

Ref.: MIAL/ENV/17/35

Date: September 27, 2017

To,
The Regional Officer (SRO)
Maharashtra Pollution control Board,
Raikar chambers, "A wing", 216, 2<sup>nd</sup> Floor,
Deonar Gaon road, near Jain temple,
Govandi (E), Mumbai – 400 088.

Sub.: Environmental Statement for the Financial Year 2016-17

Ref: Consent to Operate no. BO/CAC-cell/EIC-MU-6761-15/CR/CAC-14016 dated: 03.11.2015 and Consent to operate MLCP (building no. 5) No. BO/CAC-cell/UAN No 0000009577/1<sup>st</sup> CAC-1706000704 dated: 16.06.2017 and consent to operate for T1C hotel No. BO/CAC-cell/EIC-MU-6249-14/O(part)/CAC-690 dated: 21.01.2015

Dear Sir,

As per the above mentioned consents and Rule 14 of Environment (Protection) (Second Amendment) Rules, 1992, please find enclosed three copies of Annual Environmental Statement in Form V for the financial year 2016-17.

This is for your information and necessary records please.

Thanking you.

Yours faithfully,

For Mumbai International Airport Pvt. Ltd.

Shailendra Joshi

Deputy General Manager - Envir ament Mumbai International Airport Pvt. Ltd. Cohatrapati Shivaji International Pvt. Ltd. 1st Floor, Terminal 1B, Santacruz (E), Mumbai-400 099, India.

Encl: As Above

DEGNAR GAON ROAD, NEAR JAIN MANDIR. GOVANDI (2), MUMBAL 400028

MAHARASHTRA POLLLIFION CONTROL MARD.
RAIKAR CHAMBERS, "A" WING, 218, 280 FLOOR

Mumbai International Airport Pvt Ltd

Chhatrapati Shivaji International Airport

1st Floor, Terminal 1B, Santacruz (E), Mumbai 400 099, India

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CIN: U45200MH2006PTC160164

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# ENVIRONMENT STATEMENT

for the year 2016-17

# M/s MUMBAI INTERNATIONAL AIRPORT PVT. LTD

CHHATRAPATI SHIVAJI INTERNATIONAL AIRPORT

1<sup>st</sup> Floor, Terminal 1, Santacruz (E), Mumbai - 400 099

Date: - 27<sup>th</sup> September 2017





# FORM - V

(See rule 14)

# ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING

## 31<sup>st</sup> MARCH 2017

#### PART - A

1.	Name and Address of the Owner/Occupier of the Industry Operation or Process	Mr. Rajiv Jain, CEO M/s Mumbai International Airport Pvt Ltd. Chhatrapati Shivaji International Airport 1 <sup>ST</sup> floor, Terminal 1-B, Santacruz (E), Mumbai - 400 099
2.	Industry Category Primary (STC code) Secondary (STC Code)	NA
3.	Production Capacity in Units	NA
4.	Year of Establishment	2 <sup>nd</sup> March 2006
5.	Date of the last Environmental Statement Report Submitted	26 <sup>th</sup> September 2016





#### PART - B

## **WATER & RAW MATERIAL CONSUMPTION**

## 1. Water consumption in m³/day:

Water consumption for various purposes during the financial year 2016-17 at "Mumbai International Airport Pvt. Ltd." is shown in following table.

Purposes	Consent Limit in M <sup>3</sup> /day	Actual average Consumption M <sup>3</sup> /day
Process	Nil	Nii
Cooling	Nil	NII
Domestic (Fresh water consumption from MCGM supply)	7442	2512
Total	7442	2512





Water consumption per unit of production/output during the Year 2015-16 as shown below:

Sr. No.	Name of Product	Water consumption in Liters per passenger		
		During the previous financial year 2015-16	During the current Financial year 2016-17	
1	Water Consumption / passenger	28.9	20.30	

# 2. Raw material consumption:

Sr. No.	Nam of Raw Material	Name of Product	Consumption of Raw Material Per Unit of Output		
			During the Financial year 2015-16	During the Financial year 2016-17	
4		NA			





PART –C
Pollution Discharged to Environment / unit of output

Sr. No.	Pollution	Quantity of pollutants discharged (Kg/Day) (Except pH values)	Concentration of pollutants in discharges (mg/L)	Percentage of variation from prescribed standards with reasons
a)	Water:		<b>,</b>	
1	pH *	6.8	6.8	44
2	Suspended Solids	114.8	42.2	.9
3	BOD	34.8	12.8	
4	Residual Chlorine	0	0	:544
5	Oil & Grease	0	0	₩.

