

## **MBJ Airports Limited Environmental Policy**

The following is MBJ Airports Limited's (MBJ) Environmental Policy for Sangster International Airport (SIA):

- Integrate environmental management measures with planning, design, construction and operation of SIA facilities.
- Identify, assess and manage environmental hazards associated with SIA operations.
- Meet or exceed all applicable laws, regulations and industry codes of practice while providing superior airport services.
- Prepare for emergencies and coordinate contingency plans with responsible authorities and adjacent communities.
- Encourage personnel to be aware of and meet their responsibilities for environmental protection, providing training where necessary.
- Strive for continual improvement of environmental performance and for preventing pollution, including best available technology where cost effective.
- Minimize negative environmental impact on the marine ecology within the Montego Bay Marine Park (MBMP).
- Communicate openly with employees, Licensees/Concessionaires, customers and the public on environmental aspects of airport operations and development.

## **MBJ Environmental Programmes**

- Water Quality Management
- Spill Prevention, Control and Countermeasures
- Contaminated Site Management
- Inspection of MBJ/Licensees/Concessionaires/Contractors facilities/sites
- Waste Management
- Land Use Planning
- Wildlife Management
- Aeronautical Noise Management
- Construction Management
- Emergency Preparedness
- Education/Training/Community Relations

# Contaminated Site Management

The objective is to prevent existing contamination from reaching the sea.



**Decommissioning of former ESSO Fuel Farm at SIA, 2003**



**Ground water sampling at former ESSO Fuel Farm by Delta Environmental Consultant, USA**



**Contamination of storm drain due to leakage from a diesel underground storage tank (UGST) at Texaco Service Station**



**Routine drain inspection**



**Contamination from former fuel hydrant system discovered during excavation for the footings of a passenger boarding bridge**



**Decommissioning of diesel underground storage tank (UGST) at MBJ Electrical Main Substation**

# Construction Management

**The objective is to integrate environmental requirements into the design construction and operation of new projects**

**The objective is to integrate environmental requirements into the design, construction and operation of new projects.**



**Construction of the new East Concourse terminal building, 2004**



**Existing and “Under Construction” buildings at SIA, 2007**

# Spill Prevention Control and Countermeasures

**The objective is to prevent spills (liquid) from spreading across the ground surface and eventually penetrating the soil towards the ground water table.**



**Fuel spill on the ramp**



**Fuel spill clean-up carried out by MBJ  
Maintenance & Engineering Department**



**Secondary Spill Containment Pallet**



**Soil Remediation Farm at SIA**

# Waste Management

The objective is to handle and dispose of international and domestic waste in accordance with ICAO standards and the Jamaica Public Health and National Solid Waste Management Authority regulations.



**Waste paper from MJB administrative offices is shredded for reuse**



**Scrap metal and other wastes collected and transported from Licensees/Concessionaires' facility for disposal at the municipal landfill**

## SIA Incinerator Sites

**Then**



**Waste Management at SIA Incinerator  
under AAJ operation**

**Now**



**MBJ operates a new 4.0 Tons Incinerator  
at SIA - commissioned on December 3,  
2004**



**Domestic waste collected and disposed of by the National Solid Waste Management Authority**



**Unit for collecting and transporting international waste to the MBJ incinerator**

# Wildlife Management

The objective is to reduce wildlife interaction with aircrafts and to protect valuable natural habitat.



**Birds (Cattle Egret) on the airfield at SIA**



**Mylar tape used on the airfield as one of the methods of bird control at SIA**



**MBJ Wildlife Controllers conducting Bird surveys and patrols**



**EHS Team and Consultant from Associated Engineering Ltd, Canada, conducting Hydrology Study (Drainage) on the airfield as part of the Wildlife Control Program (2007)**

# Aeronautical Noise

The objective is to minimize the level of disturbance to those living in communities in the vicinity of SIA while recognizing the legitimate need for continued airport operation.



