GVK

Ref.: MIAL/ENV/15/48

Date: September 29, 2015

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

Sub. : Environmental Statement for the Financial Year 2014-15

Ref: Consent to Operate no. BO/RO(HQ)/CO/CAC-468 dated: 16.06.2012 and Consent operate for New T2 No. BO/CAC-cell/RO-MU/EIC-MU-5356-13/O(part)/CAC-9304 dated: 06.11.2013 and consent to operate for T1C hotel No. BO/CAC-cell/EIC-MU-6249-14/O(part)/part-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 2014-15.

This is for your information and necessary records please.

Thanking you.

Yours faithfully,

For **Mumbai International Airport Pvt. Ltd.**

Shailendra Joshi
Deputy General Manager - Environment
Mumbai International Airport Pvt. Ltd.
Chhatrapati Shivaji International Pvt. Ltd.
1st Floor, Terminal 1B, Santacruz (E),
Mumbai-400 099. India.

Encl: As Above

Mumbai International Airport Pvt Ltd
Chhatrapati Shivaji International Airport
1st Floor, Terminal 1B, Santacruz (E), Mumbai 400 099, India
T +91 22 6685 2200 F +91 22 6685 2059
www.csia.in

SRO 29/9/15

REGIONAL OFFICE, MUMBAI
MAHARASHTRA POLLUTION CONTROL BOARD,
RAIKAR CHAMBERS, "A" WING, 216, 2ND FLOOR
DEONAR GAON, NEAR JAIN MANDIR,
GOVANDI (E), MUMBAI - 400088

ENERGY
AIRPORTS
TRANSPORTATION
REALTY
HOSPITALITY
LIFE SCIENCES

ENVIRONMENT STATEMENT

for the year 2014-15

M/s MUMBAI INTERNATIONAL AIRPORT PVT. LTD

CHHATRAPATI SHIVAJI
INTERNATIONAL AIRPORT

1st Floor, Terminal 1-B, Santacruz (E),

Mumbai - 400 099

Date: - 28th September 2015

FORM – V

(See rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING

31st MARCH 2015

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 1ST floor, Terminal 1-B, Santacruz (E), Mumbai - 400 099
2.	**Industry Category** **Primary (STC code)** **Secondary (STC Code)**	Airport
3.	**Production Capacity in Units**	NA 36.634 million passenger in FY 2015
4.	**Year of Establishment**	2nd March 2006
5.	**Date of the last Environmental Statement Report Submitted**	24th September 2014

PART – B

WATER & RAW MATERIAL CONSUMPTION

1. Water consumption in m3/day:

Water consumption for various purposes during the financial year 2014-15 at “Mumbai International Airport Pvt. Ltd.” is shown in following table.

Purposes	Consent Limit in M3/day	Actual average Consumption M3/day
Process	Nil	Nil
Cooling	Nil	Nil
Domestic	11671	4906.62
Total	**11671**	**4906.62**

Note: - The consent limits are taken from the applicable Consent to Establish & Consents to Operate for Mumbai International Airport Pvt Ltd.

Water consumption per unit of production/output during the Year 2014-15 as shown below:

Sr. No.	Name of Product	Water consumption in Liters per passenger	
		During the previous financial year 2013-14	During the current Financial year 2014-15
1	**Water Consumption / passenger**	**55.62**	**48.89**

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 2013-14	During the Financial year 2014-15
		NA		

PART –C

Pollution Discharged to Environment / unit of output

Sr. No.	Pollution	Quantity of pollutants discharged (Kg/Day) (Expect pH values)	Concentration of pollutants in discharges (mg/L)	Percentage of variation from prescribed standards with reasons
a)	**Water:**			
1	pH *	6.9	6.9	..
2	Suspended Solids	2.24	5.5	..
3	BOD	5.03	12.3	..
4	Residual Chlorine	0	0	..
5	Detergent	0	0	..
6	Floating Matter	0	0	..
7	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 2.5	..	40.72	All the parameter are within the limits prescribed in NAAQS, 2009
2	PM 10	..	81.74	
3	SO2	..	15.33	
4	NOx	..	20.02	
5	CO	..	0.20	

Sr. No.	Pollution	Noise levels dB A (Leq)	Percentage of variation from prescribed standards with reasons
c)	**Noise:**		
1	Day Time	68.29	The values are within the limits given in the Consent & Noise Rules 2000
2	Night Time	66.53	

