



2015 Environmental Performance Report

Since 1997, the Authority has been updating the work that was initiated by Transport Canada prior to transfer in 1997. The first comprehensive Environmental Performance report was published in 2007. It was followed by other published reports in 2008, 2010, 2011, 2012, 2013 and 2014. The reports outline performance with objectives and accomplishments or improvements required to meet the ultimate objective of minimizing situations that may impact the environment, keeping in mind that safety is the first priority.

The following is an overview of the 2015 results.

STORMWATER QUALITY

Aircraft de-icing (use of ethylene glycol)

2015 Goal

Zero exceedances

Performance

In 2015, a new biotreatment system was constructed. The system was designed to capture glycol impacted water from areas east of the Central De-icing Facility. The effectiveness of this new system is still unknown as additional monitoring is required. Ten exceedances to the Glycol Guideline (100mg/l) occurred in 2015. The exceedances were minor and of short duration, and therefore are not expected to have caused a significant effect. These exceedances were studied and determined to have occurred when glycol impacted snow melted suddenly (17 cm of snow within 36 hours), thus generating a large amount of water. The meltwater overwhelmed the stormwater system and breached some valves due to volume. Due to the elevated amount of water, field personnel cleared a path to drain the water on paved surfaces. This created a path for the glycol impacted water to flow away from normal areas. Procedures are being developed to prevent this from happening again.

2016 Goal

Zero exceedances

Method

Change operational procedures, train staff and continue to monitor and rectify any identified issue(s)

Fuelling, equipment maintenance, aircraft preparation (spills)

2015 Goal

0.5 spills per 1000 aircraft movements and ensure no off site impact

Performance

In 2015, there were 0.91 reported spills per 1000 aircraft movements (compared to 0.74 in 2014, 0.72 in 2013, and 0.77 in 2012). No off-site impact occurred. All reported spills were on hard surface and were cleaned prior to entry into soil, surface water or ground water. The increase in reported spills is deemed to be related to the increase of knowledge and monitoring as part of the Safety Management System.

2016 Goal

Ensure no off-site impact
Remediate any spill that occurs on-site

Method

Equipment maintenance and employee awareness

Construction and demolition of buildings

2015 Goal
No significant environmental impacts

Performance
In 2015, major exterior projects included the demolition of four buildings, grooving of Runway 14-32 and rehabilitation of Apron areas. All work was completed without any environmental impact. It should be noted that a waste diversion rate of 91.8% was achieved during demolition.



2016 Goal
No significant environmental impacts

Method
Complete environmental assessments as early as possible and carry out mitigation measures and follow industry standards related to the environment

GROUNDWATER QUALITY

Former fuel storage tanks, use of de-icing products

2015 Goal
Follow the Airport Authority's groundwater monitoring program and adapt as required

Performance
The groundwater monitoring program was generally followed. This year, the focus was on de-icing products as no major hydrocarbon spills occurred. No significant issues were found.



2016 Goal
Continue with the groundwater monitoring program

Method
Update the groundwater monitoring program accordingly
Continue to implement the groundwater monitoring program

AIRCRAFT NOISE MANAGEMENT

Landing, take-off and over-flight of aircraft

2015 Goal
Continue to monitor noise complaints and identify re-occurring issues¹
Work with NAV CANADA to minimize the impact on our neighbours

Performance
In 2015, there was 1.0 complaint per 1000 aircraft movements (compared to 0.62 in 2014, 0.61 in 2013, and 0.47 in 2012). There has been no noise abatement procedure violations since 2005.
In 2015, there was an increase in noise complaints related to small aircraft completing training circuits. We received 66 complaints related to flight circuits compared to 27 in 2014. We investigated the circuits in question and most followed standard flight procedures. These complaints were logged by 15 residents. It should be noted that circuits are flown visually and minor deviations can be expected. The flights can also be deviated due to control tower requirements.



2016 Goal
Continue to monitor and respond to noise complaints and identify reoccurring issues
Work with NAV CANADA to ensure flights follow published procedures

Method
Respond to inquiries in a timely manner, work with the City of Ottawa to ensure that Ottawa Airport Operational Influence Zone (OAOIZ) principles are followed and work with NAV CANADA to minimize noise impact in populated areas, where possible

HAZARDOUS WASTE

Waste materials from building and equipment maintenance

2015 Goal

Continue to recycle 100% of hazardous waste

Performance

In 2014 and 2015, all hazardous waste was recycled including: 670 kg of batteries, 578 kg of fluorescent lights, 125 kg of other lamp bulbs, 120 kg spent ballasts, 95 kg of aerosol cans, 80 L of flammable liquid and 20 L of corrosive material. This does not include the e-waste, tires, and used oil that were also recycled.



2016 Goal

Continue to recycle 100% of hazardous waste

Method

Ensure that recyclable hazardous waste is recycled and monitor recycling efforts

ENVIRONMENTAL ASSESSMENTS

Projects that would trigger the Canadian Environmental Assessment Act (CEAA 2012)

2015 Goal

Continue to assess projects as per the 2012 Canadian Environmental Assessment Act

Performance

All projects that may impact the environment have been screened. Interior projects such as building renovations or refurbishment were assessed internally during weekly Airport Technical Committee and airport project meetings.



