildings) project under Red/LSI Category..

Ref:

1. Environment Clearance accorded by Env. Dept, GoM vide letter SEAC-2010/CR.53/TC-2 dtd. 01/07/2011.
2. Renewal of Consent to Operate accorded by the Board vide letter Format1.0/CAC-CELL/UAN No. 0000116725/CR-2202000148 dtd. 02/02/2022.
3. Minutes of Consent Appraisal Committee meeting held on 28/07/2022.

Your application NO. MPCB-CONSENT-0000138070

For: Grant of Renewal of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal of Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I,II,III & IV annexed to this order:

1. **The Consent to Renewal is granted for a period up to 31.08.2026**
2. **The capital investment of the project is Rs.96.97 Cr. (As per C.A Certificate submitted by industry).**
3. **The Renewal of Consent to Operate is valid for Building No. 5 Multi-level Car Parking-2, Santacruz (part of non-operational area (landside) development of Chhatrapati Shivaji Maharaj International Airport, out of total six buildings) named as Mumbai International Airport Ltd., Chhatrapati Shivaji Maharaj International Airport, 1st floor, Terminal 1-B, Santacruz (East), Mumbai-400099 on Total Plot Area of 7,700 SqMtrs for Construction BUA of 31,180 SqMtrs out of Total Construction BUA of 43,474 SqMtrs as per EC granted dated 01/07/2011 including utilities and services**

Sr.No	*Permission Obtained*	*Plot Area (SqMtr)*	*BUA (SqMtr)*
1	EC- dtd. 01/07/2011	1706100.00	886882.96
2	C to R - dtd 02/02/2022	7700.00	31180.00

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	*Description*	*Permitted (in CMD)*	*Standards to*	*Disposal*
1.	Trade effluent	Nil	Nil	Nil

Sr No	Description	Permitted	Standards to	Disposal
2.	Domestic effluent	22	As per Schedule - I	The treated sewage shall be 60% recycled for secondary purposes and remaining shall be utilized on land for gardening and/ or connected to local body sewer line with water metering system.

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
S-1	DG Set of 320 kVA	01	As per Schedule -II

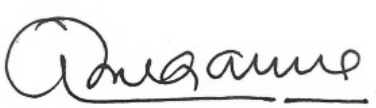
6. **Conditions under Solid Waste Rules, 2016:**

Sr No	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Solid Waste	100 Kg/Day	Segregation	Handed over to Auth. Vendor.

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:**

Sr No	Category No.	Quantity	UoM	Treatment	Disposal
NA					

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. PP shall properly operate STP to achieve the treated domestic effluent standard for the parameter BOD-10 mg/lit including disinfection facility to the treated sewage.
11. The treated sewage shall be 60% recycled for secondary purposes such as toilet flushing, air-conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and/ or connected to local body sewer line with water metering system.
12. PP shall properly operate organic waste digester along with composting facility/bio-digester (biogas) for the treatment of wet garbage.
13. PP shall make provision of charging ports for electric vehicles at least 40% of total available parking slots.
14. PP shall use battery operated electric vehicles in CSMIA.
15. Hazardous Waste from cargo facility shall be disposed through CHWTSDF.
16. PP shall extend existing BG of Rs. 25 Lakh towards O & M of Pollution Control Systems and compliance of Consent conditions.



Signed by: Ashok Shingare
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2022-08-31 23:20:12 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	125000.00	MPCB-DR-12025	17/05/2022	NEFT

Balance fees of Rs. 4,50,000 utilized in this Renewal of Consent to Operate and there is no balance fees left with Board.

Copy to:

1. Regional Officer, MPCB, Mumbai and Sub-Regional Officer, MPCB, Mumbai II
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have provided Sewage Treatment Plant of designed capacity 10000 CMD with SBR technology for the treatment of 22 CMD of sewage.

B] The Applicant shall operate the sewage treatment plant (STP) to treat the sewage so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr.No	Parameters	Limiting concentration not to exceed in mg/l, except for pH
1	pH	5.5-9.0
2	BOD	10
3	COD	50
4	TSS	20
5	NH4 N	5
6	N-total	10
7	Fecal Coliform	less than 100

C] The treated sewage shall be 60% recycled for secondary purposes such as toilet flushing, air-conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and/ or connected to local body sewer line with water metering system.

2) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.

3) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

4) **The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act,1974 and as amended, and other provisions as contained in the said act.**

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	0.00
2.	Domestic purpose	25.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00

5) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1) **As per your application, you have provided the Air pollution control (APC)system and erected following stack (s) and to observe the following fuel pattern-**

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
1	DG Set of 320 kVA	Acoustic Enclosure	12.00	HSD 70 Ltr/Hr	1	SO2	33.60 Kg/Day

2) The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards.

Total Particular matter	Not to exceed	150 mg/Nm3

3) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacemenalteration well before its life come to an end or erection of new pollution control equipment.

4) The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent(C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Renewal of Consent to Operate	25 Lakh	Extension of existing BG	Towards O & M of Pollution Control Systems and Compliance of Consent conditions.	Monthly	28/02/2027

** The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent. **# Existing BG obtained for above purpose if any may be extended for period of validity as above.**

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

General Conditions:

1 The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

2 The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act 1986 and Solid Waste Management Rule 2016, Noise (Pollution and Control) Rules, 2000 and E-Waste (Management & Handling Rule 2011.

3 Conditions for D.G. Set

a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.

b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.

c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.

d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f) D.G. Set shall be operated only in case of power failure.

g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.

4 Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rule 2016 & E-Waste (M & H) Rule 2011.

5 Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.

6 Applicant shall submit official e-mail address and any change will be duly informed to the MPCB.

7 The treated sewage shall be disinfected using suitable disinfection method.

8 The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.

9 The applicant shall make an application for renewal of the consent at least 60 days before date of the expiry of the consent.

This certificate is digitally & electronically signed.

Mumbai International Airport Ltd

MANAGEMENT REPRESENTATIVE OFFICE

STANDARD OPERATING PROCEDURE

WASTE MANAGEMENT

FOR MUMBAI INTERNATIONAL AIRPORT

MIAL/MRO/SOP/12/02

Activity	Name	Signature	Date
Prepared By	Mr. Sanjay Rathod – Manager (Environment and Sustainability)		06/05/24
Recommended By	Mr. Vinay Bedekar – Deputy General Manager (Environment and Sustainability)		6/5/24
	Mr. Yadu Arora Management Representative (IMS)		6/5/24
Approved By	Mr. Ashwin Noronha – COO		6/5/24

Chhatrapati Shivaji Maharaj INTERNATIONAL AIRPORT MUMBAI

adani

TABLE OF CONTENTS

1.0 PURPOSE

To ensure that all wastes generated during operations, maintenance activities and services at airside areas, terminal buildings, landside areas of Chhatrapati Shivaji international airport are appropriately disposed off as per applicable legal requirements as applicable to minimize danger to personnel or to the environment.

2.0 SCOPE

This procedure applies to all operations, maintenance activities and services of Mumbai International Airport Pvt Ltd (MIAL) and stakeholders, such as concessionaires, airlines, hangers, and any other outsourced agency working with MIAL at CSIA, where there is a requirement to handle and dispose waste (Hazardous, Non hazardous and E-waste, etc)

3.0 OBJECTIVE

To dispose off wastes (Hazardous, Non hazardous and E-waste) as per applicable legal requirements and environmentally friendly manner.

4.0 RESPONSIBILITY

Management Representative
The Management Representative is responsible for ensuring that the requirements of this procedure are fully implemented at Chhatrapati Shivaji international airport. He is also responsible for ensuring that Functional heads are aware of and understand the contents of this procedure.

Procurement Head
Procurement Head to ensure timely deployment of disposal agency (Including Licensed Contractor approved by CPCB/MoEF/MPCB) for transportation and disposal of waste/scrap as per defined frequency.

Further, he is responsible for appointing a Responsible Person for disposal of waste/scrap from waste yard to waste/scrap authorised disposal facility at planned intervals and carrying out periodic inspections of facilities to ensure continued and adequate compliance

Functional Heads

Functional Heads at all levels are responsible to ensure that the requirements of this procedure are followed and that those under their supervision also observe these requirements. They should ensure that training to be given to respective peoples for waste handling and disposal. Functional Head to ensurethat all the necessary legal documents are filled before sending waste outside of Mumbai International airport premises and also to ensure that the records are maintaining by the concerned persons as per the legal requirements.

Environment Manager

The environment department shall coordinate with various stakeholders and departments of MIAL for timely disposal of wastes. Also coordinate with MPCB authorized waste transport and disposal agencies for lifting of waste at scheduled timeline. As per Hazardous waste (Management, Handling and Transboundary) Rules, 2008 following forms are filled and maintained while every disposal:

- Form 11 – TREM card to be given to waste transporter
- Form 12- Hazardous waste label for the labeling
- Form 13 – Hazardous waste manifest (6 copies)
- Form 3 to be maintained monthly for waste generated and disposal records

5.0 DEFINITIONS & ABBREVIATIONS

AGM : Airside Ground Maintenance
BCAS : Bureau of Civil Aviation Services
CSIA : Chhatrapati Shivaji International Airport
CPCB : Central Pollution Control Board
CHWTSDF: Common Hazardous Waste Treatment, Storage & Disposal facility
FMT : Format
IMS : Integrated Management System
MRO : Management Representative Office
MIAL : Mumbai International Airport Limited
MPCB : Maharashtra Pollution Control Board
MoEF : Ministry of Environment & Forest
MT : Motor Transport
MWML: Mumbai Waste Management Limited
MSDS : Material Safety Data Sheet
MLD : Million Litter per Day
OWC : Organic Waste Converter
SRA : Security Removed Articles
TTCWMA: Trans Thane Creek Waste Management Association

Non Hazardous Waste:

Waste which, does not pose any problem either to people, agriculture or animals around the area. Any solid material or semisolid, which does not have any danger to the environment or to the human health if disposed of in a safe way.

Hazardous waste:

Means any waste which by reason of any of its physical, chemical, reactive, toxic, flammable, explosive or corrosive characteristics causes danger or is likely to cause danger to health or environment, whether alone or when in contact with other wastes or substances.

E-waste:

Wastes electrical and electronic equipment whole or in part or rejects from their manufacturing and repair process which are intended to be discarded.

Security Removed Articles (SRA):

SRA are the restricted items removed from baggage of passengers during inline baggage screening at terminal and during pre embarkation security checks. For examples: lighters, small size fire extinguishers, pressurizedcylinders, party poppers, fire crackers, Zippo fuel, flammable chemicals, paints/ solvents and any other BCAS restricted items.

Construction and demolition waste:

The wastes comprising of building materials, debris and rubble resulting from construction, re-modeling, repair and demolition of ay civil structure.

6.0 PROCEDURE

6.1 Non- hazardous wastes

The Non-Hazardous waste generated at CSIA and the method of storage and disposal are given below:

6.1.1 Airline Waste and Airport Garbage

The major wastes generated are Waste Plastics, Waste papers, magazines, food waste from airlines & airside canteens, Waste glass, Waste wood from the construction or cleaning activities, broken tins, metal tins etc.

There are 12 number of community bins (two each for Terminal - 2, Cargo, Terminal-1) and 6 Numbers on landside and 18 numbers on airside including Hanger and apron area. Wastes from aircrafts are handled by airlines separately. The solid waste from aircrafts is taken to their segregation areas for recovery of valuable materials.

Collection Method:- All above mentioned Non hazardous wastes are disposed by respective airlines, airport cleaning workers in to the designated waste storage bins. The bins are stored at different locations in the airside and landside such as atairside near T1, hanger area, GA terminal, Victor apron, cargo4D gate, level 1 west side, gate no. 9 and next to ATM at power house near T1 landside. Plastic bags are provided in the bins to avoid the leakage / overflow from the bins. The waste is disposed in the bins in the plastic bags with proper sealing.

Disposal Method: The wastes from all the bins are collected by an agency (government authorized) at defined frequency. The waste is segregated at central location and segregated material is sent for recycling. The remaining waste is disposed off to

MCGM disposal facility. Proper functioning of waste handling agency is being monitored by AGM department at airside, landside department at landside and facilities at terminal building.

Organic waste treatment facility:

MIAL has installed 1 MT capacity organic waste converter (OWC) for treatment of food waste generated at CSIA. This treatment facility has been installed at MIAL plot opposite to Kalpana talkies, Kurla. The daily food waste generated at airport canteens, flight kitchens are transported by OWC operator to the site. About 1 MT/day of food waste is treated at OWC site. After treatment this waste is kept for currying for 10 days. After 10 days a good quality of compost is generated which is again used for landscaping by horticulture department.

OWC operator has to coordinate with MIAL's waste handlingagency for collection and transportation of food waste to theOWC site.

Domestic Sewage

The sewage generated Terminal 1, Terminal 2, cargo and airside buildings such as apron control, MT section, main fire station, GSEs, etc. is collected through pipelines and directed to the state of the art Sewage Treatment Plants (STP). Three STP have been installed and fully operations for treatment of sewage generated at CSIA. The sewage generated is treated through physical, chemical and biological treatment. CSIA has 3 treatment plants as, for T1 – 4 MLD, T2 – 10 MLD and cargo complex – 1 MLD. Treated water from these systems is again recycled back to the flushing system, HVAC and gardening system.

Wastewater from Aircraft:

The WC waste from aircraft (Blue water) is collected by the airline agents and transported through tanker to the designated WC treatment system called "triturator". The waste from Aircrafts (blue water) is treated at triturator by crushing, settling method. Sludge from triturator is disposed through authorized contractor & water is sent to T2 stp for further treatment.

6.1.2 Construction & demolition waste:

- The construction and demolition waste generated is collected, stored and disposed as per MCGM collection center.

- This waste is not mixed with other solid wastes,segregated as soil, concrete, wood, steel and disposed sepregately.

6.2 HAZARDOUS WASTE

All hazardous wastes generated at Mumbai International airport are collected and stored at designated places with proper barrication, sign boards and containment.