PART – D

Hazardous Wastes

As specified Under Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008

Sr. No.	Hazardous Wastes	Total Quantity (MT)	
		During the previous financial year (2013-14)	During the current financial year (2014-15)
From Process			
1	Used oil	6.18	6.37
2	Oil contaminated filters (nos) and contaminated saw dust	2.82*	2.54*
3	Chemical tins/barrels nos	0.90	1.45
4	Cargo for disposal - Hazardous Cargo and date expired medicines (as per customs requirements)	3.1	3.1#
5	Biomedical Waste	0.092	0.11
6	Runway deposits of rubber & paint	67.90	95.08
7	Electronic Waste	0	1.15
* Contaminated saw dust disposal is included into this category for FY 2013-14 & 2014-15 # Waste perishable cargo is disposed under this category			
From Pollution Control Equipments- NA			

PART – E

Solid Wastes

Sr. No.	Type of Solid Waste	Total Quantity in MT	
		During the previous financial year 2013 – 14	During the current financial year 2014 – 15
From Process			
1	Waste Plastics	174.00	148.00
2	Waste Papers	864.00	812.00
3	Waste Glass bottles	28.90	57.00
4	Waste Plastic bottles	109.00	158.00
5	Waste wood	134.00	159.00
6	Damaged Tins / Cans	15.90	15.80
7	Other Misc. Scrap	335.00	173.00
8	Wet garbage	2792.00	2839.00
From Pollution Control Facility			
1	STP Sludge	0.45	0.89
Quantity Recycled or re-utilized within the unit - NA			

Quantity Sold			
1	Waste Plastics	174.00	148.00
2	Waste Papers	864.00	812.00
3	Waste Glass bottles	28.90	57.00
4	Waste Plastic bottles	109.00	158.00
5	Waste wood	134.00	159.00
6	Damaged Tins / Cans	15.90	15.80
Quantity Disposed			
1	Other Scrap	335.00	173.00
2	Wet Garbage	2792.00	2839.00

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.

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 2014 -15	Disposal Practice
Solid Waste			
1.	Waste Plastics	148.00	The Non – Hazardous Waste is collected, segregated & disposed by MCGM authorized agency -M/s Sharda Enterprises. Segregation of the waste is being done at the contractors end after that the waste is disposed to MCGM disposal yard at Deonar.
2.	Waste Papers	812.00	
3.	Waste Glass bottles	57.00	
4.	Waste Plastic bottles	158.00	
5.	Waste wood	159.00	
6.	Damaged Tins / Cans	15.80	
7.	Other Scrap	173.00	
8.	Wet garbage	2839.00	

Hazardous Waste			
1.	Used oil	6.37	MPCB authorized disposal agency M/s Meher Petrochem Pvt. Ltd. is appointed for disposal.
2.	Oil contaminated filters and contaminated saw dust (nos)	2.54	Hazardous Waste is being disposed to M/s Mumbai Waste Management Limited (MWML). This is MPCB authorized disposal agency.
3.	Empty tins of paint, pesticides, chemicals etc.	1.45	
4.	Hazardous Cargo and date expired medicines	3.1	
5.	Biomedical Waste	0.11	BM waste is disposed to MPCB authorized disposal agency M/s SMS Envo clean Pvt. Ltd.
6.	Runway deposits of rubber & paint	95.08	This hazardous Waste is being disposed to M/s Trans Thane Creek Waste Management Association (TTCWMA). This is MPCB authorized disposal agency
7.	E-waste	1.15	MPCB authorized disposal agency - M/s Hi-Tech Recycling (India) Pvt Ltd is appointed for disposal