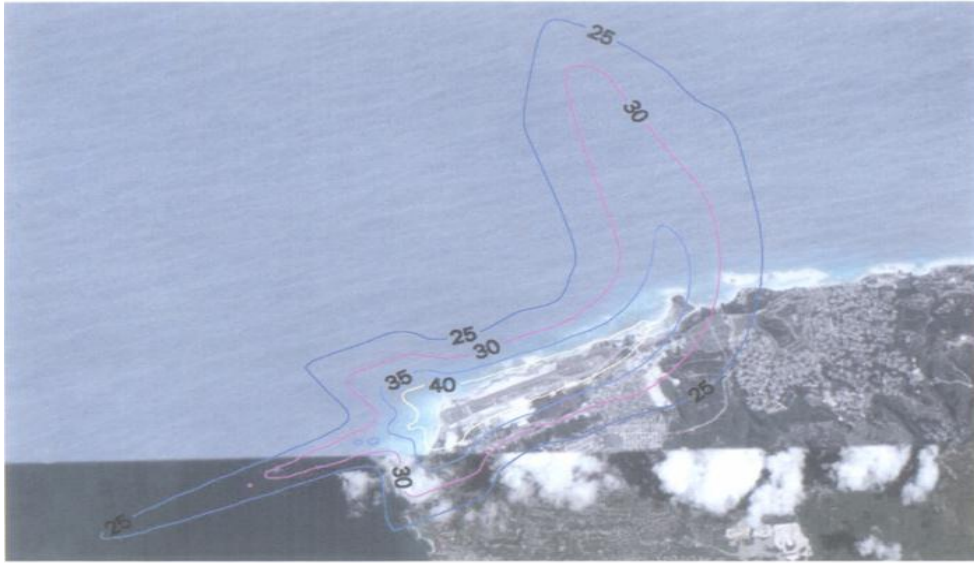
**Curfew (12 midnight – 6:00 am) - SIA**



**Peak Month as Percentage of Annual Movements**

NB: Movement data x10

## **Noise Exposure Forecasts (NEF) for the year 2006 (current) and 2026 (long term) at SIA**



**2006 Noise Exposure Forecast Contours for Montego Bay (Jamaica) Produced using Transport Canada NEF Model (v1.8) Scale in thousands of feet**



**2026 Noise Exposure Forecast Contours for Montego Bay (Jamaica) Produced using Transport Canada NEF Model (v1.8) Scale in thousands of feet**

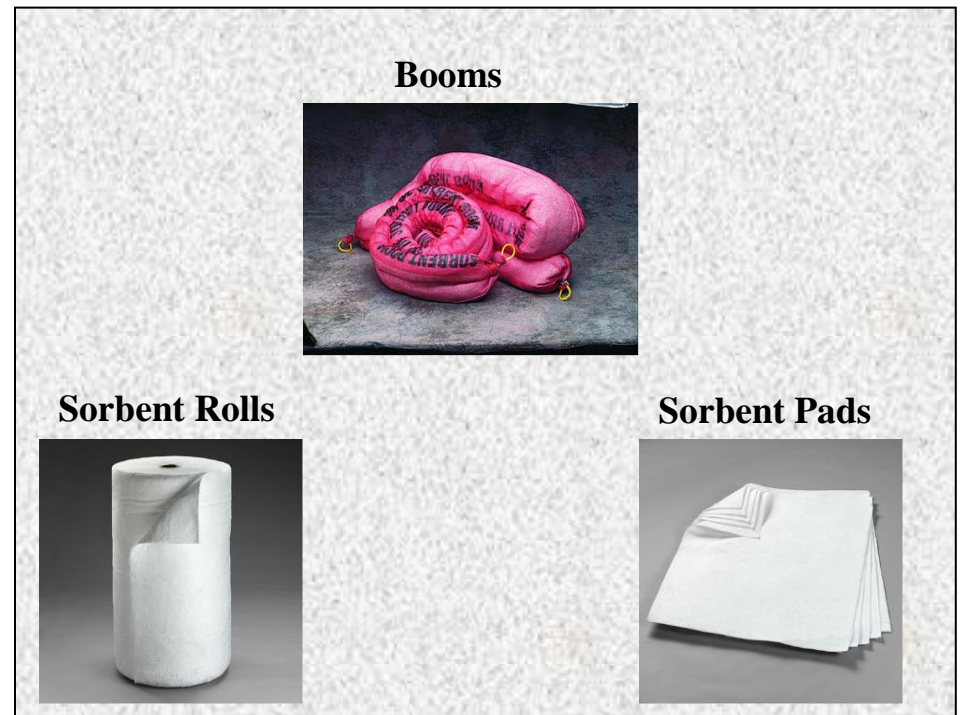
**NB. Contours represent estimates of equal values of noise energy generated by aircraft based on peak planning day**

# Emergency Preparedness

The primary purpose of this programme is to safely, quickly and effectively respond to hazardous material incidents involving aviation fuel and chemical spills.



