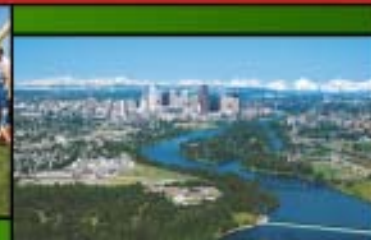


Implementing a Corporate-wide Municipal Environmental Management System - P2 Challenges for Municipalities



Harley Hutchinson
Environmental Management
Business Unit, City of Calgary



Presentation Outline

- The City of Calgary's EnviroSystem
- The structure and implementation of EnviroSystem (registration to ISO 14001)
- Identifying some key challenges and solutions related to implementing the system and demonstrating pollution prevention.

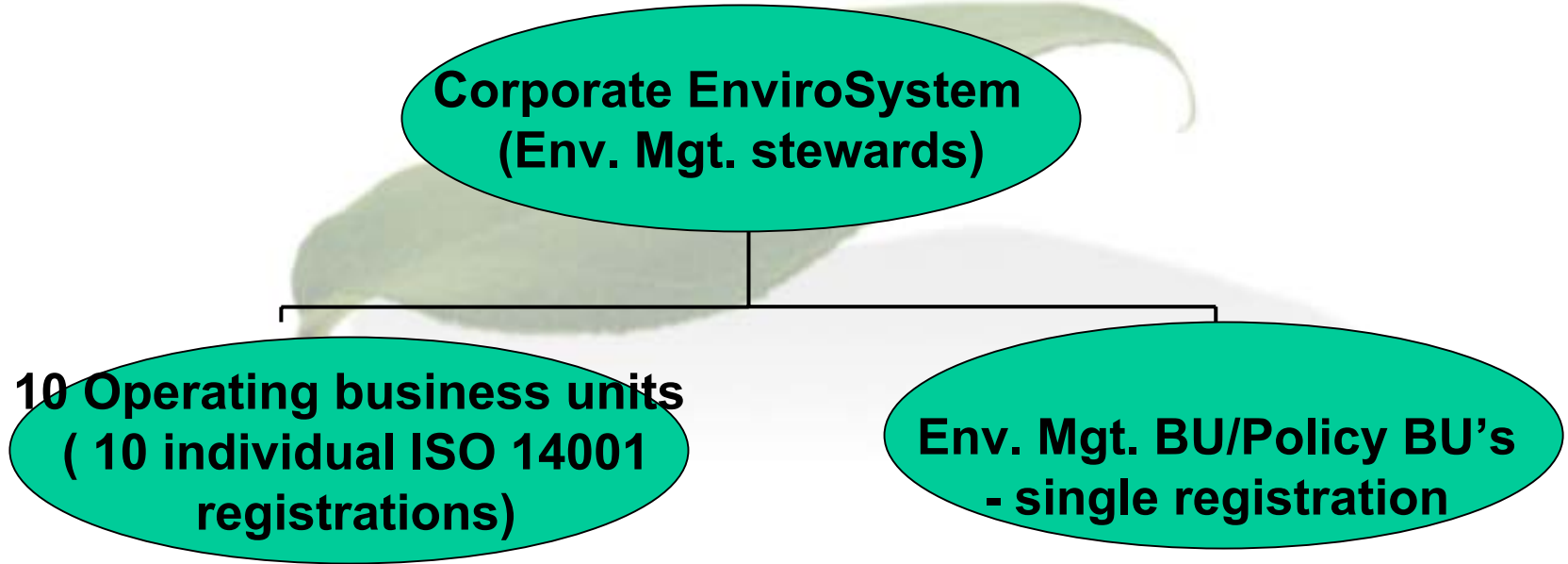


The City of Calgary's Environmental Management System

- An environmental management system internally called **EnviroSystem** (to eliminate confusion with EMS -Emergency Medical Services)
- Based on ISO 14001 Standard for Environmental Management Systems



EnviroSystem - The City Of Calgary's ISO 14001 EMS Structure



Current Registration Status

- **Operating (“high risk”) business units (10):**
 - **Individual EnviroSystem ISO Registrations**