The hazardous waste commonly generated in our area of work and the method of storage and disposal are given below:

6.2.1 Waste / Used Oil

Waste Oil / Used oil generated from DG set servicing, vehicle maintenance at Motor Transport department, transformer oil replacement and other maintenance activities.

The oil generated at Motor transport department / cargo complex is stored at designated place with sign and label. The DG set oil or Oil from transformers is generated once in a year and that is being disposed at the same time.

Disposal method: - Used / waste oil is disposed to CPCB /MPCB authorized recycling / reprocessing authority for either recycling or incineration

6.2.2 Oil contaminated Filters

Oil contaminated filters are generated from DG set servicing, vehicle maintenance at Motor Transport department and emergency services department.

The oil filters generated are stored at designated place with sign and label at MT department.

Disposal method: - Oil filters are disposed to CHWTSDF for incineration.

6.2.3 Oil Contaminated Waste

Oil contaminated waste is generated from DG set servicing,vehicle maintenance at Motor Transport department, transformer oil replacement and other small maintenance activities at airside and landside. Separate bins are provided at all locations tocollect the oily contaminated waste and finally it is transported to motor Transport department for central storage.

Disposal method: - Oil contaminated waste is disposed to CHWTSDF for incineration.

6.2.4 Runway rubber deposits:

Runway is being cleaned regularly and the rubber deposited is removed from runway along with the paints periodically. This paint and rubber waste is being removed by the help of a rubber removal machine. Waste rubber and paint deposits is being collected and stored in civil engineering department area at a designated location.

Disposal Method: This waste is disposed to CHWTSDF for treatment and landfill

6.2.5 Empty Paint / Solvent / Insecticide / Bitumen tins

Empty tins of paint, solvent, bitumen, etc. are generated by Airside Ground maintenance and E&M - Civil department. These tins are stored at respective departments at designated place.

Empty Paint and solvents tins are collected and stored. Insecticides are being used at air side and land side for the horticulture purpose. These empty tins are stored at motor transport department.

Empty bitumen drums are kept at the civil store with identification and labeling.

Disposal Method: - These contaminated empty tins are disposed to CHWTSDF for land filling purpose.

6.2.6 Oil / chemical Contaminated saw dust

Contaminated saw dust is generated after fuel or chemical spill incident. The waste is handled by AGM and cargo departments.

Contaminated saw dust is collected and stored at respective hazardous waste storage areas such as MT section and cargo,

Disposal Method: The waste is disposed to CHWTSDF for incineration.

6.2.7 Lead Acid batteries

Waste batteries are generated at motor transport, IT and E&M departments. The Lead acid batteries shall be collected and stored in Motor transport department & IT storage area at designated place with identification.

Other batteries generated at IT department etc shall be treated as E-waste and disposed off accordingly.

It is the responsibility of the generator that to make the arrangement of buy-back with the supplier.

Disposal Method: - All Lead acid batteries shall be disposed to authorized dealer as a buy back arrangement or battery recycler.

6.2.8 Electronic waste (E-waste)

All E-waste generated at Airside and landside by IT department and E&M department are to be collected and kept at designated place. The storage has been done in accordance with IT department. The e-waste includes fluorescent tubes and bulbs, computers and its accessories, printers, printer cartridges, electric bulbs etc.

E waste generated at the offices shall be stored by the housekeeping agency at designated place in custody of IT and from that place IT dept is arranging for disposal of the waste.

Separate bins are kept at terminal building for collection of e-waste from passengers also. These bins are called Eco-bin and e-waste shall be treated by an MPCB authorized e-waste handling agency.

Disposal Method: - E-waste is disposed by procurement department to MPCB authorized E-waste recycled.

6.2.9 Bio Medical Waste

Biomedical wastes is generated at medical centers located at Terminal 1, 2 and main fire station. The waste is collected at Terminal 1 & 2 and is being disposed to authorized disposal agency. The Bio-medical waste is kept at bins with proper color plastic bags.

Disposal Method: - Bio-medical waste is collected and disposed to MPCB authorized disposal agency. The agency visits to terminals and collect the waste regularly.

6.2.10 Security Removed Articles (SRA)

SRA removed from the baggage at standalone X-ray machine, SOOG or at level 4 passenger reconciliation room by MIAL security will be handed over to the airlines except dangerous goods. MIAL security department shall handle and store SRA as per SOP MIAL/SC/SOP/05/05 before disposal though Environment department.

Disposal Method: The waste is disposed to CHWTSDF for incineration.

Following are the legal requirements for storage and disposal of the hazardous waste generated at Chhatrapati Shivaji International Airport, Mumbai.

Sr. No.	Activity	Statutory forms	Instructions	Responsibility
1	Storage of hazardous waste	Form 12 of hazardous waste rules shall be pasted on the container of waste storage during transportation.	Hazardous waste shall be stored under covered shed with secondary containment.	Waste Generator
2	Disposal of hazardous waste	Form 13 (manifest) shall be filled while disposal of the waste	Signed copy of form 13 shall be taken from transporter and submitted to Pollution control board.	Environment dept
3	Inventory	Inventory shall be maintained in form 3	The forms shall be updated on continuous basis.	Environment dept
4	Returns	Returns of all hazardous waste shall be submitted to pollution control board in form 4 - annually	All types of waste shall be included in form4	Environment dept
5	Licenses	All licenses of waste disposal / recycle agency / transporter shall be kept in a file.		Procurement dept /Environment dept

6.3 TRANSPORTATION OF HAZARDOUS WASTE:

Transportation of hazardous waste shall be carried out by Licensed Waste transporter, as approved by MaharashtraPollution Control Board (MPCB).

The vehicle should comply with the requirements of Motor vehicle Act & Rules for handling hazardous goods. Drivers of vehicles carrying hazardous waste must be in possession of a copy of the waste consignment note and Waste manifest. They are briefed on precautions mentioned on MSDS by responsible person.

Proper training should be given to the drivers of hazardous waste transport vehicles and license of Hazardous waste transport is also required to perform the duties.
The same requirements shall be communicated to the hazardous waste transporter.

6.4 Waste management

Further details regarding generation, storage, handling, transportation and disposal process is given in the annexure-1

6.5 Training:

Concerned staff at all levels will receive training and information on the waste management in line with this procedure. This will come in the form of information given during new joinee induction, Environmental awareness training, specifics activities training, on job training, Waste Management Training program, EMS training, etc.

7.0 FORMATS USED

Waste Generation Register (MIAL/MRO/FMT/20/00)

8.0 RECORDS GENERATED

1. Waste Generation Record- (MIAL/MRO/REC/16)
   i. Form 3
   ii. Manifest Form 13
   iii. Form 4
   iv. Daily STP reports
   v. Used oil generation note

9.0 REFERENCES

1. The Hazardous waste (Management, Handling and Trans boundary Movement) Rules, 2008
2. Inline Hold baggage screening system T2 SOP no. MIAL/SC/SOP/05/05
3. The E-waste (Management and Handling) Rules, 2011
4. The construction and Demolition Waste Management Rules, 2016
5. The Municipal Solid Waste (Management and Handling) Rules, 2000

10.0 REVISION HISTORY

Date	Rev. No.	Page No.	Revision Description
01.06.2013	1	7, 11 & 12	Addition of runway rubber & paint waste Addition of sewage treatment plant disposal Addition of disposal of off-loaded chemicals from inline security. Updated – Sharda enterprises & TTCWMA
05.01.2017	2	4,5,6,8,9,11	Amendment in roles & responsibility of Environment department Addition of definition of E-waste & SRA and abbreviation of MWML, BCAS, SRA, MSDS, MLD, OWC Addition of amended non hazardous waste disposal method for airline waste Addition of details of organic waste treatment facility, domestic sewage treatment and blue water treatment Addition Security removed articles (SRA) management Addition of Records and references

Annexure-1 Waste Management at CSIA

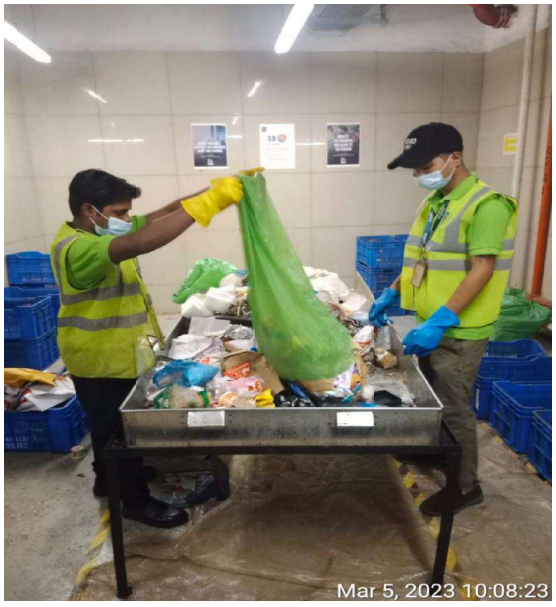
Sr. No.	Name of the Waste	Source of Generation	Storage Location	Internal Waste Transfer by	Disposal agency	Responsibility of Disposal	Records to be maintained by Env dept
1	Waste Plastic	Airside offices, Terminal 1& 2 offices canteens, waste from Airlines, canteens at airside,	Separate Bins are provided at airside and landside of T1, T2, MT section	Waste is not internally transferred, as the waste is directly lifted from the bins	Sharda Enterprises , Mumbai Food waste treated at OWC plant	Airside - Airside Ground Maintenance , Landside – Facilities Management	Monthly waste disposal details from Sharda enterprises
2	Waste papers						
3	Waste Glass (bottles)						
4	Waste plastic bottles						
5	Waste Wood						
6	Broken Tins						
7	Other Scrap						
8	Wet garbage (food waste etc)						
9	Grass, tree cuttings etc	Airside grass cleaning and landscaping maintenance at Terminals	Horticulture department	Airside - Airside Ground Maintenance and Landside – Horticulture department	Not Disposed outside, Internal composting is done at Horticulture department	Airside - Airside Ground Maintenance and Landside – Horticulture department	NA
10	Domestic Sewage	Washrooms, canteens and offices at terminal 1 & 2 and canteens at Cargo, Fire station, MT section etc	Treatment at Sewage Treatment plants	Pipelines	Recycle back in flushing, HVAC and gardening system	E&M	Daily STP report
11	E-waste	Offices, IT department, E&M department	IT department	IT department	Disposed to Authorised agency	IT department	Form 3, Form 13
12	Waste/ Used Oil	DG set , Motor maintenance, servicing etc	MT section	E&M	Mumbai Waste Management Limited,	MT section	Form 3, Form 13

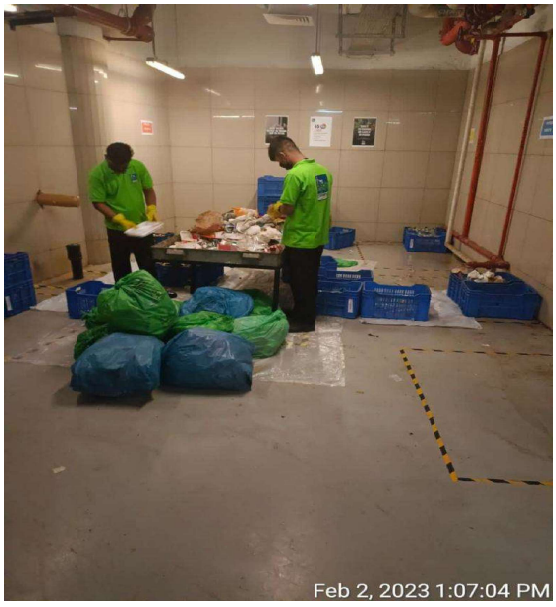
13	Waste batteries	Motor Transport Department, IT department for Laptop batteries , E&M dept for equipment batteries.	Motor transport Department , E&M department, IT Department	E&M department	Taloja	Stores	Scrap note
14	Oil filters	DG set , Motor maintenance, servicing etc	Motor transport Department	E&M department		MT section	Form 3, Form 13
15	Oil Contaminated waste	DG set , Motor maintenance, servicing, E&M dept. etc	Motor transport Department & E&M dept.	E&M department		MT section	Form 3, Form 13
16	Empty Paint / Insecticide /bitumen Tins	Airside Ground maintenance dept, runway , apron bay painting etc.	MT section	Airside - Airside Ground Maintenance and Landside – Horticulture department		Airside Ground Maintenance	Form 3, Form 13
17	Contaminated saw dust	Airside Ground maintenance dept, cargo, landside operations	MT section, Cargo	Airside Ground maintenance dept, cargo, landside operations	Mumbai Waste Management Limited, Taloja	MT section	Form 3, Form 13
18	Security Removed Articles (SRA)	Baggage screening system	Inline security offices	Security department	Mumbai Waste Management Limited, Taloja	Security department	Form 3, Form 13
19	Deposits of runway rubber and paint waste	Runway maintenance	Civil department	Civil department	TTCWMA	Civil department	Form 3, Form 13
20	Biomedical Waste	Medical Rooms at terminal 1, 2 and fire station	Terminal 1 & 2 medical rooms	NA	Authorized agency - SMS Enviro	Medical Department	Medical Department

Segregation Process

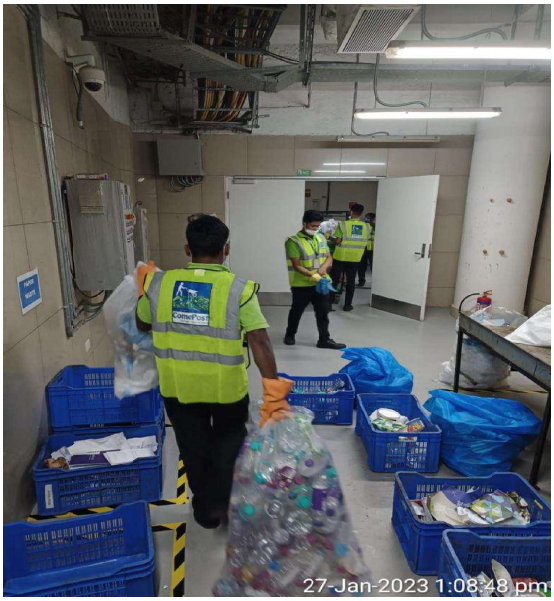
- M/s. ComePost looks after the segregation of waste after the secondary collection at MIAL.
- We do segregation at source at 5 different places.
- Specialised manpower deployed in each room to segregate the waste.
- Bins of different colour are kept for different categories with the proper marking.
- The waste is first sorted into wet and dry waste categories.
- Further dry waste is segregated into categories like plastic, paper, cardboard, metal and glass etc.
- Wet waste is segregated and converted into compost.