**Spill/Fire response supplies are at each passenger boarding bridge on the ramp**



**MBJ environmental spill supplies**

# Water Quality Management

The objective is to improve surface water quality at discharge points entering the sea and to assess the status of ground water contamination at the Airport site.

## Surface Water Sampling



Samples are analyzed for:

- pH
- Dissolved oxygen (DO)
- Total Suspended Solids (TSS)
- Temperature
- Oil and Grease (O & G)
- Biological Oxygen Demand (BOD)
- Oxidation Reduction Potential (ORP)
- Conductivity

## Ground Water Sampling



Samples are analyzed for:

- Total Petroleum Hydrocarbons (TPH)
- Benzene, Toluene, Ethylbenzene and Xylene (BTEX)
- Volatile Organic Compounds (VOCs)

# Pollution Prevention Measures

## Inceptors



**10 inceptors are installed on the ramp area to treat stormwater runoff**

## Sluice/Flap Gate



**Sluice/Flap gates are installed at all surface water discharge points entering the sea from the airport compound, as a contrivance for regulating flow or level of water**

## **Silt Fence**



**Silt fences were installed to minimize the level of TSS entering storm drains due to siltation from construction sites for airport expansion and dewatering.**

## **Oil/Water Separator**



**The primary function of an oil/water separator is to separate free oil from oil wastewater by gravitational forces.**

## **Summary of MBJ Environmental Management Programmes for Sangster International Airport (SIA)**

### **Surface/Ground Water Quality**

This programme aims to protect the Montego Bay Marine Park and the ocean from airport activities that could cause the contamination of surface and ground water. Best management practices and economically viable procedures are used to identify and manage activities that may lead to pollution of surface and ground water. Routine surface water and groundwater sampling and analysis, reporting, communication and education are a part of the programme.

### **Fuel/Hazardous Materials**

The goal of this programme is to enable us adhere to and exceed regulatory requirements for the life cycle management (purchasing, storage, waste reduction and disposal) and safe handling of hazardous materials while preventing and preparing for possible spills that can cause contamination of surface and ground water. The programme also comprises a spill prevention, control and countermeasures plan.

## **Contaminated Sites**

This programme enables MBI Airports Limited and its licensees/concessionaires in conjunction with all regulatory bodies e.g. NEPA, to manage contaminated sites (e.g. former fuel storage site) at SIA and reduce any potential risks for further contamination. A continuous monitoring system (visual inspections, water and soil sampling and analysis, etc.) is in place in order to achieve the goals of this programme.

## **Solid and Liquid Waste Management**

This programme is designed to promote efficient waste disposal at the airport and to reduce the amount of garbage that goes to the landfill. Aircraft liquid effluent and sewage are disposed of at the NWC Municipal Treatment Plant via a dump/pump station at SIA, while solid waste is either disposed of by incineration or taken to the landfill.

## **Air Quality**

The air quality programme addresses activities that impact local, regional and global air quality through the production of pollutants, greenhouse gases or ozone depleting substances. We encourage the use of alternative fuels and we are presently carrying out a greenhouse gas emissions inventory at the airport.

## **Wildlife Management**

The aim of this programme is to protect environmentally sensitive areas (e.g. Montego Bay Marine Park) on and adjacent to SIA from impacts of airport operations. Most importantly, the programme also ensures that airport operations can be carried out safely by, for instance, preventing bird strikes (aircrafts in flight hitting birds) which can result in loss of life and property.

## **Aeronautical Noise**

The aeronautical noise management programme serves to reduce the level of disturbance to those living in communities in the vicinity of the airport while recognizing the need for continued airport operations. Currently a curfew between the hours 12:00 midnight and 6:00 am is in place as a means of reducing and/or eliminating aircraft noise nuisances.

## **Construction Management**

This programme aims at integrating environmental requirements into the design, construction and operation of new projects. MBJ Airports Limited achieves these goals by assessing the environmental impacts of all new projects, implementing mitigation as identified in the impact assessment and monitoring construction to ensure mitigation is implemented as planned. The programme also ensures that construction waste is disposed of properly and that the environment is not polluted while construction on going.

## **Community Relations**

Sangster international Airport is located within and serves a vibrant community. It is also one of the first points of welcome for people visiting Jamaica. The airports operation can negatively or positively affect the neighbouring communities. As such, MBJ Airports Limited strives to openly communicate with the community by developing and implementing community relations programmes, maintaining a relationship with the Montego Bay Marine Park Trust and by conducting environmental education programmes in High schools and Primary/All-age schools.