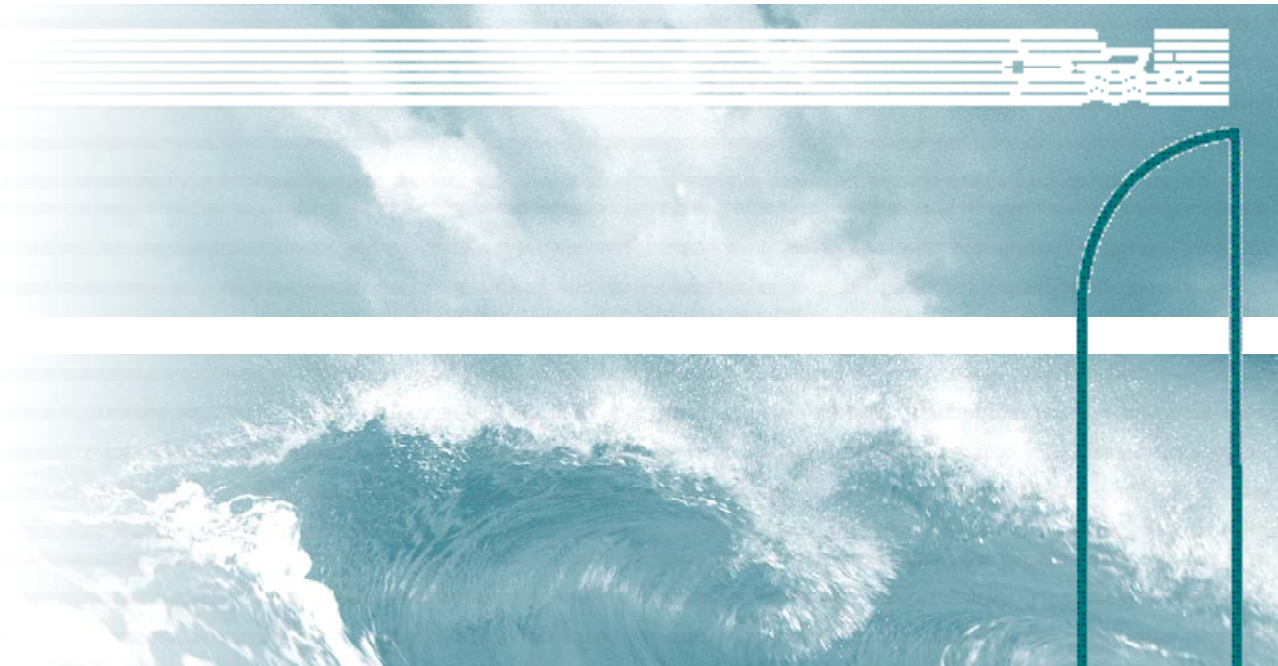




Transport
Canada

Transports
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TP 13970B
(04/2004)



Transport Canada

**Environmental
Performance Report
2003/2004**



Canada

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Please direct your comments, orders and inquiries to:

Transport Canada
Environmental Programs (AHEB)
Place de Ville
Tower C 18th Floor
330 Sparks Street
Ottawa ON K1A 0N8

Fax: **(613) 957-4260**

Email: **env@tc.gc.ca**

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This fiscal report details ongoing efforts and progress made towards meeting the challenge of environmental stewardship through the development and delivery of environmental programs that target the facilities, lands and operations of the department. (Previous environmental performance reports from 1998-2002 were made on a calendar basis.)

The fiscal year 2003/2004 was a sustainable development strategy (SDS) transition year. Transport Canada continued working actively to achieve commitments set out in the department's second SDS while developing new commitments for the third strategy. The second strategy's 29 commitments for action include concrete targets and indicators that enable measurement of the strategy's performance. The third strategy brings more precision to the concept of sustainability, and defines 7 challenges and 32 specific commitments for the next three years (2004 – 2006).

Transport Canada has included in all three of its sustainable development strategies a key challenge involving the improvement of environmental management on Transport Canada lands and in its operations. The department has met this continuing challenge through its Environmental Management System (EMS). The EMS helps the department better understand the nature of its environmental impacts and sets an example for others in the transportation sector.

Although the department no longer directly operates many components of the transportation system, it retains the role of landlord and manager for major components, including the National Airports System. In this role, Transport Canada is responsible for ensuring appropriate stewardship of its lands and facilities.

Transport Canada is responsible for a wide range of operations and approximately 905 properties, including fleets of aircraft and vehicles, as well as stores, warehouses and offices in central and remote sites across the country.

This report begins with information on the department's performance in achieving targets set out in Transport Canada's Environmental Management System. Detailed reporting follows, itemizing ongoing activities in the department's four primary environmental programs:

- Environmental Protection Program;
- Evaluation and Mitigation Program;
- Environmental Assessment Program; and
- Real Property Program.

ENVIRONMENTAL MANAGEMENT SYSTEM

In 1998, pursuant to federal government policy, Transport Canada committed to the development of an environmental management system (EMS) based on the ISO 14001 standard and the federal government's *Guide to Green Government*. Transport Canada has developed an EMS and is committed to implementing environmental management throughout the department. This process is fundamental to the integration of environmental considerations into daily decision-making and to meeting the objectives of sustainable development as detailed in the departmental sustainable development strategy (SDS). The goal of the EMS is to produce a departmental framework which is continually monitored and which provides direction to the department's environmental activities.

Although the department no longer directly operates many components of the transportation system, it retains the role of landlord and manager for major components, including the National Airports System. In this role, Transport Canada is responsible for ensuring appropriate stewardship of its lands and facilities.

Transport Canada is responsible for a wide range of operations and approximately 905 properties, including fleets of aircraft and vehicles, as well as stores, warehouses and offices in central and remote sites across the country.

2.1 Sustainable Development Strategy 2001-2003: the Environmental Management System targets

Transport Canada's *Sustainable Development Strategy (SDS) 2001-2003* describes how the department can better integrate environmental considerations into its mandate and sets principles that define the department's interpretation of sustainable development in relation to the transportation sector. The SDS also identifies 7 priority challenges and 29 commitments for action. As part of its effort to meet the commitment titled "Improving Environmental Management for Transport Canada Operations and Lands," Transport Canada established 6 targets for its environmental management system (EMS).

HEADQUARTERS EMS FRAMEWORK

Air emissions

- Target** Establish an accurate baseline of greenhouse gas (GHG) emissions by 2001/2002. Report departmental GHG emissions annually beginning in 2001.
- Status** Complete. A GHG baseline was established in 1998/1999.
- Target** Adopt a formal GHG-reduction target based on a share of the federal reduction target by 2001/2002.
- Status** Complete. In 2001, the government of Canada announced its intention to reduce its own GHG emissions to 31 per cent of 1990 levels by 2008-2012. To help achieve this goal, Transport Canada agreed to reduce its emissions by four per cent from its 1998/1999 GHG baseline.
- Target** Ensure 50 per cent of vehicle purchases between 2001 and 2003 are low-emission vehicles (i.e. alternative fuel vehicles and hybrids).
- Status** During the fiscal year 2003/2004, 11 of the 27 (40.7 per cent) vehicles purchased by Transport Canada were low emission.

Contaminated land

- Target** Develop a contaminated-site management framework by 2001/2002.
- Status** Complete. Transport Canada submitted its 2003-2008 Contaminated Sites Management Plan to Treasury Board Secretariat on July 1, 2003.
- Target** Inventory and remediate or risk-manage all sites by 2003/2004.
- Status** Ongoing (569 sites identified, 505 investigated, 64 suspected).

Storage Tanks

- Target** 100 per cent compliance with *Canadian Environmental Protection Act (CEPA) Tank Technical Guidelines*.
- Status** Ongoing. Currently, Transport Canada owns and operates approximately 77 tanks.

Non-hazardous waste

- Target** Implement or increase non-hazardous waste recycling at selected Transport Canada Centres.
- Status** On track. Recycling programs in place at Transport Canada regional offices, facilities and some Transport Canada centres.



Environmental emergencies

Target Develop or revise emergency plans for Transport Canada owned and operated facilities by 2003/2004.

Status On track. In the 2003/2004 fiscal year, Transport Canada carried out a review to determine the status of existing plans. It was determined that all the facilities have an Environmental Emergency Plan. The department also initiated an effort to produce Environmental Emergency Planning training specific to Transport Canada facilities and operations. It is expected that this training will be delivered during 2004/2005.

Environmental awareness

Target Achieve baseline awareness by Transport Canada employees by 2001/2002.

Status Transport Canada has completed a training and awareness assessment. The results are being used to develop an environmental awareness strategy.

Target Deliver targeted environmental management and sustainable development awareness programs by 2003/2004.

Status Sustainable development principles have been integrated into the presentation material of in-house courses and presentations, attended by approximately 400 employees in 2002-2003. Transport Canada delivered a two-day Sustainable Development Capacity Course in October 2002.

Transport Canada is moving toward a more formal integration of the EMS within each of the aforementioned operations and activities. Furthermore, regions and facilities have created their own EMSs by adapting the initial headquarters framework to their own business operations.

2.2 Facility Level EMS: the Aircraft Services Directorate

Using the departmental EMS as a benchmark, the Aircraft Services Directorate (ASD) developed a facility EMS which conforms to the departmental framework for environmental management.