Room 1 Location – Terminal 2



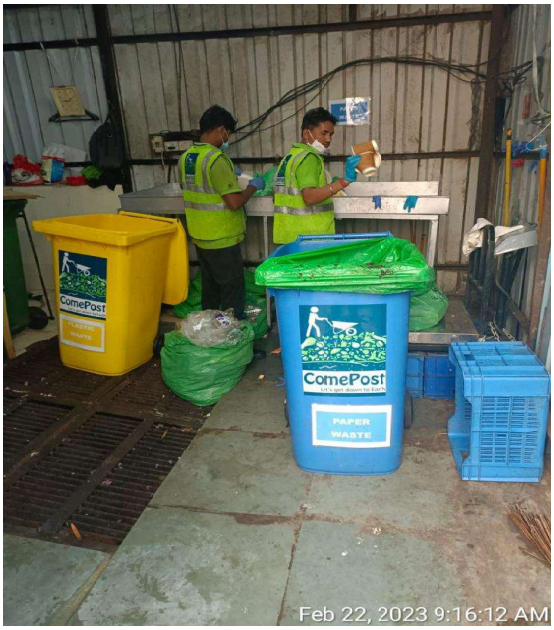


Room 2 Location- Terminal 2



Room 3 location – Loading Dock, T2

Room 4 location – Terminal 1



Waste treatment process

Waste collection from T2 and CISF barrack → Segregation of waste at site → Weighing of waste

Waste + Bioculum + sawdust feed to OWC → One batch run for 20 min to blend feed → Half compost collected in trays

Waste treatment process

Half compost kept for complete decomposition in curing system for 10 days

Ready compost transported to storage shed

compost stored at adjacent shed

Compost distribution on WED at CSMIA

O&M agency- ComePost staff

OWC facility with compost storage shed


C.S.M.I. AIRPORT
MUMBAI
EMERGENCY
RESPONSE
GRID MAP
02nd MARCH 2023
KEY
LEGEND
Landscape
SMR Antenna
Water tanks
Fuel tanks
Airside Boundary
RailwayStation
RailwayLine
Airside Emergency Road
Kaccha Road
Closed Stands
Elevated Roads
Roads
Apron bays
RWY ASPHALT
RWY CONCRETE
GSE Area
Airside Pavements
CSMIA_Land
Static Tank
Project Works- Airside
Project Works- Lanside
Crash Gate
Fire & Emergency
Pre Determined Position
Emergency Reporting Point
RV POINT
Open Drain
Covered Drain
Partially Covered Drain
Bridge
DECLARED DISTANCES
RWY TORA TODA ASDA LDA Displacement RESA Width Length
09 3188 3188 3188 3048 140 120 240
27 3448 3448 3448 2965 483 120 240
14 2871 2871 2871 2471 400 90 90
32 2871 2871 2871 2673 198 100 150
SCALE
0 200 400 800 1200 1600 Meters
0 500 1000 2000 3000 4000 5000 Feet
NOTE
This Grid Map is for use by officials/agencies responding to aircraft emergency, accident or incident. Pilots are requested to refer AIP India and AIP Supplement issued from time to time.
Coordinate System : WGS 1984 UTM Zone 43 N
Grid Map - E&M-AS-G-AS-GN-0000-GEN-00005 - Rev 111

LANDSCAPE SNAPS OF CHHATRAPATI SHIVAJI MAHARAJ INTERNATIONAL AIRPORT (CSMIA), MUMBAI.

Façade landscape of T2 MLCP, CSMIA

Green wall at domestic departure in T2

West exit road landscape towards elevated road

Landscape at Utility block near T2, CSMIA

Aerial view of departure plaza garden at T2, CS

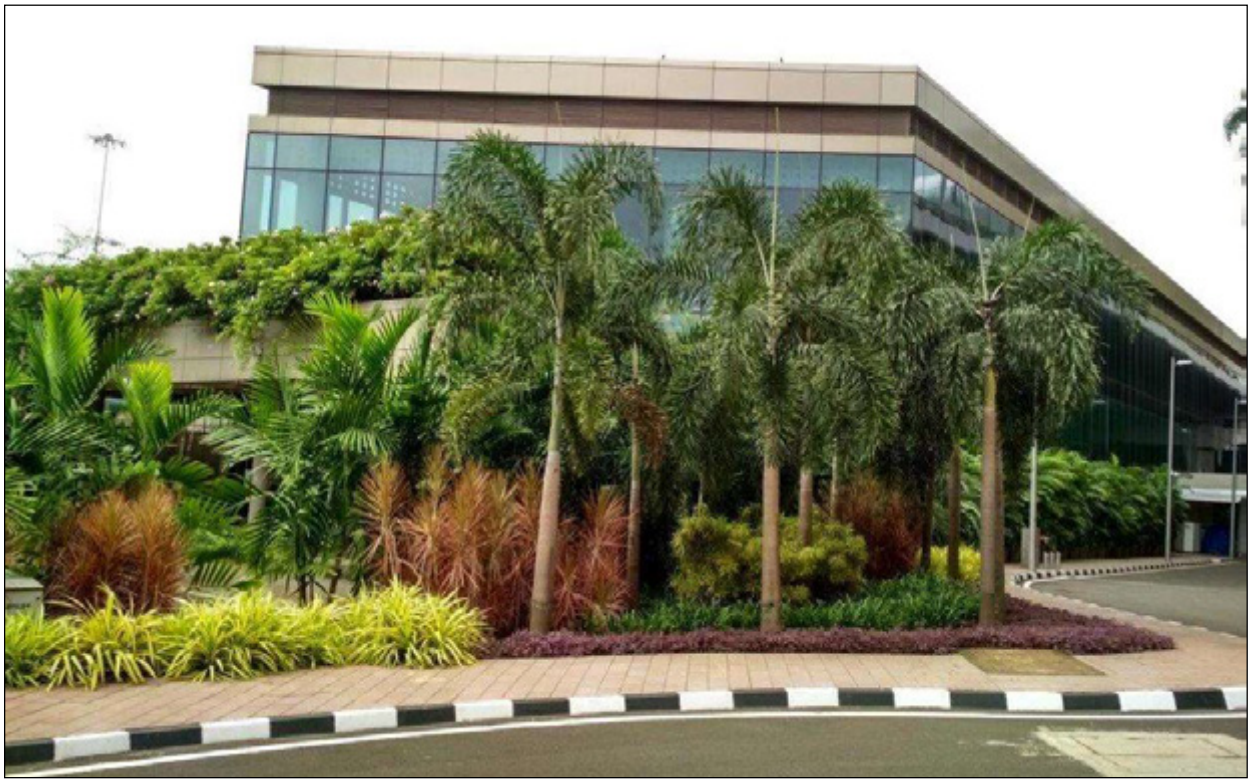
Landscape along west exit road of T2, CSMIA


Interior landscape at baggage reclaim hall in T2, CSMIA

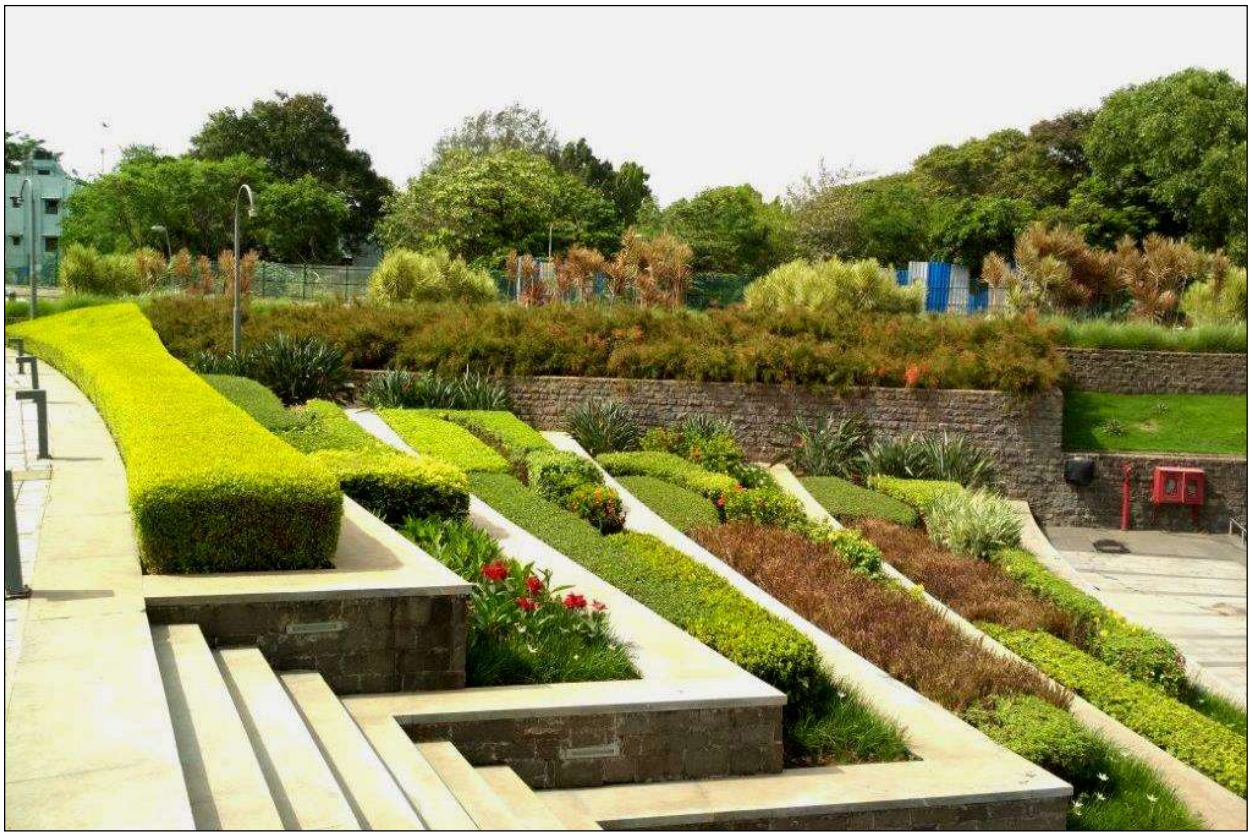
South façade of MLCP & east side landscape at T2, CSMIA

Landscape at departure forecourt of Terminal 1, CSMIA

Landscape along taxi queing area on east side of T2, CSMIA



Landscape at east side transportation lobby , CSMIA



CSMIA entance garden

Departure plaza at T2, CSMIA

Landscape at east side of transportaion lobby at T2, CSMIA

Periphery garden of ATC, CSMIA

CSMIA entrance garden

T2 Arrival plaza, CSMIA

Roundabout landscape at Airside near Gate no 6, CSMIA

Departure plaza garden at T2, CSMIA

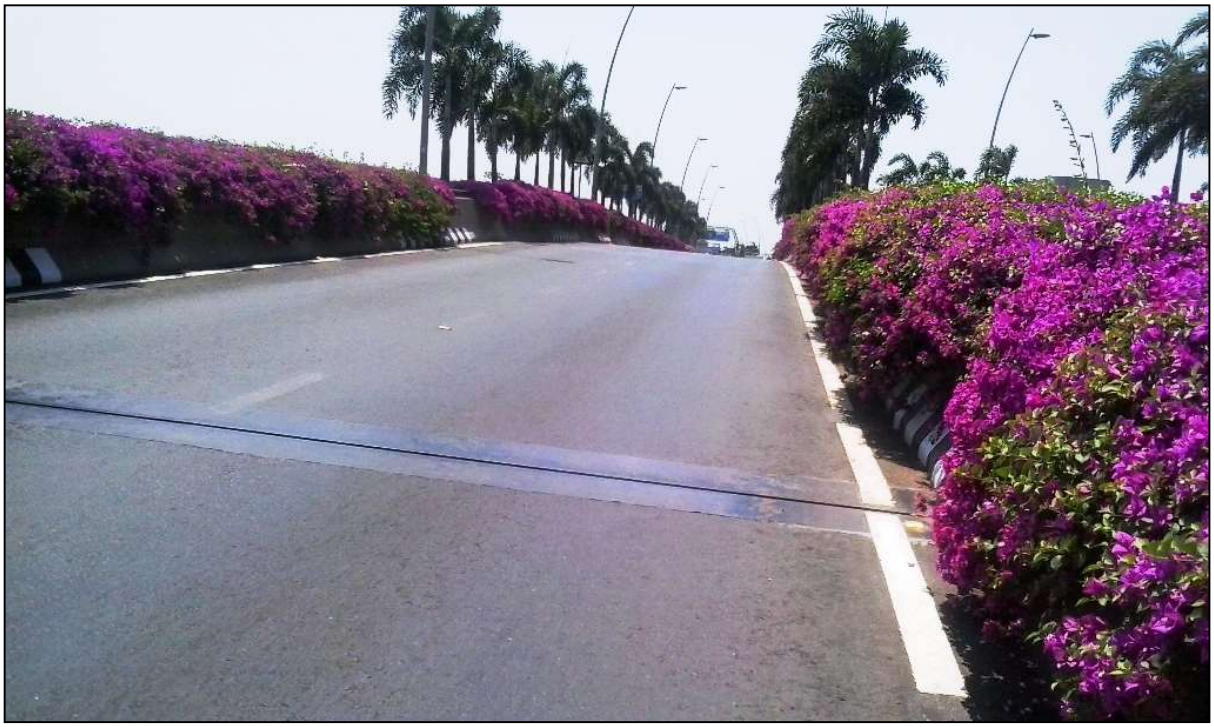
Exit road landscape towards elevated road, CSMIA