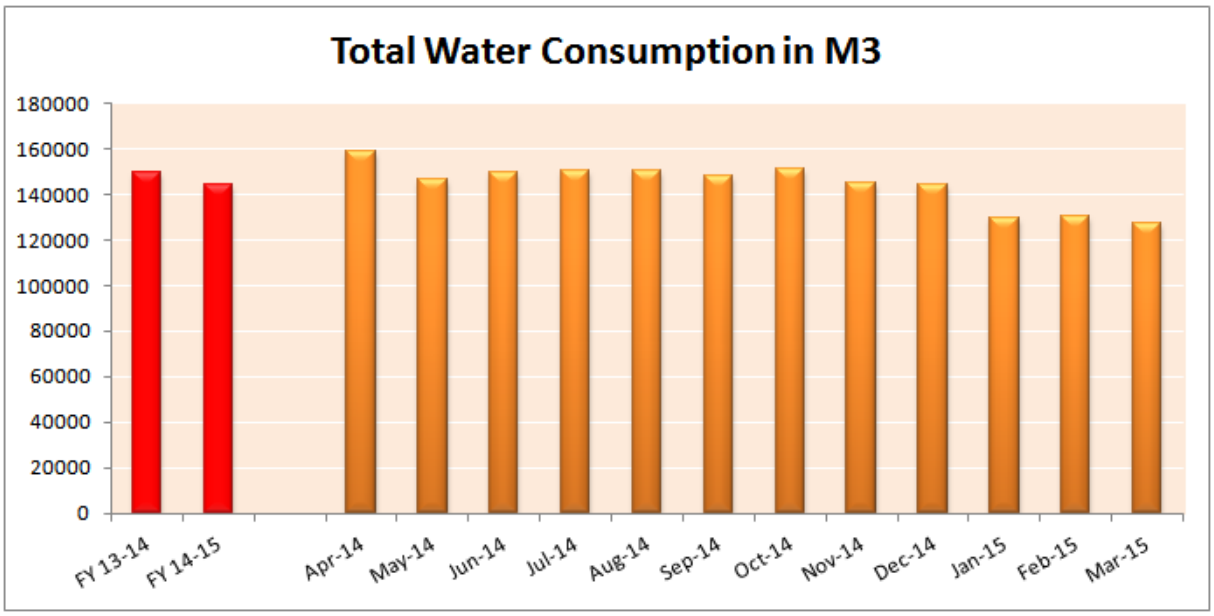
The Solid Wastes are being handled in totally hygienic conditions to avoid any Bird and Wildlife nuisance and intrusions, and by adhering to the Aerodrome operation Guidelines.