Sr. No.	Pollution	Quantity of pollutants discharged (gm/Day)	Concentration of pollutants in discharges (µg/m3)	Percentage of variation from prescribed standards with reasons
b)	Ambient Air:			
1	PM <sub>2.5</sub>		51.2	
2	PM <sub>10</sub>		67.6	All the parameter are
3	SO <sub>2</sub>	~~	12.9	within the limits as prescribed in NAAQS,
4	NO <sub>x</sub>		14.7	2009
5	СО		0.5 mg/m3	





Sr. No.	Pollution	Noise	se levels dB A (Leq)		Percentage of variation from prescribed standards with reasons	
	C) Noise					
Ambi	ent Noise levels in premises	airport	Min	Max	The values are within the limits	
1	Day Time		63.1	70.9	given in the Consent & Noise Rules 2000	
2	Night Time		60.4 69.4		Traies 2000	
1. S	se Monitoring Terr (NMT) SNDT University, M Sarvodaya Hosp Ghatkopar	umbai	Min	Max		
1	Day Time		68.5	77.4		
2	Night Time		69.1	78.2		





#### PART - D

#### **Hazardous Wastes**

As specified Under Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016

Sr. No.	Hazardous Wastes	Total Qu	antity (MT)
NO.		During the previous financial year (2015-16)	During the current financial year (2016-17)
Fron	n Process		
1	Used oil	4.35	8.57
2	Oil contaminated filters and contaminated saw dust	3.28*	3.3*
3	Chemical tins/barrels	1.40	2.463
4	Cargo for disposal - Hazardous Cargo and date expired medicines (as per customs requirements)	9.19#	12.43#
5	Biomedical Waste	0.13	0.12
6	Runway deposits of rubber & paint	45.61	46.54
7	Electronic Waste	0	0
# Wa	taminated saw dust disposal is incleaste perishable cargo is disposed un n Pollution Control Equipmen	nder this category	015-16 & 2016-17
		NA	





#### PART - E

## **Solid Wastes**

Sr. No.	Type of Solid Waste	Total Quantity in MT		
		During the previous financial year 2015 – 16	During the current financial year 2016 – 17	
From	Process			
1	Waste Plastics	154	165	
2	Waste Papers	868	688	
3	Waste Glass bottles	70	132	
4	Waste Plastic bottles	155	156	
5	Waste wood	147	134	
6	Damaged Tins / Cans	15.4	14.5	
7	Other Misc. Scrap	155	158	
8	Wet garbage	2337.8	2839.4	
9	Waste cotton	135	135	
From	Pollution Control Facility		•	
1	STP Sludge	30.91	22.04	





1	Food waste (recycled through organic waste converter)	8.2	174.6
Qua	ntity Sold		
1	Waste Plastics	154	165
2	Waste Papers	868	688
3	Waste Glass bottles	70	132
4	Waste Plastic bottles	155	156
5	Waste wood	147	134
6	Damaged Tins / Cans	15.4	14.5
7	Waste cotton	135	135
Qua	ntity Disposed		
1	Other misc. Scrap	155	158
2	Wet Garbage	2337.8	2839.4





#### **PART-F**

(Please specify the characterization in terms of composition and quantum of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of the waste)

Wastes are generated at the airport during operation and construction activities. The Waste management procedure is being followed to handle & dispose the wastes in environment friendly manner.

Food waste is being treated in organic waste converter facility operated and maintained by MIAL. The capacity of this facility is 1 MT/day. The manure is being used by MIAL horticulture department.

Disposal of Hazardous and Non Hazardous wastes are being done as per applicable legal requirements.