Elevated road landscape, CSMIA

Landscape at Elevated road towards T2, CSMIA

Landscape along Taxi queing area on east side of T2, CSMIA

Landscape on elevated road towards city side, CSMIA



Elevated road up ramp, CSMIA

Landscape along exit road, CSMIA

East side, CSMIA entrance

भारत सरकार
Government of India
वाणिज्य और उद्योग मंत्रालय
Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)
Petroleum & Explosives Safety Organisation (PESO)
ए-1 और ए-2 विंग, पाँचवा तल, केंद्रीय कार्यालय परिसर, सी.बी.डी. बेलापुर
नवी मुंबई (महा.)- 400614
A1 & A2 wing, 5th Floor, C.G.O. complex, CBD Belapur, Navi Mumbai (M.S.),
Mumbai - 400614

E-mail : jtccemumbai@explosives.gov.in
Phone/Fax No : 022 - 27575946,27573881

संख्या /No. : P/WC/MH/15/2239 (P267699)

दिनांक /Dated : 14/10/2014

सेवा में /To,

M/S. MUMBAI INTERNATIONAL AIRPORT PVT. LTD.,
SY-1405 (Part of),Marol Village,,
Andheri (East),
MUMBAI,
District: MUMBAI,
State: Maharashtra
PIN: 400099

विषय /Sub : Plot No, SY.NO. 1405(PART OF),, NA, MAROL VILLAGE, ANDHERI (E),, District: MUMBAI, State: Maharashtra, PIN: 999999 में स्थित विद्यमान पेट्रोलियम वर्ग B अधिष्ठापन में अनुज्ञप्ति सं P/WC/MH/15/2239 (P267699) के नवीकरण के संदर्भ में ।
Existing Petroleum Class B Installation at Plot No, SY.NO. 1405(PART OF),, NA, MAROL VILLAGE, ANDHERI (E),, District: MUMBAI, State: Maharashtra, PIN: 999999 - Licence No. P/WC/MH/15/2239 (P267699) - Renewal regarding.

महोदय /Sir (s),

कृपया आपके पत्र क्रमांक MIAL/EH दिनांक 29/09/2014 का अवलोकन करें ।
Please refer to your letter No : MIAL/EH, dated 29/09/2014

अनुज्ञप्ति संख्या P/WC/MH/15/2239 (P267699) दिनांक 10/07/2012 को दिनांक 31/12/2024 तक नवीनीकृत कर इस पत्र के साथ प्रेषित की जा रही है ।
Licence No. P/WC/MH/15/2239 (P267699) dated 10/07/2012 is forwarded herewith duly renewed upto 31/12/2024

2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कडाई से पालन करें । अनुज्ञप्ति के नवीकरण हेतु समस्त दस्तावेजों को अनुज्ञप्ति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व so as to reach this कार्यालय में प्रस्तुत करें ।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence so as to reach this office on or before the date on which Licence expires.

कृपया पावती दें।
Please acknowledge the receipt.

Note : Your Balance Amount with the Organisation is Rs.[illegible], which will be used for processing of the same Licence in future.

भवदीय /Yours faithfully,

()
(A.K.Srivastava)

Controller of Explosives
कृते संयुक्त मुख्य विस्फोटक नियंत्रक
For Jt. Chief Controller of Explosives
नवी मुंबई (महा.)
Mumbai

, (अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : http://peso.gov.in देखें)
(For more information regarding status,fees and other details please visit our website: http://peso.gov.in)

Ashwamedh Engineers & Consultants
Laboratory Services Division
TC-5509
Ashwamedh Engineers & Consultants
Survey No. 102, Plot No.26, Wadala Pathardi Road,
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(Near Guru Gobind Singh School, Near Pandav Nagari,
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/05/24/5028	Report No.: N/05/24/5028	Report Date	07/05/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No. 5700343880	Date of Monitoring	29/04/2024 to 30/04/2024
Calibration Certificate	CC342223000000982F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	540021

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 27 End	67.25	66.8	68.2	62.5	61.7	63.3	CPCB Protocol for Ambient Level Noise Monitoring, July 2015
2	STP Terminal- 1	63.95	62.3	65.6	57	55.7	58.3	
3	CCR-2	68.5	67.8	69.2	53.95	52.3	55.6	
4	Apron Control	66.25	65.3	67.2	58.6	57.3	59.9	
5	6 No Gate (Sahar)	66.75	65.3	68.2	61.45	60.3	62.6	
6	J 8	58.85	57.3	60.4	51.55	50.8	52.3	
7	Runway 14 End	65.5	64.3	66.7	55.2	54.3	56.1	
8	Project Office (Sahar)	65.6	64.4	66.8	50.23	48.2	52.3	
9	Cargo 4D	68.05	66.3	69.8	64.20	63.3	65.1	
10	OWC Kurla	61.55	60.8	62.3	51.30	49.3	53.3	

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

Ashwamedh Engineers & Consultants
Laboratory Services Division

End of Report

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5033	Report No.: N/06/24/5033	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000880F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	CCR-2	66.45	65.6	67.3	60.25	59.2	61.3	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5034	Report No.: N/06/24/5034	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000879F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	STP Terminal- 1	64.45	63.8	65.1	58.55	57.8	59.3	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

Ashwamedh Engineers & Consultants
Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5035	Report No.: N/06/24/5035	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000878F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 27 End	69.15	68.3	70	64.45	63.3	65.6	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5036	Report No.: N/06/24/5036	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000881F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Apron Control	64.15	63.1	65.2	56.55	55.3	57.8	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5037	Report No.: N/06/24/5037	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000882F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	6 No Gate (Sahar)	68.25	67.3	69.2	63.45	62.3	64.6	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5038	Report No.: N/06/24/5038	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000883F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	J 8	60.8	59.3	62.3	53.4	52.3	54.5	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5039	Report No : N/06/24/5039	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	CC342223000000884F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 14 End	68.25	67.3	69.2	64.45	63.3	65.6	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5040	Report No.: N/06/24/5040	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000885F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Project Office (Sahar)	64.55	63.3	65.8	58.25	57.3	59.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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Laboratory Services Division

TC-5509

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5041	Report No.: N/06/24/5041	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	C342223000000886F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	91207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Cargo 4D	68.2	67.1	69.3	63.3	62.3	64.3	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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Laboratory Services Division

End of Report

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5042	Report No.: N/06/24/5042	Report Date	03/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	28/05/2024 to 29/05/2024
Calibration Certificate	CC342223000000887F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	19120763

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	OWC Kurla	63.3	62.3	64.3	53.95	52.3	55.6	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5563	Report No.: N/06/24/5563	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000878F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	19120763

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 27 End	68.4	67.5	69.4	62.5	61.9	63.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5562	Report No.: N/06/24/5562	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000879F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	STP Terminal- 1	63.2	62.1	64.4	58.5	57.3	59.7	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5561	Report No.: N/06/24/5561	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000880F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	CCR-2	65.5	64.7	66.4	61.3	60	62.6	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5564	Report No: N/06/24/5564	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC3422230000000881F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Apron Control	66.3	65.1	67.6	59.2	58.5	60.5	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5565	Report No.: N/06/24/5565	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000882F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	6 No Gate (Sahar)	67.4	66.9	68	63.3	62.3	67.4	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5567	Report No.: N/06/24/5567	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000884F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 14 End	64.3	63	65.7	56.3	55.3	57.4	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5568	Report No.: N/06/24/5568	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000885F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Project Office (Sahar)	63.5	62.7	64.4	57.4	56	58.8	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ashwamedh Engineers & Consultants
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5566	Report No.: N/06/24/5566	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000883F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	J 8	57.5	56.7	58.4	50.7	49.6	51.8	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5569	Report No.: N/06/24/5569	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000886F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Cargo 4D	61.6	60.7	62.5	54.7	53.9	55.6	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/06/24/5570	Report No.: N/06/24/5570	Report Date	22/06/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	17/06/2024 to 18/06/2024
Calibration Certificate	CC342223000000887F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	19120763

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
10	OWC Kurla	67.4	66.3	68.5	62.4	61.2	63.7	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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End of Report

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5785	Report No.: N/07/24/5785	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000880F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	CCR-2	68.4	67.2	69.7	63.8	62.9	64.6	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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End of Report

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5786	Report No.: N/07/24/5786	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000879F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	STP Terminal- 1	64.4	63.2	65.7	59.6	58.4	60.8	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5787	Report No.: N/07/24/5787	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000878F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Runway 27 End	67.6	66.7	68.4	63.3	62.5	64.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5788	Report No.: N/07/24/5788	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000881F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Apron Control	67.7	66.6	68.8	61.2	60	62.5	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5789	Report No.: N/07/24/5789	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000882F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	6 No Gate (Sahar)	66.4	65.2	67.7	60.6	59.7	61.5	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ashwamedh Engineers & Consultants
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5791	Report No.: N/07/24/5791	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000884F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
7	Runway 14 End	65.8	64.7	66.9	62.2	61	63.4	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5792	Report No.: N/07/24/5792	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000885F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Project Office (Sahar)	66.6	65.8	67.5	61.1	60.3	62	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5793	Report No.: N/07/24/5793	Report Date	31/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000886F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Cargo 4D	63.4	62.6	64.2	58.2	57.1	59.3	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5794	Report No.: N/07/24/5794	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000887F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	OWC Kurla	68.2	67	69.4	62.6	61.4	63.7	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

Ashwamedh Engineers & Consultants
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/07/24/5790	Report No.: N/07/24/5790	Report Date	30/07/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	25/07/2024 to 26/07/2024
Calibration Certificate	CC342223000000883F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	J 8	54.4	53.4	55.5	49.6	48.7	50.4	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5205	Report No.: N/08/24/5205	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000878F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Runway 27 End	68.1	67.2	69.0	63.5	62.1	64.9	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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End of Report

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5204	Report No.: N/08/24/5204	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000879F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
2	STP Terminal- 1	59.7	58.9	60.4	52.2	51.0	53.4	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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Laboratory Services Division

End of Report

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5203	Report No.: N/08/24/5203	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000880F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	CCR-2	66.45	65.6	67.3	60.25	59.2	61.3	CPCB Protocol for Ambient Level Noise Monitoring. July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5206	Report No.: N/08/24/5206	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000881F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Apron Control	68.4	67.2	69.7	63.3	62.0	64.6	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5207	Report No.: N/08/24/5207	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000882F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	6 No Gate (Sahar)	67.1	66.2	68.1	62.8	61.7	63.9	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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Laboratory Services Division

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5209	Report No.: N/08/24/5209	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000884F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Runway 14 End	67.5	66.6	68.4	60.6	59.4	61.8	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5210	Report No.: N/08/24/5210	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000885F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Project Office (Sahar)	63.4	62.8	64.0	56.5	55.5	57.5	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5211	Report No.: N/08/24/5211	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000886F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	Cargo 4D	68.3	67.2	69.4	62.8	60.8	64.7	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ashwamedh Engineers & Consultants
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5212	Report No.: N/08/24/5212	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000887F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	OWC Kurla	63.4	62.6	64.2	53.4	52.1	54.8	CPCB Protocol for Ambient Level Noise Monitoring, July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/08/24/5208	Report No.: N/08/24/5208	Report Date	10/08/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	07/08/2024 to 08/08/2024
Calibration Certificate	CC342223000000883F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1.	J 8	52.4	51.5	53.4	49.4	48.7	50.2	CPCB Protocol for Ambient Level Noise Monitoring. July:2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5738	Report No.: N/09/24/5738	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000880F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	CCR-2	67.3	66	68.7	63.6	62.9	64.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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Reviewed & Authorised by

Ashwamedh Engineers & Consultants * Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5739	Report No.: N/09/24/5739	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000879F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	STP Terminal- 1	63.6	62.5	64.7	56.4	55.5	57.3	CPCB Protocol for Ambient Level Noise Monitoring, July-2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5740	Report No.: N/09/24/5740	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000878F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 27 End	67.25	66.4	68.1	62.45	61.6	63.3	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5741	Report No.: N/09/24/5741	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000881F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Apron Control	67.6	66.7	69.2	62.5	61.9	63.5	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5742	Report No.: N/09/24/5742	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000882F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	6 No Gate (Sahar)	66.3	65.2	67.4	59.6	58.7	61	CPCB Protocol for Ambient Level Noise Monitoring, July-2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

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Laboratory Services Division

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5743	Report No.: N/09/24/5743	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000883F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	J 8	64.2	63	65.4	55.2	54.3	56.3	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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Laboratory Services Division

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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5744	Report No.: N/09/24/5744	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000884F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial .No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Runway 14 End	68.5	67.5	69.2	63.4	62.1	64.8	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5745	Report No.: N/09/24/5745	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000885F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/220500081 0 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Project Office (Sahar)	66.3	65.1	67.5	52.1	51	53.2	CPCB Protocol for Ambient Level Noise Monitoring, July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5746	Report No.: N/09/24/5746	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000886F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	Cargo 4D	63.4	62.2	64.7	58.4	57.7	59.2	CPCB Protocol for Ambient Level Noise Monitoring, July-2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
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NOISE LEVEL MEASURMENT REPORT

Sample ID: N/09/24/5747	Report No.: N/09/24/5747	Report Date	03/10/2024
Name and Address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400099 Maharashtra		
Monitoring Done By	Laboratory	Sample Description/Type	Ambient Noise
Order Reference	SO No.5700343880 Date:14.05.2024	Date of Monitoring	27/09/2024 to 28/09/2024
Calibration Certificate	CC342223000000887F	Instrument Model	Sound level Meter
Consent Number & Date.	Format 1.0/CAC/UAN No.0000111260/CR/2205000810 Date.13.05.2022	Instrument Serial No.	191207632

