

In 1999, The City of Calgary began implementing an organization-wide environmental management system, a management tool that identifies potential impacts for City operations, and outlines procedures to manage and evaluate environmental performance.

This document was developed to address questions frequently asked.

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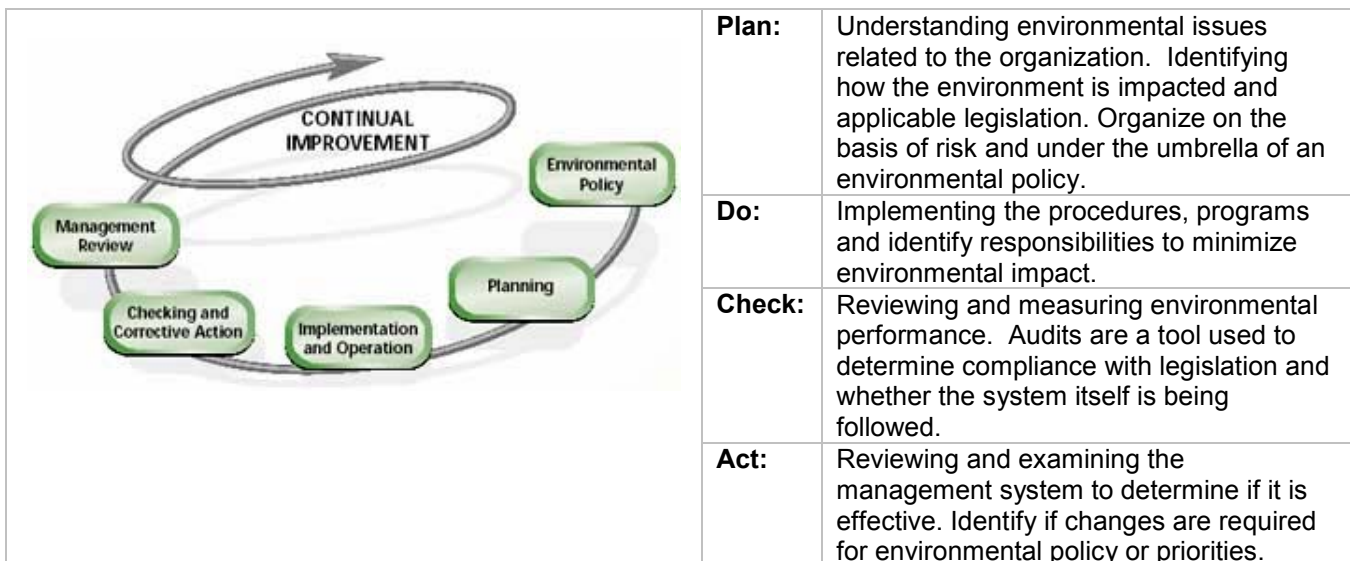
### Questions about ISO 14001

#### What is ISO 14001?

ISO 14001 is an international standard for environmental management systems that is recognized and implemented by organizations worldwide. It provides a framework for the development of an environmental management system and a supporting audit program.

#### What is an Environmental Management System?

An Environmental Management System (EMS) is a structured, systematic approach to address environmental issues within an organization. It includes things like identifying the ways in which the organization impacts the environment, identifying ways of reducing the impact, knowing what laws apply to the organization, developing procedures and making sure everyone is aware of their roles and responsibilities. In its simplest form, there are four parts to a management system: Plan, Do, Check, Act.



The most important aspect of a management system is continual improvement. Organizations use their EMS to improve their environmental performance.



### What does it mean to be registered to ISO 14001?

ISO 14001 registration is accredited third-party verification that an organization's EMS meets the requirements of ISO 14001 standard and this audit is repeated in three-year cycles. Environmental audits are important tools for assessing whether an EMS is properly implemented and maintained. Organizations that achieve ISO 14001 registration demonstrate (through independent verifier) that they have a sound environmental policy, they have an effective environmental management system to support their policy, they are committed to complying with or exceeding environmental legislation and protecting the environment, and they are committed to continually improving their environmental performance.

## Questions about the City of Calgary's EnviroSystem

### What is EnviroSystem?

EnviroSystem is the internal name for the City of Calgary's Environmental Management System. It is a tool and a systematic approach to addressing environmental issues within a diverse service organization such as the City of Calgary.

### Why implement EnviroSystem?

The City of Calgary's EnviroSystem was implemented to:

- Effectively manage environmental impacts leading to reduced liabilities and improved regulatory compliance
- Provide a framework for measuring and reporting on environmental performance
- Identify roles and accountabilities for managing environmental risk
- Improve environmental performance in City operations
- Improve communication throughout the Corporation

ISO 14001 registration will further The City's commitment to becoming an environmentally sustainable community.

### What are the benefits of EnviroSystem?

Some of major benefits of EnviroSystem are:

- Creating greater awareness and understanding of environmental issues within The City of Calgary
- Helping employees identify ways to conserve materials and energy, to reduce waste, and to improve business practices
- Making Calgary a cleaner city benefiting citizens and our natural environment
- Increasing economic development opportunities



### Is the City of Calgary registered to ISO 14001?

**The City of Calgary is the first municipality in North America to register an environmental management system for the entire corporation to this standard.** Other municipalities have registered parts of their business to ISO 14001, but Calgary is the first to include all parts of the business in its' organization-wide registration.