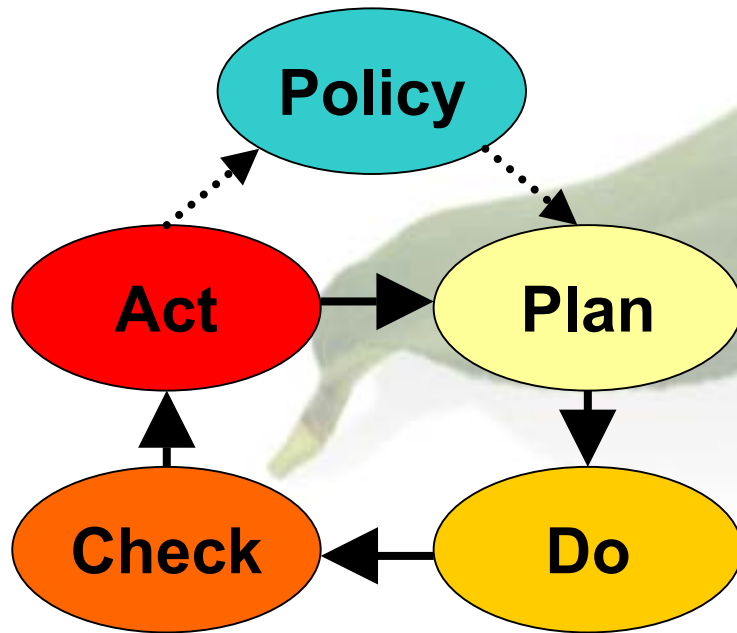
Calgary Transit
Corporate Properties
Fire Department
Fleet and Supply Management
Parks

Recreation
Roads
Wastewater
Waste and Recycling Services
Waterworks

- **Non-operating - “medium risk” Policy business units (6)**
 - **Environmental Management business unit is Steward**
 - **One single ISO Registration**



Management System Components



- **Compatible with other Mgt. Systems**
 - e.g. ISO 9000, P2 Plans

- **Key is to integrate with existing Mgt. Systems**
 - build on existing programs



City's Overall Objective for EnviroSystem

*“To improve the environmental performance of the City of
Calgary and be leaders in environmental stewardship”*



Challenges

- *What are some of the major issues and challenges we have faced so far?*
- *What did we do to overcome these challenges?*



Challenge

Getting the Buy-in and Keeping it...

- City Council
- Administration (CEO, Exec. Officers)
- Management (Supervisors, Foreman, etc.)
- All employees



Response..

- Consensus in Council - environment among highest priorities.
- Develop strategic corporate-wide communications plan.
- Build system “backwards” - BU by BU, then corporate level.
- Build on existing initiatives, celebrate early successes.
- Adequately resource, incorporate into individual performance objectives.



Challenge

- Minimal experience with highly structured Management Systems in some BU's.
- Considerable variability in acceptance of structured system - “corporate culture” varies between BU's.



Response...

- Establish Environmental Network to share best practices.
- Cross BU internal audit teams/cross-functional implementation teams.
- Customize awareness/training to BU culture.
- Lots of (various) communication tools (e.g Intranet site, posters, contests, e-learning on-line video, etc.)





- Home
- About EnviroSystem
- EnviroSystem Documentation
- Internal Environmental Policy
- Information
- Communications
- Environmental Network
- Contacts
- Audit Program
- Links
- VIROFORUM
- VIROTRACKER
- ONLINE AWARENESS ENVIRONMENTAL

Welcome to the EnviroSystem Intranet!

What's new!

- The [KPMG-ISO14000 City of Calgary Proposal](#) is now online (Nov. 18th, 2002)
- **Congratulations to Waterworks** - Recommended for Registration to ISO 14001 on October, 18th, 2002 (Oct. 21st, 2002)
- Complete The City's new online environmental awareness training and you'll be automatically entered to [win one of 10 draws](#) for great prizes! (Oct. 10th, 2002)
- **Congratulations to Waste & Recycling Services** - Recommended for Registration to ISO 14001 on September 26th, 2002 (Oct. 1, 2002)
- [EnviroSystem Bulletin Board Resources](#) - template for your own updates (Oct. 1, 2002)



ONLINE
Environmental Awareness Training
Click here now!



The City of Calgary
ISO 14001
Registration
Status

The City of Calgary is committed to continuously improve city-wide environmental management practices and to become a model of environmental performance. A healthy and sustainable environment is important to our citizens, our economy, and our future.