Chemical Testing; Group: Atmospheric Pollution

Sr No	Location	Day Time (6AM-10PM) dB (A)			Night Time (10PM -6AM) dB (A)			Method
		Leq	Lmin	Lmax	Leq	Lmin	Lmax	
1	OWC Kurla	64.4	63.1	65.7	52.3	51.2	53.5	CPCB Protocol for Ambient Level Noise Monitoring July 2015

Limit

As Per the Environment (Protection)Rules, 1986, Schedule -I

Serial Number	Industry	Limits in dB (A) weighted scale	
		Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a.m.)
112	Airport (Busy Airport)	70	65

Ninad Soundankar
Technical Manager (Chemical)
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TEST REPORT

Sample ID : E/05/24/5002	Report No. E/05/24/5002	Report Date	07/05/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal 1 STP RO Outlet	Date - Sampling	30/04/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	02/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	02/05/2024
Order Reference	SO No. 5700343880	Date - Completion of Analysis	06/05/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.5**	5.5 - 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**14**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**3**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**10**	Not to exceed 50	mg/L	APHA 24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA 24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**1.6**	Not to exceed 5	mg/L	APHA 24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**3.2**	Not to exceed 10	mg/L	APHA 24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.244**	Not specified	mg/L	APHA 24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**32**	Less than 100	MPN Index /100 ml	APHA 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
Senior Analyst (Biological)
Reviewed & Authorised by

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End of Report

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Sample ID : E/05/24/5002	Report No. E/05/24/5002	Report Date	07/05/2024

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TEST REPORT

Sample ID : E/05/24/5004	Report No. E/05/24/5004	Report Date	07/05/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal 2 STP RO Outlet	Date - Sampling	30/04/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	02/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	02/05/2024
Order Reference	SO No. 5700343880	Date - Completion of Analysis	06/05/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.7**	5.5-9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**12**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**4**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**13**	Not to exceed 50	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.2**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**5.3**	Not to exceed 10	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.240**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**40**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
Senior Analyst (Biological)
Reviewed & Authorised by

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End of Report

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Sample ID : E/05/24/5004	Report No. E/05/24/5004	Report Date	07/05/2024

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TEST REPORT

Sample ID : E/05/24/5005	Report No. E/05/24/5005	Report Date	07/05/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Cargo STP Inlet	Date -Sampling	30/04/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	02/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	02/05/2024
Order Reference	SO No. 5700343880	Date - Completion of Analysis	06/05/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.6**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**99**	mg/L	IS 3025 (Part 17) Amds I: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**173**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**520**	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**25.8**	mg/L	APHA,24th Ed.,4500- NH3.B & C,424 & 425: 2023
7	Total Nitrogen (as N)	**34.5**	mg/L	APHA,24th Ed.,4500.A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.248**	mg/L	APHA,24th Ed.,4500- Cl.G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**220**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
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Turn at Sai Mandir Chowk / Samrat Sweet Turning)
sales@ashwamedh.net +91-253-2392225

TEST REPORT

Sample ID : E/05/24/5006	Report No. E/05/24/5006	Report Date	07/05/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Cargo STP Outlet	Date - Sampling	30/04/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	02/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	02/05/2024
Order Reference	SO No. 5700343880	Date - Completion of Analysis	06/05/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution &Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.65**	5.5-9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**13**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**16**	Not to exceed 50	mg/L	APHA 24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA 24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.4**	Not to exceed 5	mg/L	APHA 24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**5.1**	Not to exceed 10	mg/L	APHA 24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.228**	Not specified	mg/L	APHA 24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**27**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
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Ashwamedh Engineers & Consultants
Laboratory Services Division

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Technical Manager (Chemical)
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Sample ID : E/05/24/5006	Report No. E/05/24/5006	Report Date	07/05/2024

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Ninad Soundankar
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TEST REPORT

Sample ID : E/05/24/5001	Report No. E/05/24/5001	Report Date	07/05/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal 1 STP Inlet	Date -Sampling	30/04/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	02/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	02/05/2024
Order Reference	SO No. 5700343880	Date - Completion of Analysis	06/05/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**8.9**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**92**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**151**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**440**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**24.6**	mg/L	APHA,24th Ed.,4500- NH3,B & C,424 & 425: 2023
7	Total Nitrogen (as N)	**31.5**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.238**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**220**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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TEST REPORT

Sample ID : E/05/24/5003	Report No. E/05/24/5003	Report Date	07/05/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal 2 STP Inlet	Date -Sampling	30/04/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	02/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	02/05/2024
Order Reference	SO No. 5700343880	Date - Completion of Analysis	06/05/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**6.9**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**104**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**191**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**540**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**31.4**	mg/L	APHA,24th Ed.,4500- NH3,B & C,424 & 425: 2023
7	Total Nitrogen (as N)	**38.7**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.232**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**240**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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TEST REPORT

Sample ID : E/05/24/5153	Report No. E/05/24/5153	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-1 STP RO Outlet	Date - Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of Sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.58**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**12**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**3**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**10**	Not to exceed 50	mg/L	APHA 24th Ed. 5220 B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA 24th Ed. 5520 B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**1.4**	Not to exceed 5	mg/L	APHA 24th Ed. 4500- NH3. F 429: 2023
7	Total Nitrogen (as N)	**3.0**	Not to exceed 10	mg/kg	APHA 24th Ed. 4500 A 415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.208**	Not specified	mg/L	APHA 24th Ed. 4500- Cl G 357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**39**	Less Than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/05/24/5153	Report No. E/05/24/5153	Report Date	04/06/2024

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TEST REPORT

Sample ID : E/05/24/5156	Report No. E/05/24/5156	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-2 STP RO Outlet	Date - Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of Sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.76**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**14**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**17**	Not to exceed 50	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.7**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**5.9**	Not to exceed 10	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.257**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**46**	Less Than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/05/24/5156	Report No. E/05/24/5156	Report Date	04/06/2024

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TEST REPORT

Sample ID : E/05/24/5157	Report No. E/05/24/5157	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Cargo STP Inlet	Date -Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.2**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**94**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**171**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**500**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**22.4**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**30.1**	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.221**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**170**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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TEST REPORT

Sample ID : E/05/24/5158	Report No. E/05/24/5158	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Cargo STP Outlet	Date - Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of Sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.6**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**11**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**4**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**13**	Not to exceed 50	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.1**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3. F,429: 2023
7	Total Nitrogen (as N)	**4.3**	Not to exceed 10	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.218**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**39**	Less Than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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Sample ID : E/05/24/5158	Report No. E/05/24/5158	Report Date	04/06/2024

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TEST REPORT

Sample ID : E/05/24/5154	Report No. E/05/24/5154	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Unreated Sewage Effluent
Sampling Location	Terminal-1 STP Inlet	Date -Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.0**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**88**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**144**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**420**	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**20.2**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**28.1**	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.208**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**170**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
Senior Analyst (Biological)
Reviewed & Authorised by

Ashwamedh Engineers & Consultants
Laboratory Services Division

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

End of Report

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Ashwamedh
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TEST REPORT

Sample ID : E/05/24/5155	Report No. E/05/24/5155	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-2 STP Inlet	Date -Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**6.98**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**98**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**200**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**600**	mg/L	APHA,24th Ed.,5220.B.544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520.B.572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**34.7**	mg/L	APHA,24th Ed.,4500- NH3. F.429: 2023
7	Total Nitrogen (as N)	**36.5**	mg/kg	APHA,24th Ed.,4500.A.415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.244**	mg/L	APHA,24th Ed.,4500- Cl.G.357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**220**	MPN Index /100 ml	APHA. 24th Ed., 9221-E. 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
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Ninad Soundankar
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Reviewed & Authorised by

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TEST REPORT

Sample ID : E/05/24/5159	Report No. E/05/24/5159	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Effluent
Sampling Location	Terminal-1 RO Reject Water	Date -Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**8.4**	-	IS 3025 (Part 11): 2017
2	Chemical Oxygen Demand	**90**	mg/L	APHA,24th Ed.,5220,B,544: 2023
3	Total Dissolved Solids	**864**	mg/L	IS 3025 (Part 16) : 2023
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022				

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TEST REPORT

Sample ID : E/05/24/5160	Report No. E/05/24/5160	Report Date	04/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Effluent
Sampling Location	Terminal-2 RO Reject Water	Date -Sampling	29/05/2024
Sample Quantity / Packing	2 L x 1 no. plastic can	Date - Receipt of sample	30/05/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44	Date - Start of Analysis	30/05/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	03/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**8.9**	-	IS 3025 (Part 11): 2017
2	Chemical Oxygen Demand	**170**	mg/L	APHA,24th Ed.:5220.B.544: 2023
3	Total Dissolved Solids	**1398**	mg/L	IS 3025 (Part 16) : 2023
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022				

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TEST REPORT

Sample ID : E/06/24/5092	Report No. E/06/24/5092	Report Date	25/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-1 STP Inlet	Date -Sampling	18/06/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	19/06/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	19/06/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	24/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.3**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**80**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**133**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**400**	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Total Nitrogen (as N)	**30.3**	mg/kg	APHA,24th Ed.,4500.A,415: 2023
7	Free Residual Chlorine (as Cl_2)	**0.236**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
8	Ammonical Nitrogen (as NH_3-N)	**24.6**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**130**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
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TEST REPORT

Sample ID : E/06/24/5093	Report No. E/06/24/5093	Report Date	25/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-1 STP RO Outlet	Date - Sampling	18/06/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	19/06/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	19/06/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	24/06/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.66**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**13**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**15**	Not to exceed 50	mg/L	APHA.24th Ed..5220.B.544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA.24th Ed..5520.B.572: 2023
6	Total Nitrogen (as N)	**3.5**	Not to exceed 10	mg/kg	APHA.24th Ed..4500.A.415: 2023
7	Free Residual Chlorine (as Cl_2)	**0.243**	Not specified	mg/L	APHA.24th Ed..4500- Cl.G.357 : 2023
8	Ammonical Nitrogen (as NH_3-N)	**1.2**	Not to exceed 5	mg/L	APHA.24th Ed..4500- NH3. F.429: 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**34**	Less than 100	MPN Index /100 ml	APHA. 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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End of Report

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Sample ID : E/06/24/5093	Report No. E/06/24/5093	Report Date	25/06/2024

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TEST REPORT

Sample ID : E/06/24/5094	Report No. E/06/24/5094	Report Date	25/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-2 STP Inlet	Date -Sampling	18/06/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	19/06/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	19/06/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	24/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**6.82**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**87**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**192**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**560**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Total Nitrogen (as N)	**42.7**	mg/kg	APHA,24th Ed.,4500,A,415: 2023
7	Free Residual Chlorine (as Cl_2)	**0.240**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
8	Ammonical Nitrogen (as NH_3-N)	**39.2**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**240**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
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TEST REPORT

Sample ID : E/06/24/5095	Report No. E/06/24/5095	Report Date	25/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-2 RO Outlet	Date - Sampling	18/06/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	19/06/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	19/06/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	24/06/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.8**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**15**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**4**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**12**	Not to exceed 50	mg/L	APHA 24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA 24th Ed.,5520,B,572: 2023
6	Total Nitrogen (as N)	**5.1**	Not to exceed 10	mg/kg	APHA 24th Ed.,4500,A,415: 2023
7	Free Residual Chlorine (as Cl_2)	**0.245**	Not specified	mg/L	APHA 24th Ed.,4500- Cl,G,357 : 2023
8	Ammonical Nitrogen (as NH_3-N)	**2.9**	Not to exceed 5	mg/L	APHA 24th Ed.,4500- NH3, F,429: 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**49**	Less than 100	MPN Index /100 ml	APHA. 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/06/24/5095	Report No. E/06/24/5095	Report Date	25/06/2024

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TEST REPORT

Sample ID : E/06/24/5096	Report No. E/06/24/5096	Report Date	25/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Cargo STP Inlet	Date -Sampling	18/06/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	19/06/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	19/06/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	24/06/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.8**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**86**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**157**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**460**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Total Nitrogen (as N)	**36.2**	mg/kg	APHA,24th Ed.,4500,A,415: 2023
7	Free Residual Chlorine (as Cl_2)	**0.228**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
8	Ammonical Nitrogen (as NH_3-N)	**29.1**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**140**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
Senior Analyst (Biological)
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Ninad Soundankar
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End of Report

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TEST REPORT

Sample ID : E/06/24/5097	Report No. E/06/24/5097	Report Date	25/06/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Cargo STP Outlet	Date - Sampling	18/06/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	19/06/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	19/06/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	24/06/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.72**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**14**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**3**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**10**	Not to exceed 50	mg/L	APHA 24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA 24th Ed.,5520.B,572: 2023
6	Total Nitrogen (as N)	**4.8**	Not to exceed 10	mg/kg	APHA 24th Ed.,4500.A,415: 2023
7	Free Residual Chlorine (as Cl_2)	**0.231**	Not specified	mg/L	APHA 24th Ed.,4500- Cl,G,357 : 2023
8	Ammonical Nitrogen (as NH_3-N)	**2.4**	Not to exceed 5	mg/L	APHA 24th Ed.,4500- NH3, F,429: 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**47**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/06/24/5097	Report No. E/06/24/5097	Report Date	25/06/2024

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TEST REPORT

Sample ID : E/07/24/5145	Report No. E/07/24/5145	Report Date	01/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-1 STP Inlet	Date -Sampling	26/07/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of sample	27/07/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	27/07/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	31/07/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.0**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**76**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**123**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**380**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**21.3**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**28.2**	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.235**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Microbiological Parameters				
9	Faecal Coliforms	**110**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
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TEST REPORT