The Aircraft Services Directorate provides aircraft maintenance and support services to Transport Canada as well as other federal government departments and agencies. This includes the provision of professional training for Transport Canada and Transportation Safety Board pilots, in addition to aircraft maintenance engineers and electricians.

The facility EMS applies to two buildings and the surrounding area. Building T-58 houses an aircraft hangar, workshops and administrative offices. Building O-276 houses the training centre. Both of these buildings are located at the Ottawa International Airport.

ASD developed an environmental policy in compliance with the requirements identified by the ISO 14001 standard. The Management Executive Committee approved and signed the environmental policy in November 2003. The environmental policy will be framed and posted in plain view of the employees by the end of July 2004.

AIRCRAFT SERVICES DIRECTORATE EMS FRAMEWORK: HANGAR T-58

Hazardous waste

Target 80 per cent reduction of hazardous waste found in general waste by the end of 2003.
Status 92 per cent reduction of hazardous waste found in ASD's general waste as recorded in the waste audit conducted in May 2003.



Waste Oil Management Program

Target Comply with legal and other requirements applicable to waste oil storage tanks.

Status A consultant was hired to audit ASD's seven waste oil storage tanks located in the Ottawa, Montreal, Moncton and Hamilton hangars. The final audit report was received in January 2004.

Non-compliances were identified for several storage tanks, and corrective measures were implemented, with the exception of the Montreal tank system. A formal request for its replacement was submitted to the Montreal-Trudeau (Dorval) Airport Authority. The replacement is scheduled within a short time period.

Waste Water Management Program

Target Identification and measurement of the dangerous waste in the water outflow from the Aircraft Services Directorate.

Status A wastewater sampling study was completed at Aircraft Services T-58 Hangar in June 2003.

Two sampling sessions were conducted measuring the quantity of dangerous waste in the water outflow.

Powerful Cleaners and Solvents Management Program

Target To replace two powerful cleaners by two less dangerous cleaners and to replace two powerful solvents by two less dangerous solvents by the end of 2003.

Status Methyl ethyl ketone (MEK) used for cleaning paint guns in the paint shop was replaced with a water base parts washer using Green Unikleen.

The cleaner for the aircraft was replaced with Deanco Turco 6692. The replacement contains more environmentally-friendly ingredients than the main ingredients in the previously used Power Kleen.

The hangar floor cleaner was replaced with an Environmental Choice product (Industrial Eco Degreaser).

Training, awareness and competence

Target To provide training to the employees regarding the identified environmental aspects.

Status Training requirements were based on Aircraft Services environmental regulatory needs, its activities and the environmental aspects of its work. The following training was offered this year:

- transportation of dangerous goods training;
- WHMIS training;
- anti-ice / de-ice training;
- specific awareness training: ASWHM; paint shop waste disposal awareness; and
- emergency response spill plan training.

Emergency preparedness and response

Target To implement an emergency spill response plan for Hangar T-58 and to provide training based on the Emergency Spill Response Plan.

Status An emergency spill response plan, describing the actions to be taken in the event of a spill, was developed and officially approved and signed by Aircraft Services management committee in February 2004. The emergency spill response plan was communicated to all team leaders.

Waste diversion

Target Increase the waste diversion rate of Hangar T-58 and the training centre.

Status New recycling stations were put in place in the office areas and in the hangar. A composting project was implemented in July 2004 for the brown paper from washrooms and for organic waste resulting from food preparation in the cafeteria. The implementation of this program will considerably reduce the amount of waste going to landfill, since food waste represents approximately 4,376 kg or 20 per cent of ASD total waste, and brown paper some 2500 kg or 11 per cent of annual waste. A waste audit that is scheduled for October 2004 should result in better diversion rates.



Aircraft Services Directorate Success Stories

Hazardous waste

Regular audits are conducted to communicate the importance of using the Hazardous Waste Stations. Non-compliance situations are continuing to be communicated in writing and verbally to the appropriate directors, chiefs and team leaders.

Furthermore, in order to reduce the amount of hazardous waste sent to landfills, disposable white towels used by our employees were replaced with reusable towels provided by Canadian Linen. It has been estimated that this will divert at least one 55-gallon drum of hazardous waste from the landfill each week, resulting in a further reduction of approximately 16 per cent of total hazardous waste. The implementation of this project has been very successful.

The installation of the Hazardous Waste Stations, the implementation of weekly audits and cooperation by the employees are responsible for this success.

Cleaners

The replacement of the cleaning products used by our janitorial service company with more environmentally-friendly products was initiated in June 2003. Furthermore, the new contract with the cleaning staff will specify that when possible, only environmentally safe products should be used in the hangar. This project will reduce the amount of powerful and hazardous cleaning chemicals used in our hangar.

A dipping tank project was recently implemented for the Paint Stripping Shop. The tank will reduce the amount of paint stripper containing dichloromethane used in the hangar.

Waste

The implementation of the waste diversion program will considerably reduce the amount of waste going to landfill, since food waste represents approximately 4,376 kg or 20 per cent of ASD total waste, and brown paper some 2500 kg or 11 per cent of annual waste. A waste audit is scheduled for October 2004.

A “Wastefest” was conducted in September 2003. During this two-day event, ASD employees were invited to clean their desks by recycling or donating unwanted office supplies or furniture. Employees were also invited to bring their household hazardous waste for proper disposal. Many paint cans, batteries, aerosol cans, binders, etc. were received. This activity was an excellent opportunity for increasing environmental awareness among ASD staff.

Atlantic Region Success Story – Facility Environmental Management Systems

In 2003, Atlantic Region's Environmental Affairs group moved forward on EMS development. By year-end, the region developed facility-specific EMSs for the Wabush and St. Anthony airports (both located in Newfoundland and Labrador), which are owned and operated by Transport Canada.

Environmental Affairs worked with management and staff at both airports to identify the significant environmental aspects specific to each location. The operations and activities of each airport were also examined, and objectives and targets developed around those areas which required improvement.

Each airport-specific EMS is being implemented with assistance from airport management and staff. The airports have been using the EMS increasingly in their environmental management work. Within the first week of implementation at the Wabush Airport, the airport manager placed recycling bins throughout the airport terminal and offices. Some of the subject areas covered in the EMS are hazardous waste, hazardous materials handling and storage, monitoring programs, environmental awareness, waste disposal and storage tanks.

The EMSs include the targets and objectives from headquarters, regional and facility EMSs, as well as specific legal and other requirements, a hazardous waste shipping form and instructions, sampling protocols (for surface water sampling where required), and an inventory of hazardous waste and hazardous materials.

Modifications will be required during each EMS three-year cycle as legislative and regulatory requirements change and as the airports work to improve their EMS. Environmental Affairs will review each EMS and monitor progress at each airport throughout the cycle and make adjustments as necessary. Information gathered will be documented and used to aid in the development of the next EMS cycle.



2.3 Sustainable Development Strategy 2004-2006: Next Steps for the Environmental Management System

Transport Canada's existing EMS manual has undergone a major review. The new EMS manual includes an eight-part framework. Eight new targets have been added to the targets continued from the 2001-2003 version. The new framework is included in the department's 2004-2006 sustainable development strategy, which was tabled in Parliament on February 16, 2004. The new significant environmental aspects are:

- air emissions;
- land management;
- waste management - non-hazardous waste;
- hazardous materials management;
- water - drinking water;
- environmental emergency response;
- green commuting and business travel; and
- environmental assessment.

ENVIRONMENTAL PROTECTION PROGRAM

Transport Canada's Environmental Protection Program (EPP) helps ensure that the department complies with applicable environmental laws, regulations and policies. An important objective of the EPP is to reduce the environmental impact of employee activities such as workplace commuting and business travel.

The EPP also involves work with other transportation stakeholders to develop environmental protection practices and standards for the transportation sector. Examples include:


- working with airports and airlines to minimize the environmental effects of de-icing fluids;
- working with Environment Canada and industry stakeholders to find ways to manage road salts and reduce harm to the environment; and
- participating in the work of the International Civil Aviation Organization's Committee on Aviation Environmental Protection, with regard to aircraft emissions, noise, and airport land-use planning.

3.1 Canadian Environmental Protection Act

3.1.1 Glycol

Prior to flight departures during periods of inclement winter weather, airlines spray a heated glycol-based fluid on aircraft surfaces. Although glycol sometimes pollutes the air and groundwater, of greater significance is the hazard to aquatic life posed as a result of stormwater discharges to surface waters.

Although existing environmental legislation does not specifically require water monitoring, federal, provincial and municipal laws do specify water quality standards and guidelines to be followed by industry. According to the *Canadian Environmental Protection Act* (CEPA), the level of glycol at an effluent-discharge point should not exceed a total concentration limit of 100mg/L. To ensure that airport effluent does not negatively impact on the environment, Transport Canada has implemented a program to sample and analyze stormwater at its airports. Water-quality programs have also been established by local airport authorities and Canadian airport authorities.



To encourage responsible environmental management of glycol, both Transport Canada airports and local airport authorities have implemented, in conjunction with air carriers, detailed glycol mitigation plans and procedures. These plans and procedures are detailed in the 2003/2004 Glycol Monitoring Program Annual Report that will be sent to Environment Canada in fall 2004.