EnviroSystem EnviroForum

[Exit](#) | [Profile](#) | [Register](#) | [Active Topics](#) | [Members](#) | [Search](#) | [FAQ](#)

Username: Password: **LOGIN**

Save Password

	Forum	Topics	Posts	Last Post	Moderator(s)
Corporate-wide Environmental Aspects/Issues					
	Compliance Issues Any questions/comments related to environmental compliance	5	19	2003 Jan 28 07:58:51 AM by: Erin Furlong	
	Corporate-wide Environmental Programs	6	14	2003 Jan 15 4:16:58 PM by: Paula Magdich	
	New Environmental Issues/Concerns	2	8	2003 Jan 03 11:24:10 AM by: Alex Eddington	
Environmental Network					
	EnviroSystem Implementation	1	1	2002 Jun 26 3:13:16 PM by: Alex Eddington	
	Network Meetings and Fun	4	15	2003 Jan 14 08:34:46 AM by: Alex Eddington	
Corporate EnviroSystem					
	Audits EnviroSystem, compliance and registration audits	3	7	2002 Oct 11 10:31:00 AM by: Alex Eddington	
	Project Management Projects and developments for the Corporate EnviroSystem	3	9	2002 Jul 08 1:29:31 PM by: Harley Hutchinson	
	Training, Awareness and Communication	8	25	2003 Jan 29 11:11:00 AM	

Challenge

- How do we effectively monitor and measure pollution prevention and improved environmental performance, across the entire corporation of the City of Calgary?



Response...

- Align monitoring programs with Council's/publics environmental priorities
- Build on established data tracking systems
- Establish Corporate database tool ("EnviroTracker") for use by all BU's to track environmental aspects, protocols, non-conformances, audit findings, corrective actions, etc.
- Incorporate established accepted Indicators into monitoring program (e.g. ISO 14031, Agenda 21-Local Gov't, etc.)





Welcome
Dave Stephens
 PHASE I

EnviroTracker
 The City of Calgary's
 Environmental Management
 Regulatory Compliance System

- Environmental Incidents ▶
- Regulatory Infractions ▶
- Environmental Aspects ▶
- Audit Findings ▶
- Mgmt Improvements and Suggestions ▶
- EnviroSystem Protocols ▶
- Compliance Protocols ▶
- Admin Module ▶

Division: Division 3
Section: Section 2
Area: Area 4
Report Title: Oil Spill in Elbow River
Location: Mission Bridge - 25th Ave/4th St SW
Date of Release: 2002-07-06 13:05

Incident Description: A tanker truck crashed into the Elbow River on the Mission Bridge spilling 10,000 gallons of refined oil.

RELEASE INFORMATION:

Qty	Units	Substance	Released to
10000	Gallons	Refined Oil	Water

Did the release enter the environment? Yes - 10000
Was release a compressed gas? No
Did release enter a sump system? No
Did the Fire Dept attend the spill? Yes
Did the Hazardous Materials Unit attend the spill? No
Where photos taken? Yes - Digital Camera
Was substance released during transport? Yes - 80,000 gallons container

Corrective Actions: Barriers were placed in the river to prevent the spill from going further downstream. Sponges are also being used along the banks of the Elbow River. Wildlife is encouraged to boil the water prior to drinking it.

Reported By: Rose Bush **Phone:** (403) 555-1212

Alberta Environment Contacted? No

[Edit your profile](#)

Challenges

- What is appropriate benchmarking for pollution prevention/performance?
- How are we accountable to external interested parties?



Response...

- In preliminary stages of assessing appropriate benchmarking tools at local, regional, national , international level; consulting with other municipalities directly and through FCM, ICLEI, etc.
- Building on existing external consultation tools (public surveys, forums, partnerships with NGO's, Council link to Env. Advisory Council, etc.) and State of the Environment report - developing on-line reporting tool.



Future Challenges...

- Fully integrating policy into all decision-making and other management systems (e.g Health & Safety, ISO 9000, etc.)
- Maintaining momentum beyond ISO registration - What's next?
- Evolution to “Sustainable Management System” (triple bottom line).
- Clearly demonstrating improved performance and \$\$ savings/justifying resource expenditure.



CONTACTS

- External web-site: www.calgary.ca
- E-mail: envirosystem@gov.calgary.ab.ca
- E-mail: harley.hutchinson@gov.calgary.ab.ca