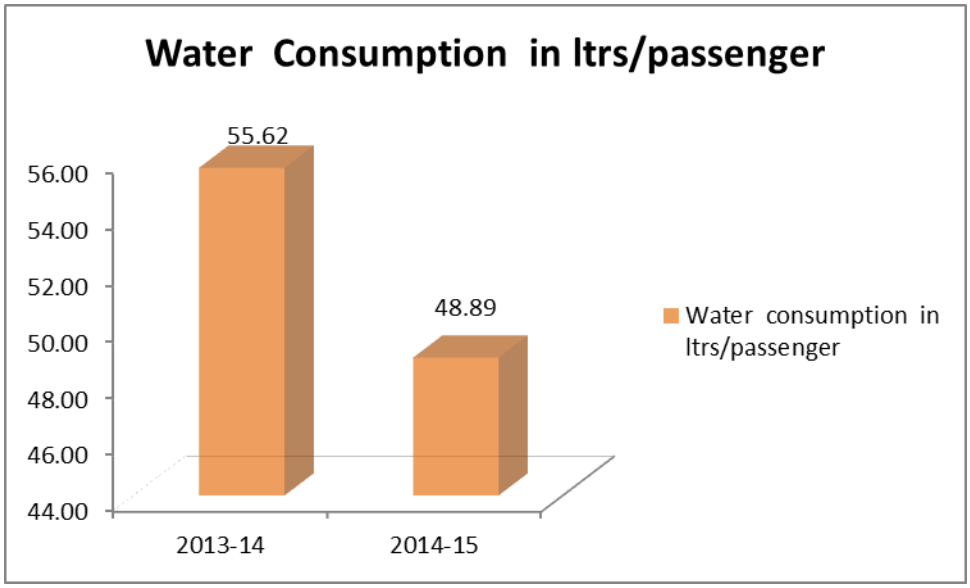
PART- G

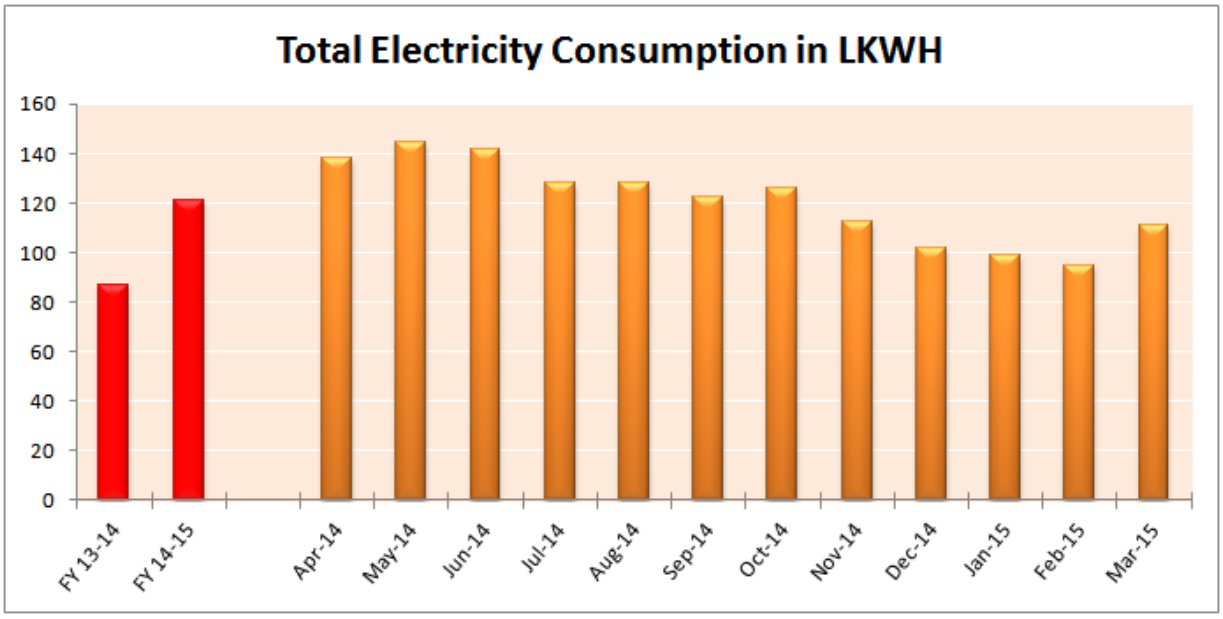
(Impact of pollution Control Measures taken on conservation of Natural Resources and on the cost of production)

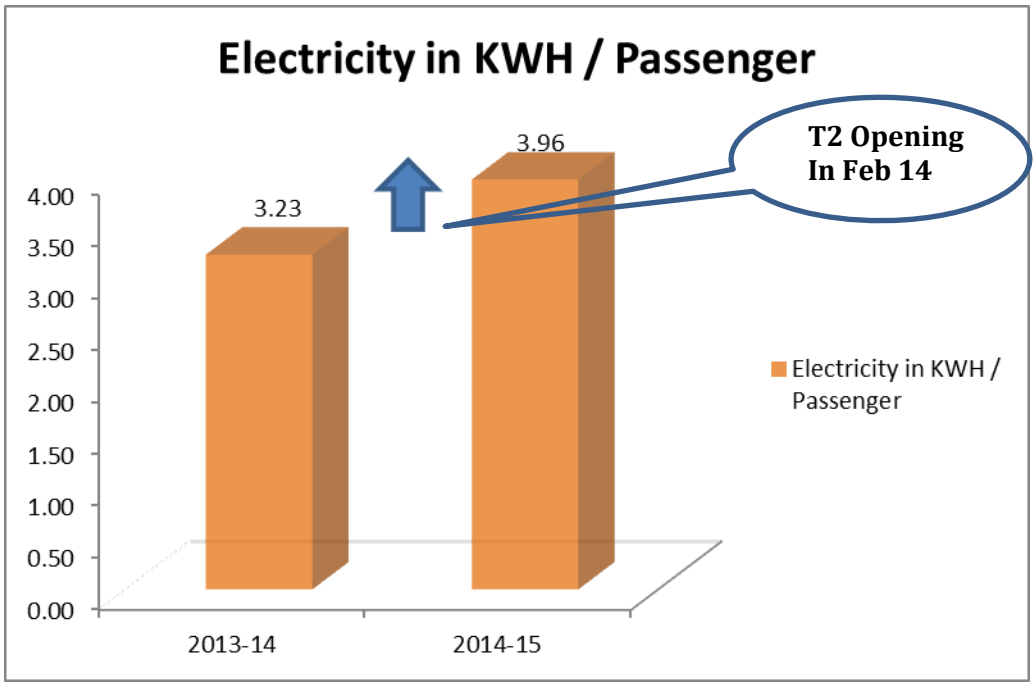
Resource optimization & conservation is always a first priority for MIAL at all stages of operation & maintenance. As a measure of conserving of Natural Resources, MIAL has undertaken several measures on optimizing the Water consumption, Electricity consumption, Fuel consumption at all possible areas. 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 water and electricity is given as below:-