In addition to glycol monitoring, Transport Canada is conducting a project to develop an Airport De-Icer Management System (ADMS) model. The objective of the ADMS model is to track the dispersal of ground de-icing/anti-icing products at an airport from the time of application up to, and beyond, the departure of the aircraft. No standardized approach or industry-accepted model can currently track this information. Phase I of the ADMS project was completed in 2003/2004 and phase II is scheduled for completion in 2005.

3.1.2 Road Salt

During 2003/2004 Environment Canada finalized its Code of Practice for the Environmental Management of Road Salts. This document was produced pursuant to the provisions of CEPA 1999 and represents follow-up work to the *Road Salts Priority Substances List Assessment Report* published in December 2001.

Under CEPA 1999 Environment Canada was required to produce a risk management regime to address the environmental damage caused by road salts without affecting road safety. The code of practice respects this commitment and was prepared through extensive consultations with a multi-stakeholder working group. Transport Canada's Environmental Programs and Road Safety Branch actively participated in this exercise and remain committed to the code's implementation. The code outlines a methodology for the environmental management of road salts and leans heavily on the related work produced in this area by the Transportation Association of Canada.

3.2 Drinking Water Program

In Canada, the responsibility for providing clean, safe and reliable drinking water to the public generally lies with the provincial and territorial governments. The federal government is responsible for ensuring the safety of drinking water supplies on its own lands, as well as supplies which serve federal government facilities.

Transport Canada is currently working with several other federal departments to produce a guidance document that will complement the current *Canadian Drinking Water Quality Guidelines*. Transport Canada Headquarters is working with the Regions to produce a statement on how the guidance document applies to Transport Canada lands and facilities.

3.3 Federal House in Order Initiative

The Federal House In Order (FHIO) initiative is the Government of Canada's plan for reducing Greenhouse Gas (GHG) emissions arising from its operations, in line with Action Plan 2000 on Climate Change.

Under the FHIO initiative, Transport Canada is one of 11 federal government departments required to report fuel consumption and GHG emissions. This reporting includes GHG emissions from four categories of transportation (air, marine, on-road vehicles and field equipment) as well as from buildings. In 2001, the Government of Canada announced its intention to reduce emissions from its own operations by 31 per cent from 1990 levels by 2008-2012. As one of the principal operational departments, Transport Canada's share of the target is equivalent to a 4 per cent reduction from Transport Canada's 1998/1999 baseline year.



Category	Percentage change from 1998-1999 baseline
Buildings	-44%
Transportation: On-Road	-21%
Transportation: Aircraft	-11%
Transportation: Marine	3%
Field Equipment	-33%
Total Transportation Emissions	-6%
Transport Canada's 4% Reduction Target	-5%

Since the 1998/1999 baseline year, GHG emissions produced by Transport Canada owned and operated buildings have decreased by 44 per cent. This significant decrease is attributed to divestiture, and as a result the calculated emissions from Transport Canada buildings are not factored into Transport Canada's 4 per cent target.

For more information, or to obtain a copy of the *Federal House In Order 2003/2004* report please email env@tc.gc.ca.

3.4 Environmental Monitoring Program

3.4.1 National Airport System Evaluations

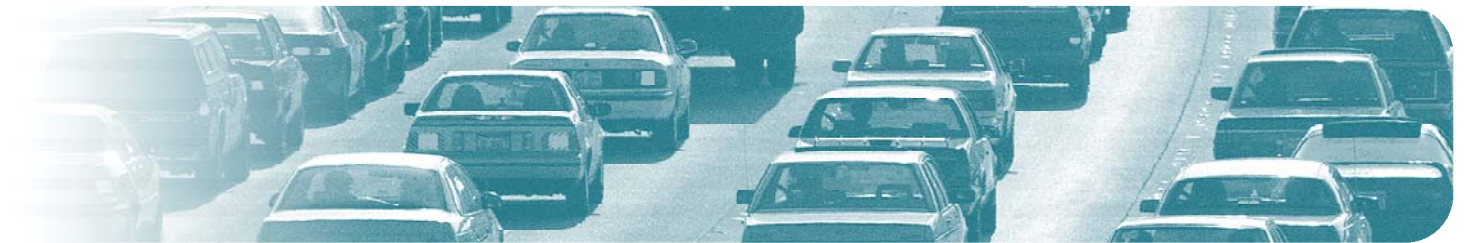
In order to have an indication of the condition of Transport Canada lands and operations, a comprehensive environmental monitoring program was launched in 2000. Five Environmental Monitoring Protocols were developed, covering all aspects of environmental management on departmental properties. Under the environmental provisions of the ground lease agreements between Transport Canada and the airport authorities, the department monitors 23 of the 26 National Airports System (NAS) sites on an ongoing basis. The remaining three NAS airports are owned and operated by the territorial governments and are not monitored by the federal government. During 2003, 22 NAS airports were evaluated using Transport Canada's Environmental Property Protocol (2000). At this time, there are no major environmental deficiencies identified.

3.4.2 Waste Initiative

In 1995, the Government of Canada announced the policy on Greening of Government Operations (GGO), which states that all federal departments and agencies must develop SDSs and EMSs. Specifically, the GGO policy states that each federal department must implement environmental initiatives in seven areas of operation:

- procurement;
- waste management;
- water usage;
- energy usage;
- motor-vehicle fleets;
- land-use management; and
- human-resource management.

The departments must also measure and report the results of these initiatives.



Case Study – Tower C

An example of Transport Canada's commitment to the GGO policy requirements is the *No Waste* initiative, which was launched in 1997 at departmental headquarters, located in Tower C of the Place de Ville complex in downtown Ottawa. This extensive waste management initiative aims to reduce non-hazardous waste by 75 per cent in departmental offices.

Since implementing the initiative, the department has conducted waste audits on a regular basis to measure and report on performance, and to reveal opportunities for improvement.

Results of the May 2003 waste audit show Transport Canada employees in Tower C:

- diverted approximately 83 per cent (234,053 kg) of waste material from landfills ;
- achieved excellent capture rates for paper and corrugated cardboard recycling streams;
- used more than 14 million sheets of paper; and
- saved approximately \$13,286 in paper-procurement costs by achieving a 12 per cent double-sided printing rate.

During the 2003/2004 fiscal year, recycling stations at headquarters were updated with designated areas for paper, glass, cans and rigid plastics. The updates included enclosing the blue recycling bins in a more aesthetically pleasing compartment with new countertops and signs. This and other initiatives are designed to further promote the *No Waste* program and encourage staff to recycle in order that the EMS goal can be met.

3.5 Environmental Awareness Activities

3.5.1 Outside Emissions Reduction Initiatives

The phrase 'outside emissions' refers to Greenhouse Gas (GHG) emissions that are not directly attributable to the Government of Canada but result from federal employee activities such as workplace commuting and business travel. With approximately 300,000 government employees undertaking such travel each day, substantial GHG emissions are created. In fact, a recent Transport Canada analysis determined that federal employee commuting and business travel generates approximately 1.5M tonnes of emissions each year, roughly equivalent to the annual GHG emissions from 350,000 automobiles.

Through a variety of Outside Emissions Reduction (OER) initiatives, Transport Canada demonstrates environmental leadership by providing employees with opportunities to reduce their own GHG emissions. Through a range of policy and communication instruments, these initiatives promote a variety of commuting and business-travel options, such as telecommuting and videoconferencing.

More information about OER initiatives can be found at <http://www.fhio.gc.ca>.



Quebec Region Success Story.

In Quebec Region, the 2003/2004 fiscal year marked the introduction of a sustainable transportation program for business travel. Under this program, a policy on using sustainable transportation for business travel was adopted that states, "Transport Canada-Quebec Region is committed to prioritizing business travel in accordance with environmental principles, economic requirements and the operational and social needs of the department and its employees."

The Quebec Region's objective is to achieve 60 per cent environmentally friendly business travel by using any transportation method other than driving alone (walk, bike, bus, train, carpool, etc). This initiative applies only to administrative travel (such as travel for meetings, conferences and training courses). No data is being collected on travel for inspection purposes.

In order to measure progress in reducing greenhouse gases more effectively, the Environmental Affairs Division has introduced an electronic form, which is now available on the regional Intranet. The form is linked to a database so that the travel can be compiled and environmental performance calculated.

Employees are asked to complete the electronic form every time they fill out their usual travel expense forms. Trips involving one person driving alone and trips for which expenses are not claimed should also be entered using the electronic form.

The results to date are encouraging: approximately 70 per cent of the business travel in the database has conformed with sustainable transportation principles.

3.5.2 Green Commute Program

Transportation emissions account for approximately 25 per cent of Canada's total GHG emissions. Three-quarters of these emissions come from road transport, primarily personal vehicle trips. Transport Canada's Green Commute Program (GCP) promotes environmentally friendly workplace travel, and sustainable transportation in general. Through the program, employees become more aware of their travel patterns, make changes to reduce the number and distance of vehicle trips, and demonstrate positive, sustainable-transportation habits to the community at large.

As proposed in *Transport Canada's 2001 Environmental Performance Report*, the department has fulfilled its commitment to expand the GCP by developing and disseminating the commuter options guide.

