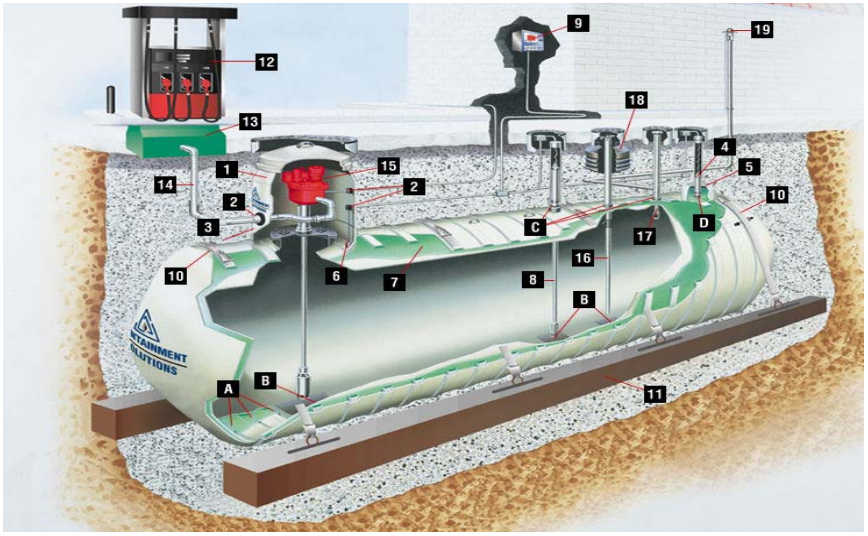
Environment Canada | Environnement Canada

Canada

Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations



Information Session
2009

Environment Canada
Prairie & Northern

Outline of Presentation

1. Authority
2. Purpose
3. Introduction
4. Application
5. Responsibilities
6. **Critical Timelines**
7. Definitions
8. **Overview of Regulations**
9. Summary
10. References/Contacts

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Canada Gazette — Gazette du Canada

Part II — Partie II

OTTAWA, WEDNESDAY, JUNE 25, 2008 — OTTAWA, LE MERCREDI 25 JUIN 2008

Statutory Instruments 2008 — Textes réglementaires 2008

SOR/2008-184 to 214 and SI/2008-63 to 73 — DORS/2008-184 à 214 et TR/2008-63 à 73

Pages 1590 to 1624 — Pages 1590 à 1624

NOTICE TO READERS — AVIS AU LECTEUR

1. Authority

Canadian Environmental Protection Act, 1999 (CEPA)

- Government of Canada's primary legislation for control of harmful substances in the environment
- Some guiding principles:
  - sustainable development
  - pollution prevention
  - precautionary principle

1. Authority

Canadian Environmental Protection Act, 1999 (CEPA)

Part 9 – Regulations that apply to
Federal Departments, Boards, Agencies, Crown Corporations and Federal Works or Undertakings Federal or Aboriginal Land

Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations created under Section 209 of CEPA, 1999

1. Authority

Compliance & Enforcement Policy Guiding Principles

- Compliance with the Act and its Regulations are mandatory
- Apply the Act in a manner that is **fair**, **predictable** and **consistent**
- Administer the Act with an emphasis on prevention of damage to the environment
- Examine every suspected violation and apply the C&E policy
- Encourage reporting of suspected violations
- **Reference:** http://www.ec.gc.ca/CEPARegistry/enforcement/

1. Authority

Responses to Alleged Violations (*CEPA 1999*)

No formal court action

- Warnings
- Directions by Enforcement Officers
- Ministerial Orders
- Tickets
- Environmental Protection Compliance Orders (cease & desist)

Court action

- Injunctions
- Prosecution
- Court orders upon conviction
- Civil suit for recovery of costs

1. Authority

Penalties & Fines

Summary Conviction

- up to $300,000 and 6 months in prison

Indictment

- up to $1,000,000 and 3 years in prison

2. Purpose of the Regulations

Reduce leaks into environment

Reduce impact of spill events

SOIL AND GROUNDWATER PROTECTION

2. Purpose of the Regulations

- **Health and Welfare of Communities, their Environment and Resources**

- **Legislate best practices for management of petroleum storage facilities – e.g. technical design, leak detection, spill reporting, emergency response**