Sample ID : E/07/24/5146	Report No. E/07/24/5146	Report Date	01/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-1 STP RO Outlet	Date - Sampling	26/07/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of Sample	27/07/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	27/07/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	31/07/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.5**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**11**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**4**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**12**	Not to exceed 50	mg/L	APHA 24th Ed.,5220 B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA 24th Ed.,5520 B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**1.05**	Not to exceed 5	mg/L	APHA 24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**3.1**	Not to exceed 10	mg/kg	APHA 24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.237**	Not specified	mg/L	APHA 24th Ed.,4500- Cl G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Microbiological Parameters					
9	Faecal Coliforms	**32**	Less than 100	MPN Index /100 ml	APHA 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
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Sample ID : E/07/24/5146	Report No. E/07/24/5146	Report Date	01/08/2024

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TEST REPORT

Sample ID : E/07/24/5147	Report No. E/07/24/5147	Report Date	01/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-2 STP Inlet	Date -Sampling	26/07/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of sample	27/07/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	27/07/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	31/07/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**6.96**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**94**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**200**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**600**	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**42.6**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**46.5**	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.239**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Microbiological Parameters				
9	Faecal Coliforms	**220**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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TEST REPORT

Sample ID : E/07/24/5148	Report No. E/07/24/5148	Report Date	01/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-2 STP RO Outlet	Date - Sampling	26/07/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of Sample	27/07/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	27/07/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	31/07/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.73**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**14**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**16**	Not to exceed 50	mg/L	APHA.24th Ed..5220.B.544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA.24th Ed..5520.B.572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.7**	Not to exceed 5	mg/L	APHA.24th Ed..4500- NH3. F.429: 2023
7	Total Nitrogen (as N)	**4.8**	Not to exceed 10	mg/kg	APHA.24th Ed..4500.A.415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.231**	Not specified	mg/L	APHA.24th Ed..4500- Cl.G.357 : 2023
Biological Testing; Group: Environment & Pollution					
Microbiological Parameters					
9	Faecal Coliforms	**46**	Less than 100	MPN Index /100 ml	APHA. 24th Ed., 9221-E. 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/07/24/5148	Report No. E/07/24/5148	Report Date	01/08/2024

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TEST REPORT

Sample ID : E/07/24/5149	Report No. E/07/24/5149	Report Date	01/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Cargo STP Inlet	Date -Sampling	26/07/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of sample	27/07/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	27/07/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	31/07/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.6**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**90**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**167**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**490**	mg/L	APHA,24th Ed.,5220.B.544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520.B.572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**34.7**	mg/L	APHA,24th Ed.,4500- NH3. F.429: 2023
7	Total Nitrogen (as N)	**41.7**	mg/kg	APHA,24th Ed.,4500.A.415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.233**	mg/L	APHA,24th Ed.,4500- Cl.G.357 : 2023
Biological Testing; Group: Environment & Pollution				
Microbiological Parameters				
9	Faecal Coliforms	**170**	MPN Index /100 ml	APHA. 24th Ed.. 9221-E. 1142: 2023

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TEST REPORT

Sample ID : E/07/24/5150	Report No. E/07/24/5150	Report Date	01/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Cargo STP Outlet	Date - Sampling	26/07/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 No. Sterile Bottle	Date - Receipt of Sample	27/07/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	27/07/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	31/07/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.6**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**10**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**3**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**10**	Not to exceed 50	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.2**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3. F,429: 2023
7	Total Nitrogen (as N)	**5.1**	Not to exceed 10	mg/kg	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.234**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Microbiological Parameters					
9	Faecal Coliforms	**40**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Akshata Pagare
Senior Analyst (Biological)
Reviewed & Authorised by

Ashwamedh Engineers & Consultants * Laboratory Services Division

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

End of Report

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Sample ID : E/07/24/5150	Report No. E/07/24/5150	Report Date	01/08/2024

Akshata Pagare
Senior Analyst (Biological)
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Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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TEST REPORT

Sample ID : E/08/24/5057	Report No. E/08/24/5057	Report Date	14/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-1 STP Inlet	Date -Sampling	08/08/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	09/08/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	09/08/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	13/08/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**8.9**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**76**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**113**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**370**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**21.3**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**26.4**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.240**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**110**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Ulka Belan
Quality Manager
Reviewed & Authorised by

Ashwamedh Engineers & Consultants
Laboratory Services Division

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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TEST REPORT

Sample ID : E/08/24/5058	Report No. E/08/24/5058	Report Date	14/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-1 STP RO Outlet	Date - Sampling	08/08/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	09/08/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	09/08/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	13/08/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.5**	5.5-9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**10**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**3**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**14**	Not to exceed 50	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**1.1**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**3**	Not to exceed 10	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.235**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**27**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Ulka Belan
Quality Manager
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Technical Manager (Chemical)
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Sample ID : E/08/24/5058	Report No. E/08/24/5058	Report Date	14/08/2024

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TEST REPORT

Sample ID : E/08/24/5059	Report No. E/08/24/5059	Report Date	14/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-2 STP Inlet	Date -Sampling	08/08/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	09/08/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	09/08/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	13/08/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**6.94**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**92**	mg/L	IS 3025 (Part 17) Amds.I: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**195**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**620**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**33.6**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**46.3**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.236**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**220**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Ulka Belan
Quality Manager
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Laboratory Services Division

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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TEST REPORT

Sample ID : E/08/24/5060	Report No. E/08/24/5060	Report Date	14/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-2 STP RO Outlet	Date - Sampling	08/08/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	09/08/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	09/08/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	13/08/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.73**	5.5-9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**12**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**22**	Not to exceed 50	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.62**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**4.4**	Not to exceed 10	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.246**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**40**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Ulka Belan
Quality Manager
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Sample ID : E/08/24/5060	Report No. E/08/24/5060	Report Date	14/08/2024

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TEST REPORT

Sample ID : E/08/24/5061	Report No. E/08/24/5061	Report Date	14/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Cargo STP Inlet	Date -Sampling	08/08/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of sample	09/08/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	09/08/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	13/08/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**10.1**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**80**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**171**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**500**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**25.8**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**30.2**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.243**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**170**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Ulka Belan
Quality Manager
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Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by

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TEST REPORT

Sample ID : E/08/24/5062	Report No. E/08/24/5062	Report Date	14/08/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Cargo STP Outlet	Date - Sampling	08/08/2024
Sample Quantity / Packing	2 L x 1 no. plastic can 1 L x 1 no. glass bottle 250 ml x 1 no. Sterile bottle	Date - Receipt of Sample	09/08/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	09/08/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	13/08/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.5**	5.5-9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**13**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**16**	Not to exceed 50	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.3**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**3.7**	Not to exceed 10	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.224**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**39**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

Ulka Belan
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Sample ID : E/08/24/5062	Report No. E/08/24/5062	Report Date	14/08/2024

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Ninad Soundankar
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End of Report

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TEST REPORT

Sample ID : E/09/24/5162	Report No. E/09/24/5162	Report Date	05/10/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-1 STP RO Outlet	Date - Sampling	28/09/2024
Sample Quantity / Packing	2 L X 1 no. plastic can 1 L x 1 no. glass bottle 250ml x 1 No.Sterile Bottle	Date - Receipt of Sample	30/09/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/09/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	04/10/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.45**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**12**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**4**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**17**	Not to exceed 50	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**1.15**	Not to exceed 5	mg/L	APHA,24th Ed.,4500 - NH3, F,429: 2023
7	Total Nitrogen (as N)	**4**	Not to exceed 10	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.242**	Not specified	mg/L	APHA,24th Ed.,4500 - Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**27**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/09/24/5162	Report No. E/09/24/5162	Report Date	05/10/2024

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Technical Manager (Chemical)
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TEST REPORT

Sample ID : E/09/24/5164	Report No. E/09/24/5164	Report Date	05/10/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Terminal-2 STP RO Outlet	Date - Sampling	28/09/2024
Sample Quantity / Packing	2 L X 1 no. plastic can 1 L x 1 no. glass bottle 250ml x 1 No.Sterile Bottle	Date - Receipt of Sample	30/09/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/09/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	04/10/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.5**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**14**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**5**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**20**	Not to exceed 50	mg/L	APHA,24th Ed.,5220 B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520 B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.8**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**4.9**	Not to exceed 10	mg/L	APHA,24th Ed.,4500 A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.240**	Not specified	mg/L	APHA,24th Ed.,4500- Cl G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**46**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
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Sample ID : E/09/24/5164	Report No. E/09/24/5164	Report Date	05/10/2024

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TEST REPORT

Sample ID : E/09/24/5166	Report No. E/09/24/5166	Report Date	05/10/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Treated Sewage Effluent
Sampling Location	Cargo STP Outlet	Date - Sampling	28/09/2024
Sample Quantity / Packing	2 L X 1 no. plastic can 1 L x 1 no. glass bottle 250ml x 1 No.Sterile Bottle	Date - Receipt of Sample	30/09/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/09/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	04/10/2024

Sr.No.	Parameter	Result	Limits as per MPCB Consent	Unit	Method
Chemical Testing; Group: Pollution & Environment					
Physical & Chemical Parameters					
1	pH (at 25°C)	**7.6**	5.5 to 9.0	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**13**	Not to exceed 20	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**4**	Not to exceed 10	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**15**	Not to exceed 50	mg/L	APHA,24th Ed.,5220.B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	Not specified	mg/L	APHA,24th Ed.,5520.B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**2.6**	Not to exceed 5	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**4.4**	Not to exceed 10	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.239**	Not specified	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution					
Bacteriological Parameters					
9	Faecal Coliforms	**39**	Less than 100	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

BLQ: Below Limit of Quantification, LOQ: Limit of Quantification
Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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Sample ID : E/09/24/5166	Report No. E/09/24/5166	Report Date	05/10/2024

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TEST REPORT

Sample ID : E/09/24/5161	Report No. E/09/24/5161	Report Date	05/10/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-1 STP Inlet	Date -Sampling	28/09/2024
Sample Quantity / Packing	2 L X 1 no. plastic can 1 L x 1 no. glass bottle 250ml x 1 No.Sterile Bottle	Date - Receipt of sample	30/09/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/09/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	04/10/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.1**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**84**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**119**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**390**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**22.4**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**30.3**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.235**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**110**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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Consent Number & Date: Format 1.0/CAC/UAN NO. 0000111260/CR/2205000810 Date 13.05.2022

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TEST REPORT

Sample ID : E/09/24/5163	Report No. E/09/24/5163	Report Date	05/10/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Terminal-2 STP Inlet	Date -Sampling	28/09/2024
Sample Quantity / Packing	2 L X 1 no. plastic can 1 L x 1 no. glass bottle 250ml x 1 No.Sterile Bottle	Date - Receipt of sample	30/09/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/09/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	04/10/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**6.99**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**98**	mg/L	IS 3025 (Part 17) Amds 1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**207**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**640**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**38.1**	mg/L	APHA,24th Ed. 4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**50.6**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.238**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**220**	MPN Index /100 ml	APHA. 24th Ed., 9221-E, 1142: 2023

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TEST REPORT

Sample ID : E/09/24/5165	Report No. E/09/24/5165	Report Date	05/10/2024
Name and address of Customer	**Mumbai International Airport Ltd.** Chhatrapati Shivaji Maharaj International Airport, 1st Floor, Terminal 1-B, Santacruz(E), Mumbai-400099,Maharashtra		
Sampling done by	Laboratory	Sample Description / Type	Untreated Sewage Effluent
Sampling Location	Cargo STP Inlet	Date -Sampling	28/09/2024
Sample Quantity / Packing	2 L X 1 no. plastic can 1 L x 1 no. glass bottle 250ml x 1 No.Sterile Bottle	Date - Receipt of sample	30/09/2024
Sampling Procedure	APHA,24th Ed.,2023, 1060 B, 44, & 9060 A, 1094, 9060 B, 1097, ISO 19458:2006	Date - Start of Analysis	30/09/2024
Order Reference	SO No. 5700343880 dated 14.05.2024	Date - Completion of Analysis	04/10/2024

Sr.No.	Parameter	Result	Unit	Method
Chemical Testing; Group: Pollution & Environment				
Physical & Chemical Parameters				
1	pH (at 25°C)	**9.7**	-	IS 3025 (Part 11): 2017
2	Total Suspended Solids	**88**	mg/L	IS 3025 (Part 17) Amds.1: 2017
3	Biochemical Oxygen Demand (3 days, 27°C)	**177**	mg/L	IS 3025 (Part 44): 1993
4	Chemical Oxygen Demand	**580**	mg/L	APHA,24th Ed.,5220,B,544: 2023
5	Oil & Grease	**BLQ (LOQ:1)**	mg/L	APHA,24th Ed.,5520,B,572: 2023
6	Ammonical Nitrogen (as NH_3-N)	**29.1**	mg/L	APHA,24th Ed.,4500- NH3, F,429: 2023
7	Total Nitrogen (as N)	**35.5**	mg/L	APHA,24th Ed.,4500,A,415: 2023
8	Free Residual Chlorine (as Cl_2)	**0.232**	mg/L	APHA,24th Ed.,4500- Cl,G,357 : 2023
Biological Testing; Group: Environment & Pollution				
Bacteriological Parameters				
9	Faecal Coliforms	**170**	MPN Index /100 ml	APHA, 24th Ed., 9221-E, 1142: 2023