Commuter Options Guide

Since the debut in 2002 of the *Commuter Options Guide: The Complete Guide for Federal Employers and Workshop Manual*, 150 copies have been distributed to municipalities, non-governmental organizations, federal departments and private businesses as an initial promotional effort. To further increase awareness about the GCP, two information sessions were held in December 2003 and January 2004.

A commuter options survey was carried out in conjunction with the transit pass evaluation, in the four federal departments (Transport Canada, Environment Canada, Treasury Board, Natural Resources Canada) participating in the **Transit Pass Pilot Project**. A second survey was then conducted at Transport Canada's regional offices.

With respect to training workshops, two have been delivered to date. The first was a pilot training session held in Ottawa with representatives from 8 federal departments and the second was a half-day session with participants from our regional offices. Both workshops proved to be very successful, with participants' feedback indicating the course was interesting and informative.

The comprehensive Commuter Options Guide is designed for Canadian employers in all sectors who want to enhance the commuter options available to their employees. The guide is based on years of international experience, but it focuses on specific Canadian examples and resources to provide a range of innovative and practical ways to make commuting easier, healthier, and less expensive.



The Commuter Options Guide includes all materials that business groups, government agencies and non-profit organizations require to deliver effective alternative-commuting training workshops. The guide also identifies numerous green-commuting resources, including other Canadian agencies that offer related support services to employers.

Transit Pass Pilot Project

One of the ways the federal government demonstrates leadership in reducing GHG emissions and promoting awareness of sustainable transportation within the federal government is the Transit Pass Pilot Project. This innovative project enables employees of four federal government departments in the National Capital Region (NCR) to purchase discounted annual transit passes through monthly payroll deductions. This convenient payment method, and the savings involved, help to increase the number of employees who choose transit.

The Transit Pass Pilot Project is based on a partnership between the Government of Canada and the two local transit authorities: OC Transpo in Ottawa, and Société de transport de l'Outaouais in Gatineau. Participating departments signed service agreements with the transit companies, committing to the project for a period of one year from November 1, 2002, to October 31, 2003. The pilot has been extended into 2004 to allow for more time to finalize the evaluation.

The project offers many benefits, including GHG emission reductions, cost savings for employees, and improved access to environmentally sound commuting.

Building on the success of the Transit Pass Pilot Project, the Sustainable Federal House in Order Assistant Deputy Minister Committee has approved moving forward and expanding the pilot project into a full program. The new Transit Pass Program will be offered to employees of departments in the NCR that choose to participate.

3.5.3 Environmental Awareness Highlights

Environment Week

Transport Canada NCR employees participated in the National Commuter Challenge during Environment Week, June 1-5, 2003. This five-day event is an annual competition to determine which Canadian city can achieve the greatest pollution reductions by using sustainable methods of transportation. Since the use of fossil fuels is one of the leading causes of air pollution and GHG emissions, participants opted for environmentally-friendly methods of transportation throughout the week: walking, cycling, in-line skating, transit, car-pooling, and telecommuting at every opportunity.

Transport Canada made an impressive showing in the Challenge, finishing second among businesses with more than 1,000 employees. Nearly 54 per cent of Transport Canada's NCR employees participated in the event, reducing vehicle emissions by 43.8 tonnes.

Clean Air Day

On June 3, 2003, Transport Canada helped celebrate Clean Air Day by co-sponsoring an awareness campaign in partnership with the Canadian Urban Transit Association. The campaign included a series of clean-air and climate-change messages, which were posted on buses in 65 cities across Canada to encourage use of more sustainable modes of transportation.

TC Express

The *TC Express* is a national newsletter for Transport Canada employees. Articles are sent in to the newsletter to help raise awareness among departmental employees about issues related to the environment. In the 2003/2004 fiscal year, Environmental Affairs contributed articles on the following topics: new environmental policies in the Ontario Region, hazardous household waste, car recycling, and sustainable development initiatives in the Quebec Region.

Other Regions contribute similar articles to their regional newsletters on many of the same environmental issues.



Pacific Region Success Story - Walking the Talk

This year Transport Canada and Public Works and Government Services Canada collaborated in a Pedometer Relay event as part of Environment Week celebrations in the Pacific Region. The 66 hour relay, starting on Monday at 3:00 pm and ending on Thursday at 9:00 am, was an attempt to encourage staff to consider alternative ways of commuting to work or moving about during and after working hours. The relay involved a floor vs. floor challenge by the two departments at the 800 Burrard Street federal building in Vancouver. Each floor nominated a champion/coordinator to organize a team and promote the event. One pedometer was given to each team. The pedometer was passed among team members to track the number of steps taken while walking, jogging, and running. Some team members walked to and from work for the first time, some jogged during lunch hour and after work, and some walked to meetings while carrying the pedometer.

A log sheet, used to record the team members who carried the pedometer, the time, and the number of steps taken, was submitted at the end of the event. Awards were given to the team/floor that had the most steps, to the individuals (from both departments) who had the most steps, and to the team that had the most participants. Prizes were given to the coordinator of each floor for their cheering and hard work in organizing the event. Staff members were excited about the Relay and, most importantly, they reaped the benefit of walking, jogging and running, as well as socializing/interacting with team members. The individual with the most steps traversed the equivalent of approximately 20 miles within a short period of time. The winning team, with 6 members, moved the equivalent of 45 miles within 66 hours.

The Pedometer Relay was considered a success because of its four-day format, its team approach, the participation level and the interest it generated. This is one event that will certainly be repeated next year during Environment Week.

The Pedometer Relay was reported in the *Go Green Coordinator Newsletter* (Summer issue, Volume 7, Issue 2) put out by Best Environmentally Sound Transportation (B.E.S.T.), as one of the success stories in the promotion of green commuting. It was also submitted as one of the One-Tonne Challenge success stories featured on the Government of Canada's Climate Change website at <http://www.climatechange.gc.ca/onetonne/english/stories/>.

3.6 Work with Other Organizations

3.6.1 Great Lakes / St. Lawrence Seaway Study

In May 2003, Transport Canada signed a Memorandum of Cooperation (MOC) with the United States (U.S.) Department of Transportation to carry out a 30-month evaluation of the Great Lakes / St. Lawrence Seaway system. The agreement calls for Transport Canada's participation with the U.S. Department of Transportation and the U.S. Army Corps of Engineers on a transportation study of the Great Lakes / St. Lawrence Seaway. The overall objective of the study is to evaluate the future infrastructure needs of the Great Lakes / St. Lawrence Seaway system, specifically the engineering, economic and environmental implications of those needs as they pertain to the marine transportation infrastructure on which commercial navigation depends. In June 2004, the study schedule was extended to a 42-month timeframe with a completion date of October 2006.

The study is being led by Transport Canada's Marine Policy group. Environmental Affairs co-chairs the environmental component of the initiative with the United States. The primary objectives of this environmental review are:

- to compile the necessary information to characterize baseline conditions for the Great Lakes and St. Lawrence River for the period of analysis (to approximately 2060); and
- to identify and define an appropriate methodology for assessing the environmental impacts of future navigation-related activities in the Great Lakes and St. Lawrence River ecosystem.

3.6.2 Clean Air

In 2003/2004, Transport Canada received funding from Environment Canada for its component of the Border Air Quality Strategy commitments on Clean Air. Transport Canada has the authority to regulate emissions from the aviation, rail and marine sectors. There are a variety of measures that are being explored to reduce emissions in these areas.



Partnerships

International

In the spring of 2004, Transport Canada was pleased to join the Federal Aviation Administration and the National Aeronautics and Space Administration as a sponsor of the Center of Excellence (COE) for Aircraft Noise and Aviation Emissions Mitigation. This partnership provides access to a large range of resources and expertise from academic institutions as well as manufacturers.

Air traffic around the world continues to increase rapidly. Parallel to that development, the number of extra hours that aircraft spend in the air and waiting on the ground has also increased. Transport Canada has studied air quality at Canadian airports for a number of years and will continue to look at ways of implementing responsible practices on and around the airfield that can reduce the contribution of airports to air pollution. In particular, the department has been promoting the use of the International Civil Aviation Organization (ICAO) Circular entitled *Operational Opportunities to Minimize Fuel Use and Reduce Emissions*. Working with ICAO, Transport Canada has delivered two successful workshops on the contents of this circular and is looking for future opportunities to encourage use of this important guidance material.

Canada, as a member state of ICAO, is working to reduce smog-forming pollutants from the aviation sector and sees the partnership in the COE as a means of advancing the state of knowledge in key technological areas. In February 2004, the Committee on Aviation Environmental Protection of ICAO developed recommendations to reduce the environmental impact of aircraft noise and engine exhaust emissions (including more stringent standards for oxides of nitrogen), made progress on market-based measures to limit or reduce emissions, and provided guidance on the implementation of a 'balanced approach' to noise management. Working with the COE, Transport Canada believes it will be able to contribute to achieving these goals and bring about a more sustainable aviation sector.

Domestic

Transport Canada is continually enhancing its partnerships with airport authorities. Its Mobile Air Quality Monitoring Laboratory spends approximately 12 months at an airport to gather a broad base of data and investigate seasonal fluctuations that may affect air quality. Between November 2001 and October 2002, the mobile laboratory monitored air quality at Victoria International Airport. In the 2002/2003 fiscal year, results from the study were received, indicating that Victoria International Airport could accommodate an increase in air traffic without exceeding acceptable air quality objectives under prevailing meteorological conditions.