EnviroSystem is comprised of 13 separate registrations: 12 individual operating business unit registrations and one overall Corporate registration.

### Which business units have registered management systems?

Operating business unit registrations belong to:

Calgary Fire Department	Golf Courses	Waste and Recycling Services
Calgary Transit	Parks	Wastewater
Corporate Properties	Recreation	Waterworks (2 registrations)
Fleet and Supply Management	Roads	

The Corporate registration, managed by Environmental Management, encompasses the remaining business units called the Policy and Administrative business units.

The following policy and administrative business units are included in the Corporate registration:

Alderman's Office	Corporate Engineering	Human Resources
Animal & Bylaw Services	Customer Service & Communications	Information Technology
Assessment	Development & Building Approvals	Land Information & Mapping
City Auditor's Office	Emergency Medical Services	Land Use Planning & Policy
City Clerk's Department	Environmental Management	Law Department
Community & Neighbourhood Services	Executive Office	Transportation Planning
Community Strategies	Finance & Supply	Transportation Project Office

### What does ISO registration mean for the City of Calgary?

Achieving ISO 14001 registration puts Calgary in a leadership role to:

- Foster and facilitate environmental compliance
- Reduce environmental impacts and their associated liabilities
- Improve practices to prevent pollution
- Reduce consumption of natural resources and input costs
- Provide a context for staff and public awareness and participation
- Provide a comprehensive basis for environmental leadership in the community.



### Green Initiatives

Here are just a few environmental initiatives from across City business units:

#### Ride the Wind – Calgary Transit

Calgary Transit entered a partnership with ENMAX and Vision Quest Windelectric Inc. to develop the Ride the Wind program – a first for public transit anywhere in North America. The emissions reductions from this program are about 26,000 tonnes a year.

#### “Green” Streetlights – Calgary Roads

Calgary is the first city in North America to embark on an extensive program to retrofit residential streetlights with new, lower-wattage, flat lens fixtures. These new fixtures save energy, reduce light pollution and greenhouse gas emissions and will save the City \$2 million a year. They will reduce carbon dioxide emissions by as much as 16,000 tonnes per year.

#### “Green” Furniture – Corporate Properties

Following the City’s green procurement policy and sustainable building practices, new purchases for the City of Calgary include environmental criteria for evaluating vendors and meeting challenges and challenging traditional thinking.

#### It’s Potty Time - Waterworks

This new program encourages residents with water meters to replace their old toilets with flush volumes of 20 litres or more with new approved six-litre models. As part of the launch for the new program, old water guzzling toilets were converted into exciting new things, including a plant, bird-bath and go-kart.

#### Leaf Composting Program – Waste & Recycling Services

The City runs a special bagged leaf and pumpkin drop-off program at more than 25 recycling depots. All leaves collected, more than 1200 tonnes in 2003, are composted. The compost is used on the gardens and lawns of the Calgary Zoo and city parks.

#### New Tool for Contractors – Fleet & Supply Management

Contractors who work on City projects now have a new tool to ensure their work with the City stays green. This tool, the *Contractors’ Environmental Responsibilities Package*, lists expectations of contractors when they’re working on City projects.



### Safety Improves - Wastewater

The hazardous materials storage and spill response equipment at the City's wastewater treatment plants has improved as a result of the ISO 14001 registration process. This included the purchase of hazardous materials storage cabinets, pallets, containers and igloos for the use at the plants.

### SOLARWALL® - Calgary Transit

The vast expanses of exterior walls at the Victoria Park, Anderson and Spring Gardens Transit garages provide a solution to reducing a significant energy requirement. SOLARWALL® uses solar energy to heat the buildings and has been installed at the garages. The dark coloured metal cladding is heated by solar radiation. Outside air is drawn through specially designed tiny holes in the SOLARWALL, extracting heat from the metal panels in the process. This warm, fresh air is then distributed throughout the building.

### Bridge Over Troubled Waters – Roads

Roads is working hard to keep chlorine and debris out of Calgary's rivers and storm sewers with a number of new initiatives now in place for bridge construction work. Best practices specifications are now included in all bridge construction contracts to contain chlorinated water waste and solid debris. High pressure water is used in the rehabilitation of bridge decks to remove deteriorated concrete. Systems are now required to dam, contain and treat this chlorinated waste and to keep cement particles with their high pH levels out of waterways.

### Bus Wash Water Recycling - Calgary Transit

When a need for a new bus washing system was identified, the work went out that the City was looking for a new system that uses less water. The City's 700 buses, all subject to Calgary's Chinooks and challenging weather conditions, are washed regularly and it takes litres of potable water to keep them clean. A bus washing system provided by Westmatic of Sweden, recycles 95% of the wastewater. This new system saves the City 2.2 million litres of water every year by using a centrifuge to remove solids from the wastewater so that it can be used again and again.