2016 Goal

Assess all projects following CEAA 2012

Method

Monitor projects through the Airport Technical Committee Facility Alteration Permit (FAP) process and Airport Authority project meetings
Complete the required environmental assessments

WASTE REDUCTION/RECYLING

Waste generated from aircraft, restaurants, maintenance facilities and public and office areas

2015 Goal

Increase the overall diversion rate to 35%, excluding hazardous waste

Performance

In 2013, a waste diversion rate of 30% was achieved (compared to 18% in 2006). The achieved diversion rate is 33%. No waste audit was completed in 2014 and 2015. The recycling data is not expected to have changed during the past year.



2016 Goal

Increase overall diversion, excluding hazardous waste

Method

Work with airlines, concessions and the public to increase awareness and create waste reduction programs
Work with airlines and regulators to be able to recycle waste from flights that originate from across the Canadian border
Integrate waste management in all new terminal leases
Complete a waste audit in 2017

AIR QUALITY

Vehicles, aircraft and buildings

2015 Goal

No increase in greenhouse gas from Airport Authority activities

Performance

In 2015, greenhouse gas emissions controlled by the Airport Authority were re-estimated based on the Airport Council International (ACI) Airport Carbon Accreditation program developed in 2015. From 2015, GHG emissions will now be calculated on actual emissions related to actual airport activities. Previously, some emissions calculated included other emission sources. The new calculation process follows the Airport Carbon and Emission Reporting Tool (ACERT) that is endorsed by the International Civil Aviation Organisation (ICAO). The Airport Authority plans to follow the International Airport Carbon Accreditation Program. Following the former calculation tool, the 2015 carbon emission from Airport Authority managed operations were an estimated 5,728 tonnes (compared to 10,603 tonnes in 2014, 10,520 tonnes in 2013, and 10,251 tonnes in 2012). There are two reasons for the drastic reduction. The first is not counting the glycol use, as it is not a direct emission source (2,700 tonnes) from the airport operation as it is generated by the airlines and the second is the reduction in emission factors to the change in electricity generation from coal and gas to nuclear and renewable resources (150% reduction). In 2016, we are focusing on reducing GHG emissions by joining the ACI Airport Carbon Accreditation Program which focuses on the reduction of GHGs.

Please note that airport related greenhouse gas emissions are weather dependent and also depend on the manner in which electricity is generated (i.e. nuclear, coal, wind, etc...).

**2016 Goal**

Reduce to 2010 levels of 9,456 tonnes and enroll, and follow the International Airport Carbon Accreditation Program

Method

Continue to monitor and implement feasible greenhouse gas reduction initiatives

GREEN INITIATIVES

Procurement

2015 Goal

Encourage green alternatives to products

Performance

In 2006, the Airport Authority changed its cleaning and maintenance products to green products where possible. Since then, the procedure has continued. Our effort to seek greener alternatives also continues.



2016 Goal

Continue looking for green alternatives to products

Method

Continue to promote green procurement

AWARENESS

Training

2015 Goal

Complete awareness training

Performance

Training has been completed on required aspects based on specific needs. An awareness and training matrix was developed and is followed.



2016 Goal

Continue training on relevant SOPs

Method

Follow training matrix

BUILDING EFFICIENCY²

Water use

2015 Goal

Reduce consumption whenever possible

Performance

Water use varies from year to year based on factors such as the number of passengers and the weather. In 2015, water use for the entire campus was 23.7m³ per 1000 passengers (compared to 22.2 m³ in 2014, 18.0 m³ in 2013, and 17.36 m³ in 2012). The airport strives to reduce its water use.



2016 Goal

Reduce consumption whenever possible

Method

Continue to monitor for new technology that improves efficiency and maintain a proactive maintenance schedule, which enhances the overall efficiency of the building's mechanical systems

Electricity use

2015 Goal

Reduce consumption whenever possible

Performance

Electricity use varies from year to year based on factors such as the number of passengers and the weather. In 2015, electricity use was 5.73 kWh/passenger (compared to 5.73 kWh in 2014, and 5.76 kWh in 2013, and 5.84 kWh in 2012).



2016 Goal

Reduce consumption whenever possible

Method

Continue to monitor for new technology that improves efficiency and maintain a proactive maintenance schedule, which enhances the overall efficiency of the building's mechanical systems

Natural Gas Use

2015 Goal

Reduce consumption whenever possible

Performance

Natural gas use varies from year to year based on factors such as the number of passengers and the weather. In 2015, natural gas use was 12.5 m³ per m² of PTB floor area (compared to 13.9 m³ in 2014, 11.7 m³ in 2013 and 11.7 m³ in 2012).



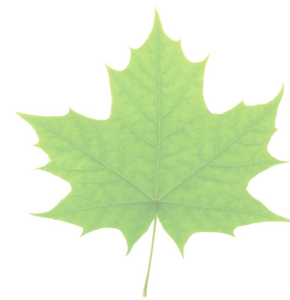
2016 Goal

Reduce consumption whenever possible

Method

Continue to monitor for new technology that improves efficiency and maintain a proactive maintenance schedule, which enhances the overall efficiency of the building's mechanical systems

The Authority will continue to strive to achieve these goals and objectives. Some of the goals and objectives are difficult to realize as there are unforeseeable factors and variables. Special attention will be given to waste reduction and greenhouse gas emissions.



1 OMCI AA has limited control over the number of complaints.

2 For results prior to 2010, please contact the OMCI AA.