In the fall of 2003, the air monitoring laboratory was moved to the Lester B. Pearson International Airport located in Toronto to begin a comprehensive air quality study. Results of this study are expected in 2004/2005.

Transportation Modes

Aviation

In 2003/2004, Transport Canada, International Aviation initiated research that would involve making emission inventories, identifying operational opportunities to reduce emissions, and investigating the movements of pollutants and their effects on ozone formation that are specific to Canadian airspace. Specifically, the two research studies initiated were:

- *Study of the Potential Impact of Aviation Emissions Including Aerosols on the Upper Troposphere/Lower Stratosphere Region; and*
- *Strategy for Long Range Operations in Canadian Airspace.*

An initial assessment and research plan was developed for the *Study of the Potential Impact of Aviation Emissions Including Aerosols on the Upper Troposphere/Lower Stratosphere Region*. The primary objective of this project was to develop a research plan and assess the resources required to study the potential impact of aviation emissions, including NO_x, H₂O, SO₄ and black carbon, on the upper troposphere/lower stratosphere. The focus is the impact on ozone, greenhouse gas, and other compounds. In addition, the research team will investigate the impact of water emissions on the abundance of cirrus clouds and their effects on radiation and heterogeneous chemistry. Particular attention would be focused on the Arctic.



A research plan was completed for the *Strategy for Long Range Operations in Canadian Airspace*. The primary objective of this project was to conduct an initial assessment of opportunities to minimize fuel use and reduce emissions from aircraft overflying Canadian airspace. While technological improvements in fuel consumption have been significant in the past, future improvements are expected to be on the order of only 1 percent per year. Operational opportunities to minimize fuel consumption hold the greatest potential for future reductions.

Rail

Transport Canada, Rail Safety provided support to the 2nd Railways and the Environment Workshop that was held October 6-8, 2003 in Winnipeg. The workshop highlighted the fact that the rail industry provides a highly fuel-efficient and emissions-friendly environment for moving freight in North America.

In 2003/2004, work began on a series of railway locomotive emissions tests which will continue throughout 2004/2005 and 2005/2006.

In September 2002, VIA Rail presented to the Minister of Transport a vision for the future of passenger rail in the Quebec-Windsor corridor. The proposal, named VIAFAST, presents an approach for implementing higher speed passenger rail in the corridor. In 2003/2004, Transport Canada, Rail Policy further assessed this proposal through a three-part project:

- revenue and ridership forecasts;
- equipment and infrastructure options and costs; and
- potential for rail diversion of truck freight in terms of truck loads and the amount of reduction of highway congestion and of GHG emissions and other environmental benefits.

There were several recommendations from the project in terms of enhancing benefits. Some of these are environmental in nature. It was found that enhancing the benefits can be achieved by:

- maximizing ridership levels, passenger revenues and ultimately, reducing VIA's reliance on operating subsidies from the Government of Canada;
- reducing environmental emissions of Criteria Air Contaminants and Greenhouse Gases from passenger and freight transportation;
- improving safety (i.e. reducing fatalities, injuries and property damage caused by collisions);
- optimizing land-take for transportation activity; and
- minimizing other intrusions, such as noise.

Marine

In 2003/2004, Transport Canada's Marine Safety group progressed towards the development of regulations to implement the provisions of the International Maritime Organization's *Regulations for the Prevention of Air Pollution from Ships, Annex VI MARPOL*. In January 2004, Marine Safety finalized and approved the *Pollution Prevention Guidelines for the Operation of Cruise Ships under Canadian Jurisdiction, TP14202*, that included provisions for air emissions.



3.6.3 Smog Summit 2003

For the fourth year in a row, representatives from the federal, provincial and municipal governments across the Greater Toronto Area (GTA) joined the City of Toronto to report back on progress and announce their new clean air commitments. The members of the Smog Summit Secretariat came through on their pledges from previous years, and brought new commitments to the table.

Smog Summit IV featured an exhibition of interactive displays in the Metro Hall Rotunda and in Metro Square, where participants and visitors learned interesting ways to fight smog and save money on fuel bills by reducing energy use. Many also took advantage of the opportunity to test-drive a hybrid car, sign up for pollution free electricity, and check out energy-efficient home appliances. Over 40 exhibitors contributed to the displays.

In the Greater Toronto Area, action is being taken to curb smog and its associated health and economic impacts. The GTA Clean Air Council (GTA-CAC) is an inter-governmental working group dedicated to exploring joint clean air initiatives in the GTA and to liaising with municipalities across Canada to discover best practices for reducing smog. On behalf of the GTA-CAC, Transport Canada led the development of the publication entitled *Governments' Actions on Clean Air in the Greater Toronto Area*, which provides a comprehensive description of clean air initiatives being undertaken by members of the GTA-CAC.

ENVIRONMENTAL EVALUATION AND MITIGATION PROGRAM


The Environmental Evaluation and Mitigation program ensures that Transport Canada manages its contaminated sites and storage tanks in a responsible manner.

4.1 Contaminated Sites Program

As operator, landowner and landlord, Transport Canada continues to manage properties that have been contaminated by commercial and industrial activity. The department is committed to managing these contaminated sites in a responsible manner. This commitment is being met through an ongoing contaminated-site management program, as well as a management policy that requires all contaminated sites on Transport Canada lands to be identified, classified and managed. Furthermore, through its EMS, the department has set specific targets for the management of these contaminated sites:

Contaminated Sites by Status	
Suspected	64
Under assessment	141
Under remediation	60
Remediated/risk managed	18
Under risk management	117
Remediation complete	98
Remediation by third party	10
Assessed, no action required	61
Total	569

(Transport Canada's Contaminated Sites Database, May 2004)



At the end of each fiscal year, Transport Canada is required to submit inventory data for inclusion in the Treasury Board Secretariat's Federal Contaminated Sites and Solid Waste Landfills Inventory (<http://publiservice.tbs-sct.gc.ca/dfrp-rbif/cs-sc/home-accueil.asp?Language=EN>). To assist in this effort and to support departmental tracking, reporting and liability-cost accounting activities, Transport Canada maintains an electronic contaminated sites database, which contains basic parameters for each site, including location, classification and status.

To meet the EMS target to inventory and remediate or risk-manage all sites by 2003/2004, the department has initiated a project through which all Transport Canada properties will be reviewed for potential contamination. Ongoing efforts are ensuring that all Transport Canada sites have been identified; staff are reconciling departmental property records with known contaminated sites entered in the internal contaminated sites database.

Currently, Transport Canada is tracking sites where the department has a liability or contingency. These sites include transferred facilities and are classified in accordance with the Canadian Council of Ministers of the Environment's (CCME) National Classification System (NCS). Of a total of 569 sites, 505 have been investigated and 64 are suspected of contamination.

CCME NCS Classifications 2002

Class 1 (action required): 65 Transport Canada sites

Available information indicates that action, such as further site characterization, risk management, remediation, etc., is required to address existing concerns. Typically, Class 1 sites raise major concerns due to a range of factors, and because measured or observed impacts have been documented.

Class 2 (action likely required): 162 Transport Canada sites

Available information indicates that there is a high risk of adverse off-site impacts, although threats to human health and the environment are generally not imminent.

Class 3 (action may be required): 110 Transport Canada sites

Available information indicates a site is currently not a major concern. However, additional investigation may be carried out to confirm site classification and, as a result, some action may be required.

Class N (action not likely required): 59 Transport Canada sites

Available information indicates there is probably no significant environmental impact or human-health threats. There is likely no need for action unless new information becomes available indicating greater concerns, in which case the site should be re-examined.

Class I (insufficient data): 173 Transport Canada sites

Additional information is required to properly classify the site.

Total Transport Canada sites: 569

4.2 Land Occupied by NAV CANADA

In 2003, work was conducted on 180 air navigation sites across Canada to clean up contamination and replace or upgrade old fuel tanks. The cost of this work was \$2 million. All of the sites are occupied by NAV CANADA, with the majority of the sites leased from Transport Canada, while a few of the sites were the subject of third-party leases or were sold to NAV CANADA. This work is required as part of the privatization of the Air Navigation System that occurred in 1996. The transfer agreement signed in 1996 transferred the Air Navigation System to NAV CANADA, a not-for-profit company. In accordance with the transfer agreement, Transport Canada is responsible for contamination that occurred prior to the transfer date and for upgrading all fuel tanks.



4.3 Federal Contaminated Sites Accelerated Action Plan

The 2003 Federal Budget includes a commitment of \$175 million over two years to establish a centrally managed fund to make ongoing resources available to federal contaminated sites. An additional \$100 million/year for the following three years is earmarked for this purpose in the fiscal framework. The goal of the Federal Contaminated Sites Accelerated Action Plan (FCSAAP) is to accelerate action and reduce federal financial liabilities related to high-risk sites (CCME NCS classes 1 and 2) within twenty-five years. Key elements are a completed inventory and ranking of sites, and accelerated action on those sites posing the greatest risks to human health and the environment.

Within the next five years it is expected that the action plan will prevent an increase in existing liabilities, with care and maintenance of abandoned mine sites in the North, remediation of high risk contaminated sites, and advance remediation of many others. The action plan will also provide money for assessment and identification of sites.