Sr. No.	Name of Waste	Quantity of Waste in (MT) FY 2016 -17	Disposal Practice
Solid Was	ste	The state of the s	
1,	Waste Plastics	165	
2.	Waste Papers	688	
3.	Waste Glass bottles	132	The Non – Hazardous Waste is collected, segregated &
4.	Waste Plastic bottles	156	disposed by M/s Sharda Enterprises. Segregation of
5.	Waste wood	134	the waste is being done at the contractors end after that
6.	Damaged Tins / Cans	14.5	the waste is disposed to MCGM disposal yard at
7.	Waste cotton	135	Deonar.
8.	Other Scrap	158	
9.	Wet garbage	2839.4	
10,	Food waste	174.6	Manure is used by MIAL horticulture department and also given to NGO / committees upon request
Hazardou	is Waste		
1,	Used oil / Waste oil	8.57	MPCB authorized recycler agency M/s Plus Lubricants





131			Pvt. Ltd. is appointed
2.	Oil contaminated filters and contaminated saw dust	3.3	Hazardous Waste is being
3.	Empty tins of paint, pesticides, chemicals etc.	2.46	disposed to M/s Mumbai Waste Management Limited (MWML) for incineration and land filling.
4.	Hazardous Cargo and date expired medicines	12.43	
5.	Biomedical Waste	0.12	BM waste is disposed to MPCB authorized disposal agency M/s SMS Envo clean Pvt. Ltd. for incineration.
6.	Runway deposits of rubber & paint	46.54	This hazardous Waste is being disposed to M/s Trans Thane Creek Waste Management Association (TTCWMA) for landfill after treatment. This is MPCB authorized disposal agency
7,:	E-waste	0	MPCB authorized disposal agency - M/s Hi-Tech Recycling (India) Pvt Ltd is appointed for disposal

The Solid Wastes are being handled in totally hygienic conditions to avoid any Bird and Wildlife nuisance and intrusions, and by adhering to the Aerodrome operation Guidelines stipulated by DGCA and AAI.



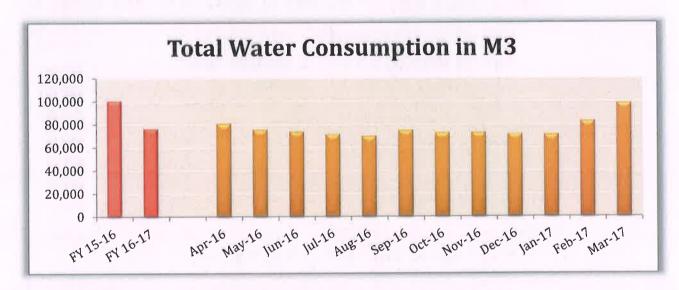


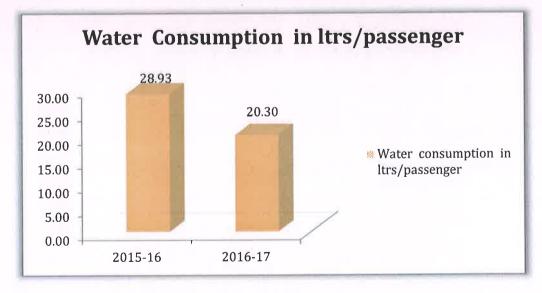
#### **PART-G**

(Impact of pollution Control Measures taken on conservation of Natural Resources and on the cost of production)

Resource optimization & conservation is always a first priority for MIAL at all stages of operation & maintenance. As a measure of conserving of Natural Resources, MIAL has undertaken several measures on optimizing the Water consumption, Electricity consumption, Fuel consumption at all possible areas. Various measures are being taken on continuous basis to ensure the process optimization and enhance the efficiency of resource conservation.