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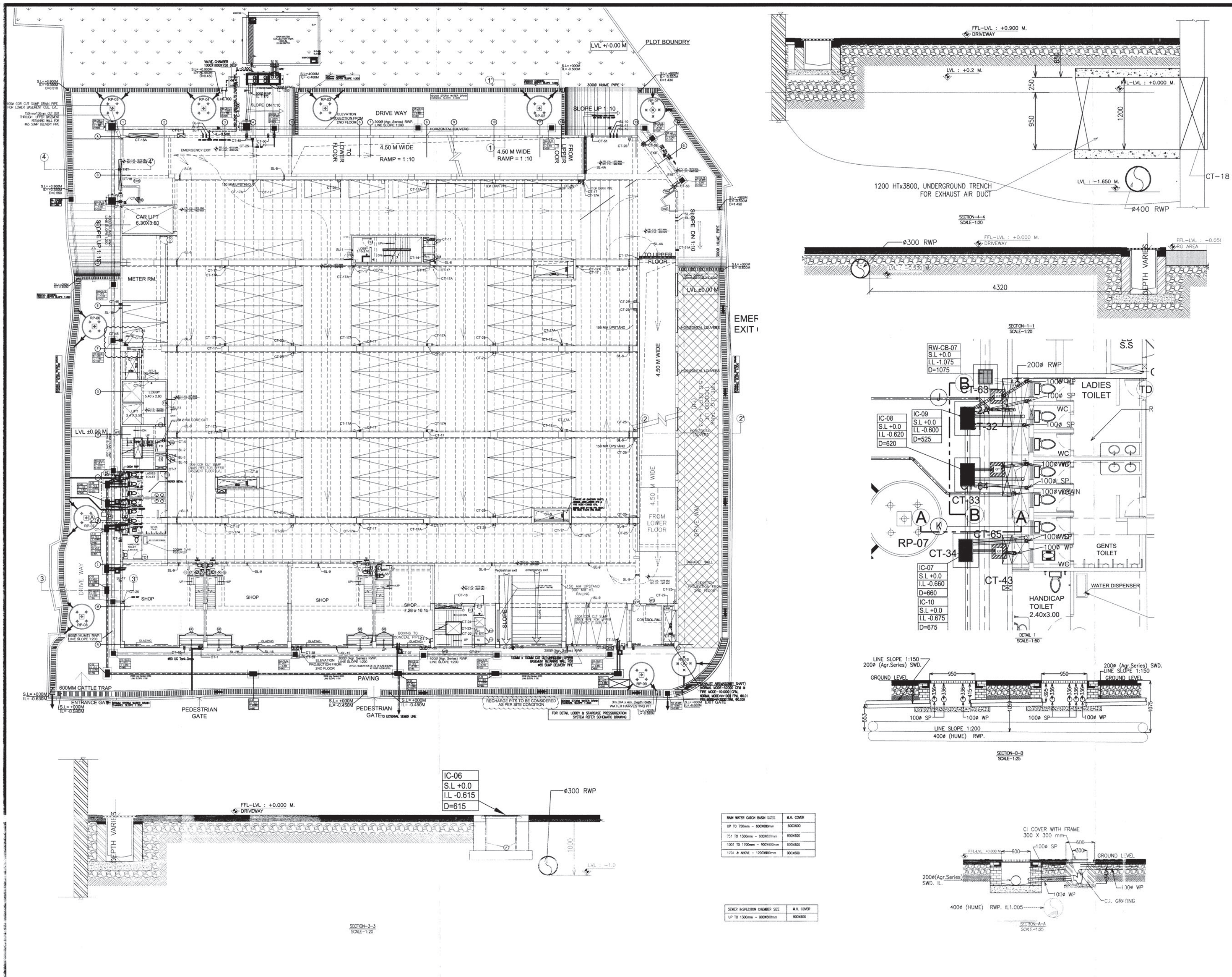


RAIN WATER CATCH BASIN SIZES	M.H. COVER
UP TO 750mm - 600X600mm	600X600
751 TO 1300mm - 900X600mm	900X600
1301 TO 1700mm - 900X900mm	900X600
1701 & ABOVE - 1200X900mm	900X600

SEWER INSPECTION CHEMBER SIZE	M.H. COVER
UP TO 1300mm - 900X600mm	900X600

KEY PLAN

NOTES:

1. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKABLE MANNER.
2. PROVIDE CHROME PLATED COMBINATION COVER PLATE AND CLEAN OUT PLUGE OR ACCESS PANEL FOR ALL WALL CLEAN OUTS.
3. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER OR HIS AUTHORIZED REPRESENTATIVE AND SHALL BE PERFORMED IN ACCORDANCE WITH ALL BUILDING RULES AND REGULATIONS PROVIDED BY THE BUILDING OWNER.

LEGEND	
SYMBOL	DESCRIPTION
	IC CHEMBER
	CATCH BASIN
	GULLY TRAP
	100ø SOIL PIPE
	100ø WESTE PIPE

AS BUILT

REV	DATE	DESCRIPTION	DRAWN	CHECK	APP	REVISION DESCRIPTION
R3	27.04.2015	AS BUILT				
			SAIF	KM/DDS	JSSM/R.PAL	
R2	10.07.2014	G.F.C.	S.K.		P.K.	AS PER SITE REQUIREMENT
R1.	23.06.2014		S.K.		P.K.	AS PER CO-ORDINATED LAYO

REVISION TABLE

CLIENT
MUMBAI INTERNATIONAL AIRPORT PVT. LTD.

ARCHITECT
HSA HITEN SETHI ARCHITECTS
ARCHITECTS | PLANNERS | INTERIOR ARCHITECTURE | PROJECT MANAGEMENT

STRUCUTRAL CONSULTANT:
LARSEN & TOUBRO LIMITED
EDRC-B & F OC

SUB CONSULTANT (MEP CONSULTANTS):
EMC ELECTRO-MECH CONSULTANTS
Expertise To Create Sustainable & Green Future

DRAFTING CONSULTANT
KP CONSULTANTS

PROJECT
MULTI LEVEL CAR PARK FOR T1B AT CHHATRAPATI SHIVAJI INTERNATIONAL AIRPORT.

DRG. TITLE
EXTERNAL DRAINAGE LAYOUT

DRN BY	CHK BY	APP BY	DATE
SAIF	KM/DDS	JSSM/R.PAL	27.04.2015
PROJECT NO.		ISSUED AS :	
140150		AS BUILT	
DRAWING NO.		SCALE	REV NO.
140150-PLMB-ESL-002		A1	R3

Water Conservation Initiatives by CSMIA

Waterless urinals at Terminal 1 and Terminal 2

Total 133 nos. of urinals of T1 converted into waterless.

Previously appx. 3.8 lit/flush water used to be consumed. So savings of appx. 0.25 MLD of water.

Water flow reducer in jet spray

Water flow reducer used in every WC jet spray connection. It will save 50% of water towards every uses.

T1 &T2

Tap aerators in wash basins

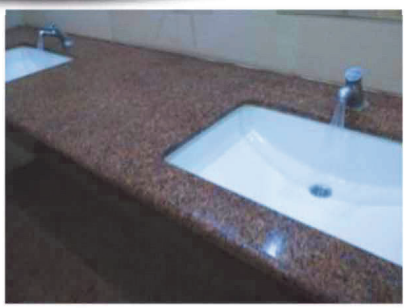
40% of water save by using tap aerator in washbasin where press or handle tap used.

Saving 1/3rd of water during each uses, by using sensor tap.

Water sensor taps in wash basins

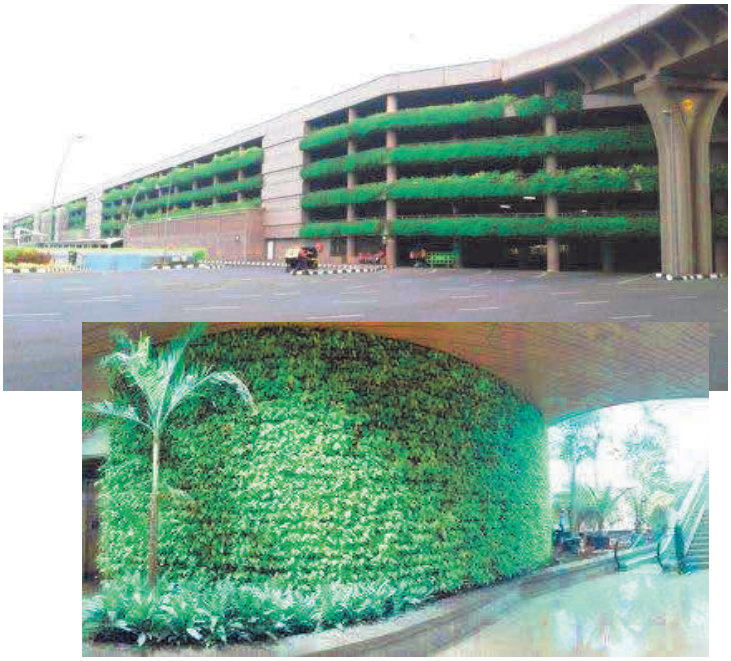
Waterless urinals

Water flow reducer in jet spray



Tap aerators in wash basins

Best practices in water conservation.



Terminal 2 landscape under drip irrigation system.

MLCP, inside terminal building and landside area.

Implementation of RWH structures

- Chhatrapati Shivaji Maharaj International Airport covers an area of approximately 5.5 sq km, comprising terminals, aircraft maintenance facilities, aprons and runways and encroached land.
- The airside rainwater catchments have an area of approximately 620 Ha.

The Rainwater storage option is not feasible within the Airport areas due to following reasons

- **Attraction of birds which will result in aircraft bird hit**
- **Constrains of limited land area**

Implementation of RWH

Even if it is not feasible to store the rainwater, the rainwater harvesting scheme is drawn with the intention of efficiently harvest the water from the airside pavements and landside building roofs

Calculation of runoff from Airside catchments

Rainfall intensity for 1 in 2 yrs = 54.2 mm/hr (1 hour duration)

Description	Total Catchment area	T_c (Minutes)	Run Off coefficients	Intensity (1 in 2 yrs)	Flow (m^3/sec)
D1	866373	60	0.96	54.2	12.522
D2	906638	60	0.81	54.2	11.056
D3	315873	60	0.81	54.2	3.852
D4	360793	60	0.73	54.2	3.965
D5	70260	60	0.68	54.2	0.719
D6	577971	60	0.81	54.2	7.048
D8	224289	60	1.00	54.2	3.377
D9	596831	60	0.76	54.2	6.829
Total Flow					49.368

Implementation of RWH structures

- The rainwater pits are constructed in the airside and near terminal building to recharge the ground water table.
- Recharge pits are normally excavated pits, which are sufficiently deep to penetrate the low-permeability layers.
- The collected water is being recharged into the ground through these recharge pits

No of recharge pits at CSMIA – 229 nos.

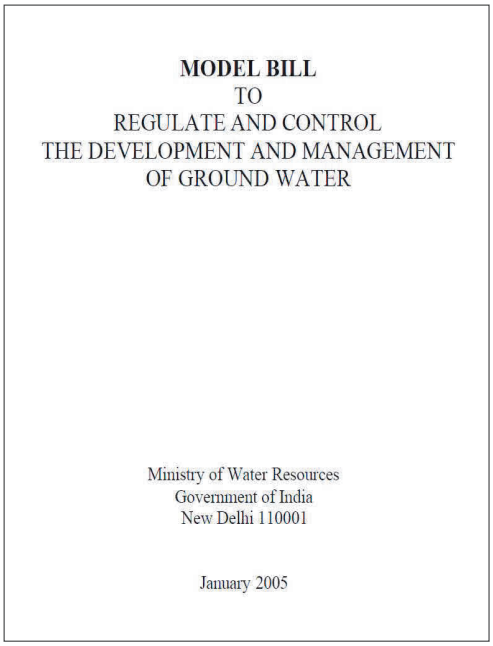
Volume of Each Pit - @ 3.0 m30

Recharge Pit

Implementation of RWH structures

No groundwater tapping at airport premises as per the Model bill to regulate and control the Development & management of ground water

MIAL is planning to take up the water conservation projects under CSR activities in coming years



MODEL BILL
TO
REGULATE AND CONTROL
THE DEVELOPMENT AND MANAGEMENT
OF GROUND WATER

Ministry of Water Resources
Government of India
New Delhi 110001

January 2005

Substitution of fresh water with harvested rainwater

- Below is the table showing RWH tanks with capacity and usage location:

Domestic, Grey Water Tanks					
SR.NO	**DESCRIPTION**	**DECIPLINE**	**No of Partitions**	**Location**	**CAPACITY**
1	Tank No 1	Grey Water Tank 1	Tank A & Tank B	Bldg 7. MEP-10	5,50,000 ltrs
2	Tank No 2	Grey Water Tank 2	Tank A & Tank B	Bldg 7A. MEP-11	5,50,000 ltrs
5	Tank No 5	Grey Water Tank 5	Tank A & Tank B	Bldg 5. MEP-6	5,00,000 ltrs

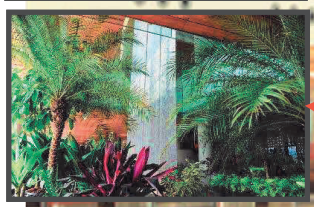
Augmentation of ground water beyond fence

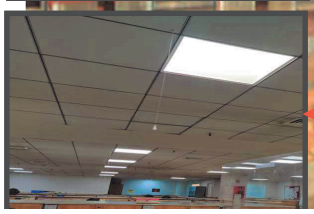
- MIAL had initiated Afforestation project in 2017 at village Tetavali through an Non government organization (NGO) Hariyali.
- This project was also included construction of dam which has 3 water holding bunds with total capacity of approximately 3.5 Lakh liters.
- Approximately 24.5 Lakh liters of harvested water is being utilized in degraded forest area for the year.