Transport Canada supports FCSAAP as it will advance a consistent federal government approach to contaminated sites. The FCSAAP cost-sharing regime allows proactive departments, such as Transport Canada, to initiate or accelerate assessment work and remediate high-risk sites if departmental funding is received.

This federal funding is not sufficient to address all of Transport Canada's contaminated sites. As such, it may be necessary to investigate other potential internal funding resources.

Prairie and Northern Region Success Story

Remediation at Yukon Transportation Museum Lot: Whitehorse, Yukon

The Yukon Transportation Museum is located at the Whitehorse Airport. Environmental concerns were raised when noxious fumes began permeating work and public areas at the museum. A Public Works and Government Services Canada (PWGSC) historical review and investigation of the site revealed that the adverse odours were originating from the former site of an old heating fuel tank nest. The tanks were decommissioned in the 1970s; however, contaminated soil was left in place, untreated.

PWGSC managed this remediation project, which commenced in May 2003. Approximately 9,500m³ of contaminated soil was removed from the site, far more than the originally estimated 750m³. Unfortunately, it was not possible to remove contamination that had migrated underneath the museum facility, without compromising the integrity of the facility's foundation. A curtain was installed to avoid cross-contamination of the clean material that was backfilled into the excavated contamination zone. The curtain also assists in the collection of groundwater for treatment.

All contaminated soil removed from the site is being treated in a land treatment unit (LTU) at Whitehorse Airport. The soil will be treated until it meets Yukon's environmental criteria, at which time the LTU will be decommissioned and all remediated soil will be taken for disposal. Decommissioning will likely occur in 2005/2006.

4.4 Storage Tanks Program

Although the number of underground and aboveground storage tanks on Transport Canada property is on the decline due to continued property divestiture, the department continues to closely monitor this inventory. The majority of these tanks contain petroleum and associated products, including aviation fuel and glycol, which have the potential to contaminate surrounding environments.



Environment Canada proposes to repeal the CEPA *Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum Products on Federal Lands or Aboriginal Lands Regulations* and the CEPA *Technical Guidelines for Underground Storage Tank Systems Containing Petroleum Products and Allied Petroleum Products and Technical Guidelines for Aboveground Storage Tank Systems Containing Petroleum Products* and replace them with new regulations.

These regulations promote a voluntary approach to compliance.

Proposed new regulations will be broader in scope, and more effective in preventing pollution and protecting the environment from soil and groundwater contamination.

4.5 Site Environmental Remediation Tracking System

During 2003/2004, Transport Canada incorporated a tank and tank system component into an existing project management system known as the Site Environmental Remediation Tracking System (SERTS). Although the tank and tank system component was not specifically designed to meet the requirements of Environment Canada, it does capture the majority of the required information. The SERTS database is capable of generating various tank and tank system reports.

Users of the SERTS database are responsible for populating the database with information pertaining to tanks and tank systems under their administrative control. Thus, each region or other user exercises control over its own SERTS database, with Headquarters having the ability to download regional data into a duplicate database located in Ottawa. Headquarters will be providing reports to Environment Canada once the new regulations come into force.

Currently, Transport Canada owns and operates approximately 77 tanks.

4.6 Gloucester Landfill - An Integrated Risk-Management Approach

The former Gloucester Landfill site is located on Transport Canada property, adjacent to Ottawa International Airport. The Gloucester Landfill site served as a municipal waste disposal site from approximately 1957 to 1980. From 1969 to 1980, a portion of the site, the "Special Waste Compound", was used for the disposal of wastes from various government departments. Over the past 20 years, extensive monitoring and site investigations have identified on-property and off-property groundwater impacts of primarily volatile organic compounds. To date, more than 10,000 groundwater samples have been collected from various groundwater monitoring sites, as well as 100 surface water samples and over 350 soil samples.

Various remediation activities have been undertaken to decrease the risk associated with the impacted soil and groundwater. Measures that were implemented include: servicing of municipal water to local residents and businesses in 1984/1985, excavation of impacted soil from 1987 to 1989, and commissioning of a groundwater pump and treatment system in 1992.

The initial environmental quality objectives defined in 1987 were used until 2003 for the remedial activities and site evaluations. The initial objectives were reflective of drinking water guidelines and were considered conservative since potable use of groundwater in the area had ceased in 1984/1985. In 2003, an Area Wide Risk Assessment (AWRA) study was conducted to evaluate the likelihood of undesired effects on human and ecological health resulting from exposure to a contaminant source. The AWRA concluded that the environmental conditions examined do not represent a health risk to current and future residents, or commercial/industrial building occupants/workers. Following the AWRA, site-specific environmental quality criteria were defined and integrated into the risk management plan for the site. These new criteria are reflective of the current site conditions and environmental fate modeling, exposure pathway analysis and toxicology knowledge.

Open House

As part of the communications activities of the AWRA, an open house was held in October 2003 at a local community hall to present the findings of the AWRA. Letters of invitation were sent to neighbouring residents, business owners and other interested groups. In addition, public notices were placed in local newspapers advising the public of the open house. Approximately fifty people attended. Positive feedback was received from the attendees concerning Transport Canada's efforts with respect to the risk assessment study and dissemination of the findings.

ENVIRONMENTAL ASSESSMENT PROGRAM

Through its Environmental Assessment Program, Transport Canada evaluates the environmental implications of proposed projects, policies, plans and programs.

5.1 Project Environmental Assessment

The *Canadian Environmental Assessment Act* (CEAA) is the primary legal framework for the environmental assessment of projects involving the federal government. Federal departments and agencies also have environmental assessment (EA) responsibilities under regimes established pursuant to land-claims agreements. The *Mackenzie Valley Resource Management Act* includes a legislated EA process for the majority of the Northwest Territories. The Nunavut Land Claim Agreement, the Inuvialuit Final Agreement (Mackenzie Delta and Eastern Arctic, Northwest Territories) and the James Bay Northern and Quebec Agreement as well as the North Eastern Quebec Agreement each set an EA process that applies to federal departments and agencies.

Project EA under the CEAA

The CEAA sets out responsibilities and procedures for environmental assessment of proposed projects involving the federal government, and helps the federal government determine the environmental effects of projects early in the planning stages.

Under the CEAA, Transport Canada must ensure that an environmental assessment is conducted before it carries out or supports certain projects in which the department is involved.

Environmental assessments are conducted when Transport Canada:

- acts as **proponent** of a project;
- **fun**ds a project through grants or other financial assistance;
- grants an interest in **land**; or
- carries out certain project-related regulatory duties which require a permit, approval or license that is identified in the ***Law List Regulations***.

These four actions are generally referred to as 'triggers', and are outlined in the following sections.

Proponent

As a federal authority, Transport Canada is responsible for ensuring that environmental assessments are conducted for projects proposed by the department. In 2003, these included environmental assessments for remediation projects at contaminated sites, storage tank removal, and maintenance and upgrade projects at public port facilities that are owned and operated by Transport Canada.

Funding

Environmental assessments can be triggered by a number of funding programs that Transport Canada administers, including the Airports Capital Assistance Program, the Port Divestiture Fund, the Urban Transportation Showcase Program, the Grade Crossing Improvement Program, and various highway infrastructure programs.

Land

With title to 905 properties across Canada, Transport Canada is a significant landowner among federal departments. An environmental assessment is required whenever Transport Canada issues a lease, sells a property, or otherwise grants an interest in federal land for the purpose of enabling a project to proceed. This occurs, for example, at public port facilities that are still owned and operated by Transport Canada. If Transport Canada issues a lease to a third party at a public port facility, and the lease is for the purpose of enabling a project to proceed, then Transport Canada must ensure that the EA process is followed.

Law List Regulations

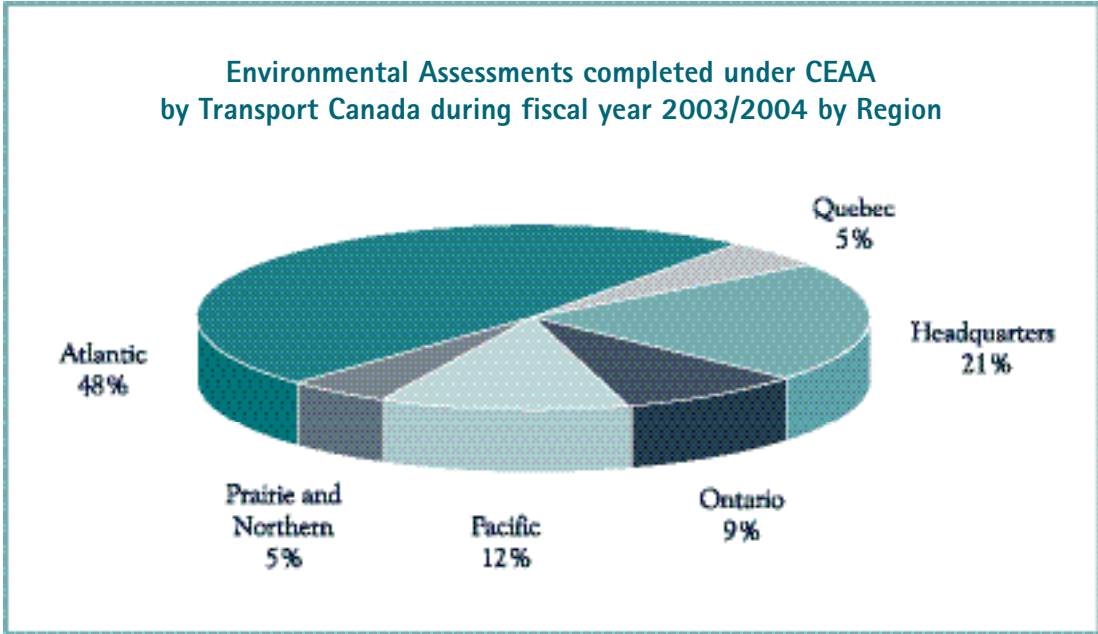
As a federal regulator, Transport Canada is also required to complete environmental assessments for some of the rail safety and bulk storage facility approvals and authorizations noted in the *Law List Regulations*, including the *Railway Safety Act* and, since March 29, 2004, the *Navigable Waters Protection Act*.