Total Electricity Consumption in LKWH
160
140
120
100
80
60
40
20
0
FY 13-14
FY 14-15
Apr-14
May-14
Jun-14
Jul-14
Aug-14
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15


Electricity in KWH / Passenger
3.96
3.23
T2 Opening
In Feb 14
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
2013-14
2014-15
Electricity in KWH / Passenger

PART – H

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

As a responsible corporate citizen, MIAL is always improving the pollution control systems installed at CSIA. In FY 2014-15, financial year we have done the following investments.

Continuous Ambient Air Quality monitoring station: - MIAL has installed online ambient air quality monitoring station at airside to measure the ambient air quality 24x7. This station continuously monitors the air quality parameters like SO_X, NOx, PM_{10}, $PM_{2.5}$, HC, O_3, CO, CH_4 etc.

Noise Monitoring System: - MIAL has installed noise monitoring terminals (NMTs) for the aircrafts. Two fixed noise monitoring terminals have been installed at the outside of the airport premises which falls under landing & take off paths of the main runway. One NMT has been installed at SNDT Women's University, Juhu & another at Sarvodaya Hospital, Ghatkopar. Also a mobile NMT has been installed at airside. The noise levels are captured continuously through these systems and integrated with aircraft movements and data is analysed considering background noise and metrological parameters like wind speed & direction etc.

Energy Management System (EnMS): MIAL certified its operations and maintenance of terminals, landside and airside for ISO 50001:2011 based Energy management system. Also, MIAL is certified for ISO 14001:2004 (Environmental Management System)

Carbon Accounting & Management System- MIAL was the first airport in India to account and verify its Greenhouse gas inventory in compliance with the international standard ISO 14064-1:2006. This accreditation is given to the organization that measures and reports its Greenhouse emissions according to the guidelines and specifications of standard. Since 2011, MIAL has been implementing Carbon Accounting and Management System (CAMS) to measure, report and reduce its Greenhouse gas emissions.

PART - I

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

Airport carbon Accreditation: - MIAL enrolled voluntarily to the international Airport Carbon Accreditation (ACA) program of Airport Council International (ACI). The program accredits the airport in different Level (I, 2, 3 or 3+), provided they meet the eligibility criteria for each level.

Level 1 – Mapping
Level 2 – Reduction
Level 3 – Optimisation
Level 3+ - Neutrality

In 2011 MIAL became the first Indian airport accredited to Level 1 (Mapping) stage of the program. In the year 2013 MIAL successfully upgraded its accreditation to Level 2 (Reduction) and in the year 2015 MIAL yet again successfully upgraded to Level 3 (Optimisation). Going ahead, MIAL plans to further streamline its operations and coordinate with stakeholders to make CSIA a carbon neutral airport and upgrade to LEVEL 3+ accreditation.

Greenery Development Initiatives: -

Greenery development is one of the important components of environmental conservation initiatives taken by MIAL. However, keeping in view the potential hazards associated with bird strike during flight operations, the greenery development within the airport premises needs to be done in cautious manner.

MIAL is actively involved in programs such as tree plantation, seed distribution, and greenbelts along the Western Express Highway, beautification of airport surroundings, nature conservation and others. In our effort to conserve the environment, we have gone beyond the compliances and a variety of tree species have been planted by the Horticulture Department. Tree plantation program has been conducted at Sanjay Gandhi National Park along with donation of seeds of the trees to farmers, NGO's and MCGM for further distribution & plantation. Plant saplings have been distributed to passengers on the occasion of World Environment Day. Till date, MIAL have planted approximately 8,000 trees.
MIAL is associated with Bombay Natural History Society (BNHS) for the nature conservation activities also which helps in promoting the awareness about environmental protection.