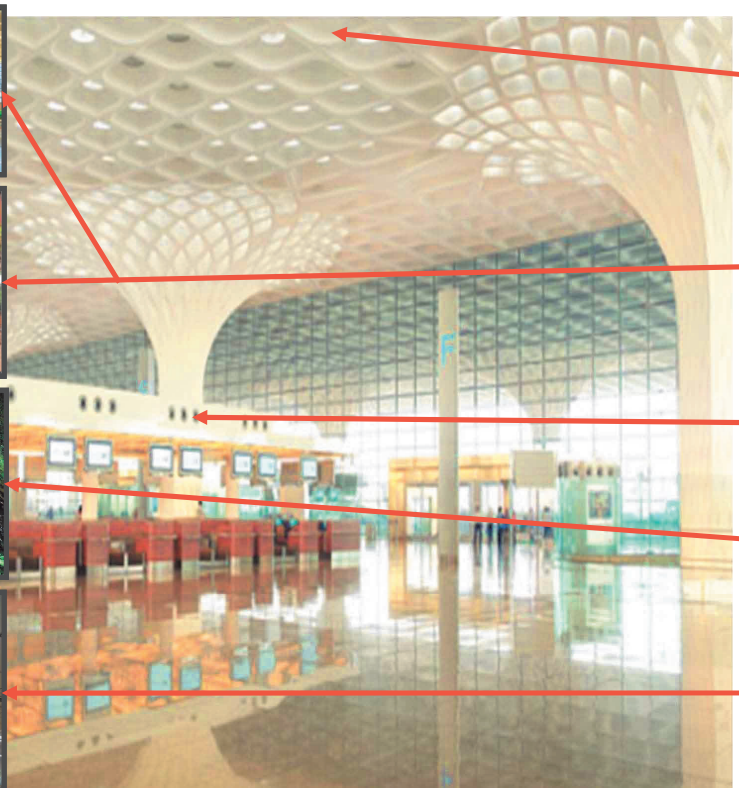
Augmentation of ground water beyond fence

Thank You

Design Features







Roof → **Energy efficient TPO membrane.**
It facilitates:
- Resistance to UV
- High reflective property(SR >0.8)

- Ample **Day Light harvesting**
- **Double glassed façade** to reduce heat ingress.

- SHGC: 0.23
- VLT: 60%

- **VAV controlled system** across terminal system to optimize HVAC consumption

- **Rich landscape of greenery** maintained in and across terminal → Reduce heat, upgrades air quality.

Provision of:
- **Task lighting** in offices
- **Occupancy sensors** in staircase, MLCP and lesser movement areas

Energy conservation Projects, FY 2023-24 (2/2)

Conversion of TWY halogen lights to LEDs

Project Brief:

- Replace existing Halogen taxiway light to LEDs
- Project being executed in phase wise manner.
- Project Cost: 3 Cr
- Lamps to be replace: 270
- Reduction in Wattage/lamp: 50W
- Estimated Annual Energy Saving – 1.18 lakh Kwh

Automation of air-curtains

Project Brief:

- Interlocking of air-curtains with sliding doors.
- **Problem:** Across terminal many doors are being used rarely. The air curtains above these gates runs for almost entire day. Being handled by multiple stakeholders its difficult to keep control.
- **Solution:** Air-curtains to be interlocked with doors, such they will run only when the doors are operational.
- Scope for optimization.
- Estimated Annual Energy Saving: 39,000 kwh

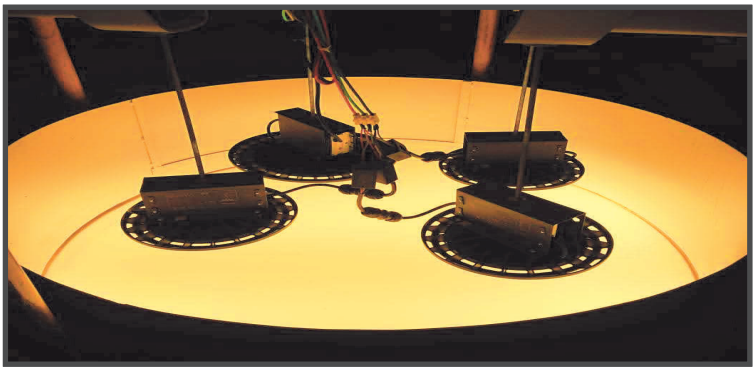
Energy conservation Projects, FY 2022-23 (2/2)

Replacement of Halogen lights of HHR to LEDs

Project Brief:

- Project Executed in FY 2022-23
- No of lamps replaced - 3000
- Project Cost ~ 3 Cr
- Reduction in Wattage/lamp: 50 W
- Estimated Annual Energy Saving – 6.5 lakh Kwh

The project was indeed challenging and possessed high risk because of height of roof, location is 24*7 operational and fully PAX facing area.



Annexure –40-Photos of DG Set & Enclosure and Stack


POWERICA
CPCB II COMPLIANT
ENVIRONMENT FRIENDLY

Sewage Treatment Plants at CSIA

Waste Water generated at Chhatrapati Shivaji International Airport is being treated at state of art sewage treatment plants located at different parts of the Airport.

Three sewage treatment plants are installed at CSIA to treat the sewage generated from the terminal buildings & Airside facilities.

Three STP's are installed at following locations :

Domestic Terminals (T1A/B/C) :- 4 (2+2) MLD capacity
International Terminal (T2) :- 10 (5+5) MLD capacity
Cargo Terminal :- 1 MLD capacity

The Components of STP are

- Sequential batch reactor (SBR technology)
- Disinfection unit
- Pressure Sand Filter
- Sludge Thickener
- Ultra filtration unit
- Reverse Osmosis plant

All the treated sewage is being used for flushing & cooling purpose in the terminal buildings.

Sewage Treatment Plant

Sewage Treatment Plant @ CSIA

Pressure Sand Filters

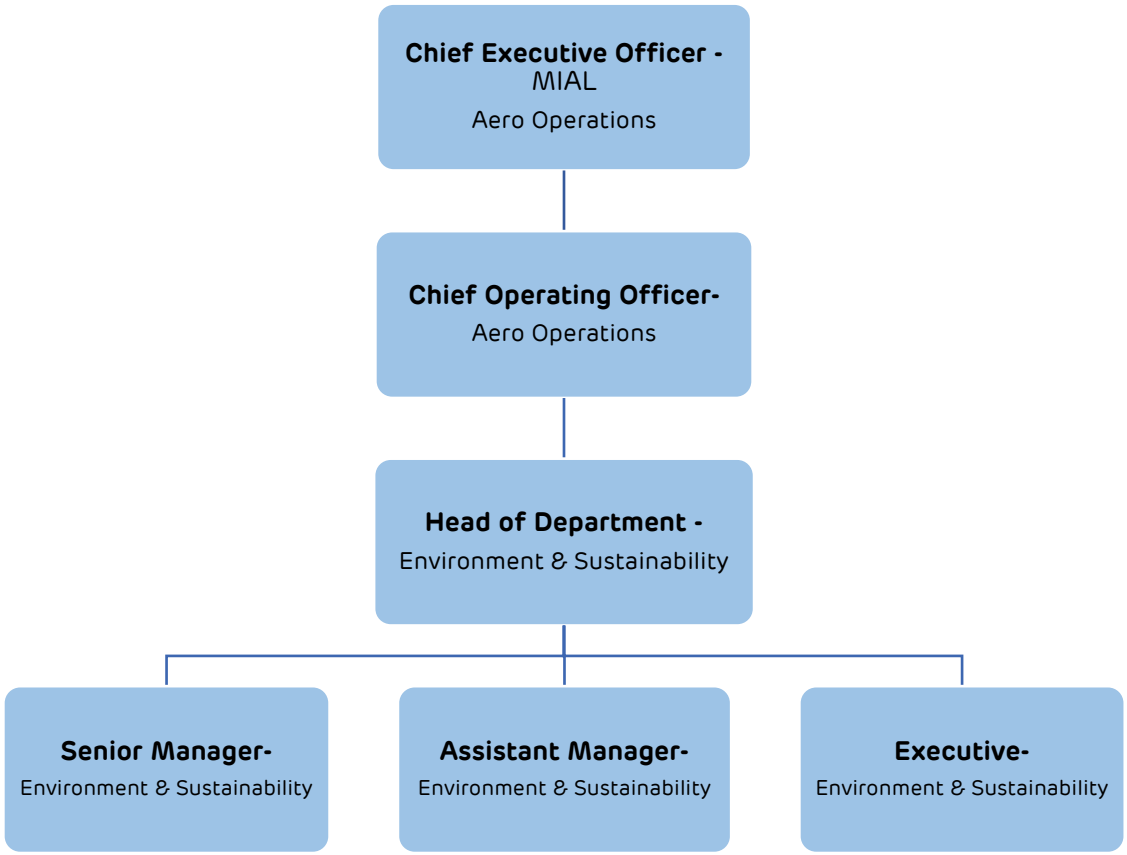
Sewage Treatment Plant

STP Sludge storage Shed

Sequential Batch Reactor & PSF

OWC machine at the MIAL

ORGANIZATIONAL STRUCTURE- ENVIRONMENT AND SUSTAINABILITY



Annexure 20- Environmental Expenditures for FY 2024-25

MIAL Environment Budget and Expenditure for the FY: 2024-25		
Sr. No.	**Activity / Category**	**Expenditure (Apr 24 to Sep 24)**
1	Opex	119,932,833.93
2	Capex	4,508,931.00
	Total Amount in Rs	124,441,764.93
	Total Amount (In Crores)	**12.44**

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2024

Unique Application Number	***Submitted Date***
MPCB-ENVIRONMENT_STATEMENT-0000069349	10-09-2024

PART A

Company Information

Company Name	***Application UAN number***	
Mumbai International Airport Ltd	MPCB-CONSENT-0000111260	
Address		
Terminal 1B, 1st floor, Chhatrapati Shivaji Interational Airport, Santacruz (E), Mumbai		
Plot no	***Taluka***	***Village***
Terminal 1, Santacruz east	Andheri	Santacruz
Capital Investment (In lakhs)	***Scale***	***City***
1574567	L.S.I	Mumbai city
Pincode	***Person Name***	***Designation***
400099	Vinay Bedekar	Head - Environment & Sustainability
Telephone Number	***Fax Number***	***Email***
9881103651	02266850291	vinay.bedekar@adani.com
Region	***Industry Category***	***Industry Type***
SRO-Mumbai II	Red	other
Last Environmental statement submitted online	***Consent Number***	***Consent Issue Date***
yes	MPCB-CONSENT-0000111260/CR/2205000810	2022-05-13
Consent Valid Upto	***Establishment Year***	***Date of last environment statement submitted***
2024-05-31	2006	Sep 12 2023 12:00:00:000AM
Industry Category Primary (STC Code) & Secondary (STC Code)		

Product Information

Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
NA	0	0	Nos./Y
/NA	0	0	Nos./Y

By-product Information

By Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
NA	0	0	Nos./Y

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
Process	0.00	0.00
Cooling	0.00	0.00
Domestic	7100.00	3535.35
All others	0.00	0.00
Total	7100.00	3535.35

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Sewage generation at CSMIA	6615	2700.69	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
OTHERS	0	0	

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
NA	0	0	CMD

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Diesel For DG set	5483	50.69	Ltr/Hr

Part-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
PH	7.3	7.6	0	5.5-9.0	Pollutant discharge within standard limit
Suspended Solids	16.20	12.9	0	20	Pollutant discharge within standard limit
BOD 3 days (27oC	5.4	4.3	0	10	Pollutant discharge within standard limit
COD	24.31	15.8	0	50	Pollutant discharge within standard limit

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason

SO2 (Kg/day)	1.1	0	0	295.2	Pollutant discharge within standard limit
Total Particulate matter (mg/Nm3)	0	17.4	0	150	Pollutant discharge within standard limit

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	6.31	MT/A
5.2 Wastes or residues containing oil	7.7	0.1	MT/A
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	1.84	1.97	MT/A
23.1 Wastes or residues (not made with vegetable or animal materials)	5.97	117.99	MT/A
23.1 Wastes or residues (not made with vegetable or animal materials)	0	49.05	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Plastic waste	796.83	1093.07	MT/A
Waste Paper	419.995	910.11	MT/A
Waste glass bottles	132.21	94.09	MT/A
Broken tins	134.66	139.96	MT/A
Other Misc. scrap	87.985	2.05	MT/A
Waste cotton	0	0	MT/A
Wet waste	555.1	121.56	MT/A
Organic / food waste	207.71	2959.5	MT/A
Waste wood	46.363	136.73	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
STP sludge	8.4	3.7	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	*Qty of Hazardous Waste*	*UOM*	*Concentration of Hazardous Waste*
5.2 Wastes or residues containing oil	0.1	MT/A	Hazardous Waste is being disposed to M/s Mumbai Waste Management Limited (MWML)
5.1 Used or spent oil	6.31	MT/A	Sahara industries, Uchaad , Palghar
20.2 Spent solvents	0	MT/A	NA
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	1.97	MT/A	Hazardous Waste is being disposed to M/s Mumbai Waste Management Limited (MWML).
23.1 Wastes or residues (not made with vegetable or animal materials)	117.99	MT/A	Hazardous Waste is being disposed to M/s Mumbai Waste Management Limited (MWML)
23.1 Wastes or residues (not made with vegetable or animal materials)	49.05	MT/A	This hazardous Waste is being disposed to M/s Trans Thane creek waste management association, Mahape authorized disposal agency

2) Solid Waste

Type of Solid Waste Generated	*Qty of Solid Waste*	*UOM*	*Concentration of Solid Waste*
Waste plastic	1093.07	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Waste paper	910.11	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Waste glass bottle	94.09	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Waste wood	136.73	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Broken tin	139.96	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Wet garbage	121.56	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Other scrap	2.05	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Waste cotton	0	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary
Food waste (OWC) treated	2959.5	MT/A	The non-hazardous waste is collected, segregated and disposed by M/s Compost. Segregation of the waste is being done at the contractors end after the waste is taken outside of airport boundary

Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
Energy saving measures at CSMIA	0	0	0	6099325	10.5	0

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
CAAQMS, Solar projects, RVM machine	CAAQMS, Solar projects, RVM machine	143

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
EV charging station, replacement of AC etc	EV charging station, replacement of AC etc	150

Part-I

Any other particulars for improving the quality of the environment.

Particulars

Nil- The Form 5 is cumulative all the CTO (CSMIA & MLCP) both, Para no 4 DG fuel DG Diesel were not appear in the Tab so mentioned figure and submitted

Name & Designation

Vinay Bedekar

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000069349

Submitted On:

10-09-2024