CEAA Environmental Assessments in Fiscal Year 2003/2004

In fiscal year 2003/2004, Transport Canada completed a total of 123 environmental assessments (all screenings). In addition, Transport Canada had another 76 environmental assessments underway in the same fiscal year, including one comprehensive study. The following table and figure itemize the total completed environmental assessments, by CEAA trigger and regional distribution.



Environmental Assessments Completed in Fiscal Year 2003/2004 by CEEA Trigger		
Trigger	April 1, 2003 to March 31, 2004	Percentage (%)
Proponent	15	12%
Funding	44	36%
Land	63	51%
Law List- <i>Railway Act</i>	1	1%
Total	123	100%




CEAA Five-Year Review

The CEAA stipulates that, five years after it comes into force, the Minister of the Environment must conduct a review of the provisions and operation of the Act. The first review was launched in 1999. Amendments to the Act were tabled in Parliament in March 2001 and received Royal Assent on June 11, 2003. Bill C-9 is an Act to amend the *CEAA* that came into force on October 30, 2003.

Bill C-9 resulted in many changes to the federal environmental assessment process. Here are some of the changes brought about by the Act:

- crown corporations will be subject to the *CEAA* effective June 2006;
- the definition of federal lands now includes lands managed by Canada Port Authorities;
- entities operating on federal lands may be designated as a 'prescribed authority' subject to the *CEAA*. The Canadian Environmental Assessment Agency, in consultation with Transport Canada, is currently developing regulations to bring National Airport System airports under the *CEAA* as prescribed authorities;
- introduction of the concept of the Federal Environmental Assessment Coordinator who has the responsibility to establish timelines and coordinate among the proponent, provincial or territorial departments, and federal departments;
- creation of the new Canadian Environmental Assessment Registry to provide better access for public participation;
- comprehensive studies now include mandatory public consultations on scope of project, and a notice of public consultation must be put in the Canadian Environmental Assessment Registry in a timely manner. An early decision will now be made to either complete a Comprehensive Study Report or refer a project to a panel review;
- federal authorities or a federal body (e.g. a department or agency) that may have expertise or a mandate relevant to a proposed project must assist in the implementation of mitigation measures where it is agreed that those measures are required; and
- the *Species at Risk Act* amended the definition of "environmental effect" in the *CEAA* to include the effects of a project on any species at risk. This change is reflected in Bill C-9.



As part of Transport Canada's contribution to the five-year review of the CEAA, the department worked closely with the Canadian Environmental Assessment Agency to ensure that the Act was amended to enable gaps in the Canada Port Authority (CPA) environmental assessment regulations to be closed and to enable other transportation entities to be brought under the Act. In 2003/2004, Transport Canada continued to work with the Agency, CPAs and airport authorities to initiate additional changes to the CPA Regulations to reflect Bill C-9, and to develop new EA regulations for airport authorities operating on federal land.

Canada Port Authority training on proposed amendments to CEAA was undertaken in April 2003. Workshops for Transport Canada EA practitioners took place in Moncton, New Brunswick in October 2003 and in Ottawa in February 2004, to discuss implementation of the amendments to the Act within the department.

Transport Canada Environmental Assessment Guide

In 2002, the department completed a practitioners' guide to help ensure department-wide consistency in the conduct of environmental assessments. The guide was amended in January 2004 to reflect the amendments to the Act. The guide helps Transport Canada managers and EA practitioners to fulfill their responsibilities under the *CEAA* by focusing on typical Transport Canada projects and EA requirements, and by describing procedures for completing environmental assessments.

5.1.1 Project Delivery

National Program Project Delivery

In 2003/2004, Headquarters' EA group conducted *CEAA* EAs for several HQ groups. Surface Programs and Divestiture EAs were initiated for one bridge and two highway twinings in Quebec. Through the Urban Transportation Showcase Program, three EAs were started in Whitehorse for one bridge and two trails. With the Freight Sustainability Demonstration Program, one EA was initiated related to a liquified natural gas service station in southern Ontario.

Toronto Waterfront Project

Headquarters' EA group also had responsibility for EAs conducted for the Toronto Waterfront Revitalization Initiative (TWRI), under the management of the TWRI Secretariat at HQ. In October 2000, the federal government, the Province of Ontario and the City of Toronto committed a total of \$1.5 billion (\$500 million each) to the revitalization of the Toronto waterfront. Federal government funds flowed through Transport Canada until March 2004, and the department took the lead in coordinating EA requirements among federal departments and with the Province of Ontario and the City of Toronto. In 2003/2004, federal environmental assessments were completed for the Cherry Beach Septic Tank Replacement and Signage Improvement Plan, and the Harbourfront Centre Waters Edge Improvement Project. EAs were also underway for: the Front Street Extension; the Union Subway Station Second Platform and Concourse Improvements Project; the Don River Flood Protection Project; the Port Union Waterfront Improvement Project, and the Mimico Waterfront Linear Park Project. In March 2004, responsibility for the federal government's participation in the Toronto Waterfront Revitalization Initiative was transferred from Transport Canada to the Department of Human Resources and Skills Development as part of a reshuffling of Cabinet responsibilities.

Project EA under Northern Regimes

In 2003/2004, Transport Canada was also involved with a number of environmental assessments, as an expert department, under EA regimes established pursuant to northern land-claims agreements: the *Mackenzie Valley Resource Management Act*, the *Nunavut Land Claim Agreement* and the *Inuvialuit Final Agreement*. Some projects in the north required review under both the CEAA and a northern land claim agreement EA process.

Prairie and Northern Region provided specialist advice for several natural resource development projects in Nunavut: the Bathurst Inlet Port and Road Project, the Meadowbank Gold Mine Development, the Jericho Diamond Mine Development and the Doris Hinge Gold Mine Development. Under the Mackenzie Valley Resource Management Act, project proposals were reviewed and assessed for potential environmental concerns and identified regulatory requirements. Transport Canada provided advice to groups such as the Sahtu Land and Water Board for consideration in connection with environmental approval conditions.



5.1.2 Quality Assurance Program (QAP)

In support of the EMS, the department has developed an environmental monitoring program, which includes a component dedicated to environmental assessment. Transport Canada's EA Quality Assurance Program involves the review of selected screening reports and interviews with EA practitioners. The evaluations are systematic, documented and objective reviews to assess the compliance of Transport Canada's EA screening reports with the requirements of the *Canadian Environmental Assessment Act*.

In November 2003, the EA group in Ottawa initiated an evaluation in Pacific Region with the assistance of Prairie and Northern Region. The evaluation was based on a sample of environmental assessment screening reports that had been completed since January 1, 2002. The assessment evaluated compliance requirements such as timing and determination of whether or not the Act applied, completeness of project description, adequate scope of project, public consultation and follow-up programs. Specific recommendations and suggestions were made by the evaluation team to improve the overall quality of environmental assessments within Transport Canada. The evaluation team completed the assessment report in January 2004.

5.1.3 Navigable Waters Protection Act (NWPA)

In December 2003, a decision was made to transfer responsibility for the *Navigable Waters Protection Act (NWPA)* from the Department of Fisheries and Oceans Canada (DFO) to Transport Canada. The transfer took effect on March 29, 2004. It reassigned administrative responsibilities for the *NWPA*, and the associated environmental assessment responsibilities, to Transport Canada. Transport Canada and DFO agreed that DFO would continue to complete the environmental assessments on behalf of Transport Canada for a period of six months to allow for a transition period. Transport Canada will start conducting environmental assessments for projects triggered by the *NWPA* starting on October 1, 2004.

5.1.4 Due Diligence Environmental Assessment

In January 2004, Transport Canada adopted the "Operational Guidance Statement on Due Diligence Environmental Assessments". Transport Canada committed to considering conducting environmental assessments for any initiative or activity that involves the department, or that takes place on Transport Canada property, where there is a concern that the activity may cause adverse environmental effects, but for which an EA is not required under the *CEAA*.

5.2 Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is a systematic process for evaluating the environmental effects of policy, plan and program proposals to ensure that they are addressed on a par with economic and social considerations and early in the decision-making process. Within Transport Canada, the practice of SEA has become an important instrument for integrating environmental considerations into decision-making.

Consistent with the 1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, and the 2001 Transport Canada SEA Policy Statement, all policy, plan and program proposals submitted to the Minister or Cabinet for approval must undergo a preliminary scan to determine likely environmental effects. If important environmental effects are likely, a detailed analysis must be undertaken. According to Transport Canada's SEA tracking system, Transport Canada completed a total of 58 preliminary scans of policy, plan and program proposals during fiscal year 2003/2004. One detailed analysis was initiated during this period but not completed.