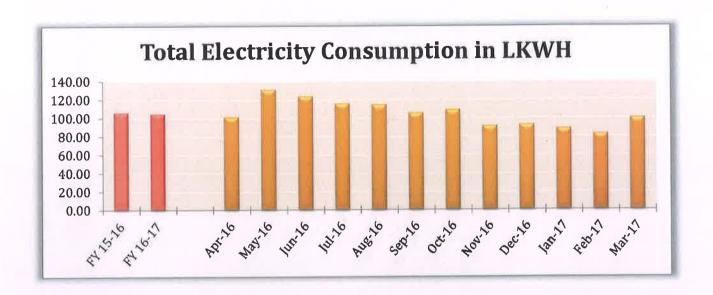
The detailed consumption pattern for electricity and water is given as below:-

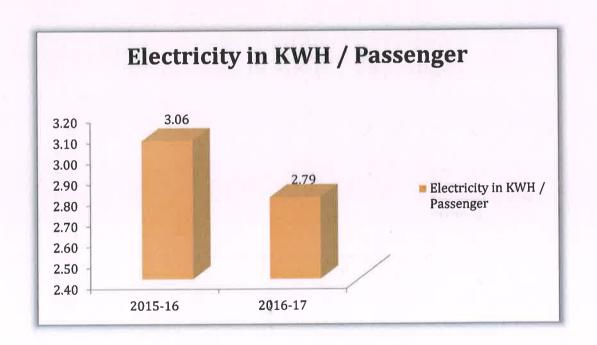
















#### PART - H

(Additional measures / investment proposal for Environmental Protection Including Abatement of Pollution, prevention of pollution)

At MIAL, we have framed necessary strategies and approaches to contribute towards sustainable development. We have developed a comprehensive strategy to accommodate the growing passenger demand while reducing the overall negative impacts on the Environment.

Continuous Ambient Air Quality monitoring station: - MIAL is continuously monitoring ambient air quality as per the NAAQMS 2009 & DGCA CAR through online monitoring system. The air quality monitoring system is most advanced and air quality monitoring is being done 24x7. We are also planning to install dedicated weather monitoring station as a part of this system. The data is being reported to government authorities.

Noise Monitoring System: - MIAL had installed comprehensive Noise Monitoring System (NMS) at CSIA. This system has been installed as per the requirements mentioned in the DGCA CAR on noise management. Two stationary noise monitoring terminals are installed at landing and takeoff path of main runway and one mobile station is at airside, which are working well and various noise events are captured. The captured noise event data is readily available on "Noisedesk" – a web based tool developed by Bruel & Kjaer (B&K) for MIAL. This system is effective and helps to comply the legal requirements as well as to measure background community noise and aircraft noise events.

Waste Management – Line in 2013, MIAL is planning to conduct a solid waste quantification, characterization study in 2017 for existing infrastructure and waste handling system. This study shall include 24x7, area wise onsite data collection, best practices existing at airports, benchmarking with other airports, etc. The study is being conducted through waste management experts and staff shall be deployed at terminal buildings, airside areas, and common waste collection points at CSIA to capture





maximum waste data. The study shall be carried out for 30-45 days to cover all areas of CSIA.

In the FY 2016-17 MIAL has published its 3<sup>rd</sup> sustainability report, showcasing its Social, Economic & Environmental performance.

#### PART - I

(Any other Particulars for improving the quality of the environment.)

#### Airport Carbon Accreditation -

Mumbai International Airport Pvt. Ltd (MIAL) has upgraded the CSI airport to the level of "Neutrality"- Level 3 + Neutrality' which is the highest level of environmental achievement available to airports, and becomes 5<sup>th</sup> airport in Asia-Pacific region to achieve the Neutrality.

MIAL has continuously demonstrated its leadership in GHG emission management and has taken various initiatives & actions to reduce direct & indirect GHG emission of Airport Operation. The major initiatives taken are;

- Increasing use of renewable energy Solar power installations of 2.56
   MW
- Energy efficiency initiatives Savings of 2.16 million units of electricity
- Promote the use of clean & green fuel
- Green Building Certifications IGBC Platinum rating for Terminal 2,
- Infrastructure improvements for reducing taxiing time
- Stakeholder engagement to reduce scope 3 emissions

Organic Waste Converter (OWC): MIAL has installed OWC in March 2016 to treat the food waste generated from CSI Airport. Approximately 1 MT per day of food waste has been treated in OWC machine regularly. The organic compost generated after treatment has been utilized in internal landscaping areas of CSIA and distributed to nearby communities. As on 31<sup>st</sup> March, 2017 174.6 MT of food waste was treated.