During fiscal year 2003/2004, considerable efforts were deployed for advancing SEA practice and strengthening SEA awareness and capacity building within Transport Canada. Major initiatives undertaken during this period include carrying out a preliminary evaluation of Transport Canada's SEA tracking system, carrying out revisions to departmental guidance and training material, and providing additional training on the conduct of SEA within the department.



5.2.1 SEA Tracking

Transport Canada has established an SEA tracking system to ensure proper application of the cabinet directive within the department. Policy, plan and program proposals are identified through internal monitoring processes, and the completion of the SEA process is documented. During fiscal year 2003-2004, Transport Canada adopted additional measures to reinforce the department's SEA tracking system procedures.

5.2.2 Revised SEA Manual

In September 2003, the department undertook the revision of the *Transport Canada SEA Manual* and training material that had been developed two years previously. The revised SEA manual simplifies the SEA process and provides more practical guidance on the conduct of preliminary scans and detailed analyses.

5.2.3 SEA Training

During fiscal year 2003/2004, two additional SEA training sessions were offered to Transport Canada employees who are involved in the preparation or coordination of proposals to the Minister or Cabinet. As of March 31, 2004, more than 120 Transport Canada employees had received SEA training. Additional training continues to be offered on a regular basis as required.

5.2.4 Audit of the Environmental Assessment of Federal Policies, Plans and Programs

In the fall of 2003, the Commissioner of the Environment and Sustainable Development initiated an audit of the environmental assessment of federal policies, plans and programs. Transport Canada underwent detailed examination on SEA system implementation and SEA compliance. The Commissioner's report is expected to be tabled in October 2004.

The Real Property Management section is responsible for the collection, management, interpretation and dissemination of information residing in title documents and property records related to the departmental real property portfolio. This includes maintaining the Property Records System and the property plans, and reporting to the Directory of Federal Real Property.

The section acts as the departmental liaison with Public Works and Government Services Canada's Payment In Lieu of Taxes (PILT) Office regarding National PILT issues such as the negotiation of the National Memorandum of Understanding for PILT Administration.

Real Property Management also represents Transport Canada on a number of Treasury Board committees and working groups concerning the management of federal real property.

In the 2003/2004 fiscal year, the Real Property Management section started work with the other groups in Environmental Programs to develop a database that will track Transport Canada's owned lands and facilities. The database is to capture data relevant to Transport Canada's environmental obligations and responsibilities as outlined by the EMS targets and objectives, the Environmental Monitoring Program and the Federal House In Order initiatives. This project will enable the group to more efficiently share information and provide stakeholders with a clearer, more precise snapshot of custodial holdings and the issues that impact them.



Ontario Success Story – Pickering Lands

The Pickering Lands Site comprises 7530 hectares of mainly rural land expropriated by the Government of Canada in 1972 for a proposed second international airport for the Greater Toronto Area. The site consists of individual parcels of land leased to the public for specific land uses including residential, agricultural, or commercial undertakings. Approximately 3051 hectares of the site have also been protected as Green Space.

There are a number of ongoing environmental management issues present on the Pickering Lands, including water quality, contaminated sites, storage tanks, and other environmental compliance issues. Two specific initiatives undertaken in 2003/04 demonstrate the range of environmental program delivery.

On the technical side, phase I environmental baseline studies (EBS) were completed for 217 properties at a cost of approximately \$871,000. This is part of a multi-year EBS program in support of the potential transfer of management responsibilities for the Pickering green space properties. The phase I process included completion of an environmental compliance audit and an enhanced phase I environmental site assessment update for each property (including some initial field screening). Three consultants were hired to complete the work, and final reports included summary tables documenting all environmental compliance or potential contamination issues identified at each site.

Virtually all Green Space properties have now had phase I completed, and work continues this fiscal year on phase II intrusive investigations at priority sites.

In another initiative related to watershed restoration and environmental awareness, a Pickering Green Space tree planting event was held as part of this year's Public Service Week and Environment Week. In total, approximately 350 trees were planted by 25 volunteers from Transport Canada and Public Works and Government Services Canada. The event was a joint effort between Transport Canada and the Toronto & Region Conservation Authority (TRCA) to re-forest an area adjacent to Wixon Creek, a cold water tributary in the Duffins Creek Watershed. The TRCA is a partnership organization committed to protecting, restoring and celebrating the natural environment in the Toronto region. This type of streambank or riparian planting contributes many benefits to the environment, including provision of cover to fish and wildlife, helping to keep the stream temperatures cool, slowing down erosion and streamflow, and adding organic material to the aquatic food chain.

This project also serves to show how the Pickering Lands provide Transport Canada an excellent opportunity to demonstrate sustainability in the management of our lands and properties.

Transport Canada's environmental programs will continue to focus on direct and indirect environmental impacts of departmental activities. The department is confident that lessons learned through EMS implementation will lead to continual improvement and result in a system that responds more effectively to all pertinent environmental concerns.

Environmental Management System

- Start a new reporting scheme for the new EMS targets and objectives set out in the *2004-2006 Sustainable Development Strategy*.
- Develop, with the help of the Real Property group, a database that will track the new targets and objectives.
- Review the EMS audit protocol and update it if necessary.

Environmental Protection Program

- Participate in the CEPA 5-year Review.
- Continue to support the implementation of Environment Canada's code of practice for the environmental management of road salts.
- Provide the environmental input and assistance with the development of a manual on aircraft ground icing operations being developed by Transport Canada, Civil Aviation Group.
- Complete the airport de-icer management system model project.
- Continue to develop the Transport Canada Drinking Water Program.
- Work with other departments to promote the benefits of the Green Commute Program.
- Extend the Transit Pass Project to all federal departments in the National Capital Region.

Environmental Evaluation and Mitigation Program

- Implement Transport Canada's Contaminated Sites Management Plan.
- Continue to participate in the Interdepartmental Contaminated Sites Management Working Group and assist in developing consistent federal policies and best practices relating to contaminated sites.
- Continue the work of reconciling departmental property records with known contaminated sites on Transport Canada's contaminated sites database.
- Continue to monitor the impacts on the department of the new federal storage tank regulations.
- Continue to submit projects for FCSAAP funding and investigate other potential internal funding resources to address Transport Canada's contaminated sites.



Environmental Assessment Program

- Develop new guidance material to reflect the recent transfer to Transport Canada of responsibilities for the *NWPA*.
- Develop a program for implementation of newly acquired environmental assessment responsibilities pertaining to the *NWPA Law List Regulation* trigger.
- Continue to work with the Canadian Environmental Assessment Agency to develop regulations for airport authorities and crown corporations, and to amend the *Canada Port Authority Environmental Assessment Regulations*.
- Continue to conduct monitoring evaluations under the EA Quality Assurance Program.
- Continue to promote SEA awareness and capacity building within the department.
- Complete a periodic evaluation of Transport Canada's SEA tracking system to ensure proper application of the Cabinet Directive on the environmental assessment of policy, plan and program proposals.
- Develop and implement an SEA Quality Assessment Program.
- Complete a review of Transport Canada's SEA performance compliance and quality control.

Real Property

- Continue to develop a database that will capture data relevant to Transport Canada's environmental obligations and responsibilities.
- Continue the work of reconciling departmental property records with the Evaluation and Mitigation group on Transport Canada's contaminated sites database.

LIST OF ACRONYMS

ADMS – Aircraft De-Icer Management System
AHE – Environmental Affairs
ASD – Aircraft Services Directorate
AWRA – Area Wide Risk Assessment
CAEP – Committee on Aviation Environmental Protection
CCME – Canadian Council of Ministers of the Environment
COE – Centre of Excellence
CEAA – Canadian Environmental Assessment Act
CEPA – Canadian Environmental Protection Act
EA – Environmental Assessment
EBS – Environmental Baseline Study
EMS – Environmental Management System
EPP – Environmental Protection Program
FAA – Federal Aviation Administration
FCSAAP – Federal Contaminated Sites Accelerated Action Plan
FHIO – Federal House In Order
FTLMP – Fuel Tank Liability Modeling Project
GCP – Green Commute Program
GGO – Greening Government Operations
GHG – Greenhouse Gas
GTA-CAC – Greater Toronto Area Clean Air Council
ICAO – International Civil Aviation Organization
IMO – International Maritime Organization
LTU – Land Treatment Unit
NAS – National Airport System
NCR – National Capital Region
NCS – National Classification System
NWPA – Navigable Waters Protection Act
ODS – Ozone Depleting Substance
OER – Outside Emissions Reduction
PILT – Payment In Lieu of Taxes
PWGSC – Public Works and Government Services Canada
QAP – Quality Assurance Program
SARA – Species at Risk Act
SDS – Sustainable Development Strategy
SEA – Strategic Environmental Assessment
SERTS – Site Environmental Remediation Tracking System
SFHIO – Sustainable Federal House In Order
TAC – Transportation Association of Canada
TC – Transport Canada
TMX – Transport Canada's Executive Management Committee
TRCA – Toronto Region Conservation Authority
TWRI – Toronto Waterfront Revitalization Initiative