2. Purpose of the Regulations

Soil and groundwater contamination affects our health

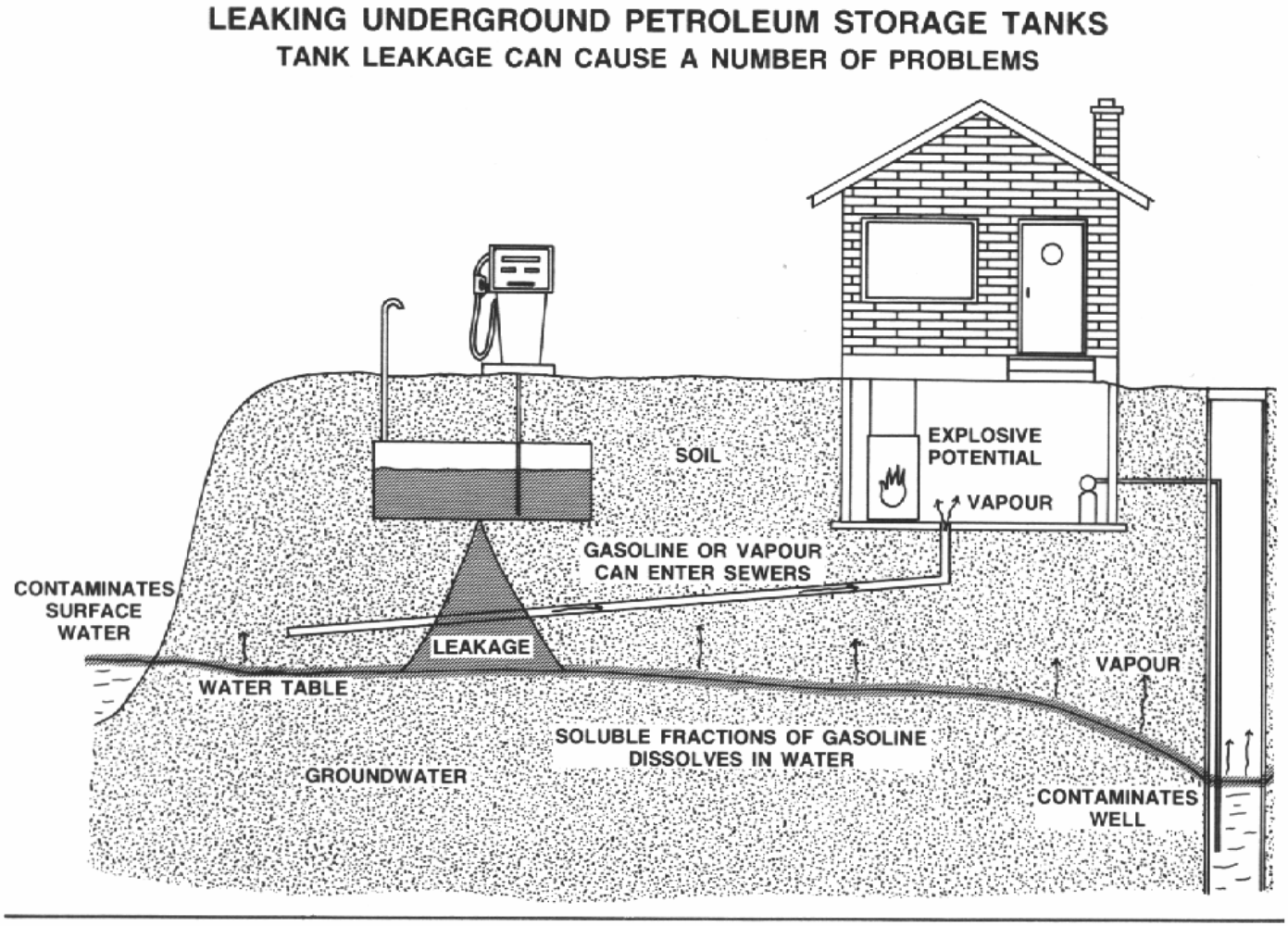
"Why should I care about future generations?
What have they ever done for me?"

~ Groucho Marx ~

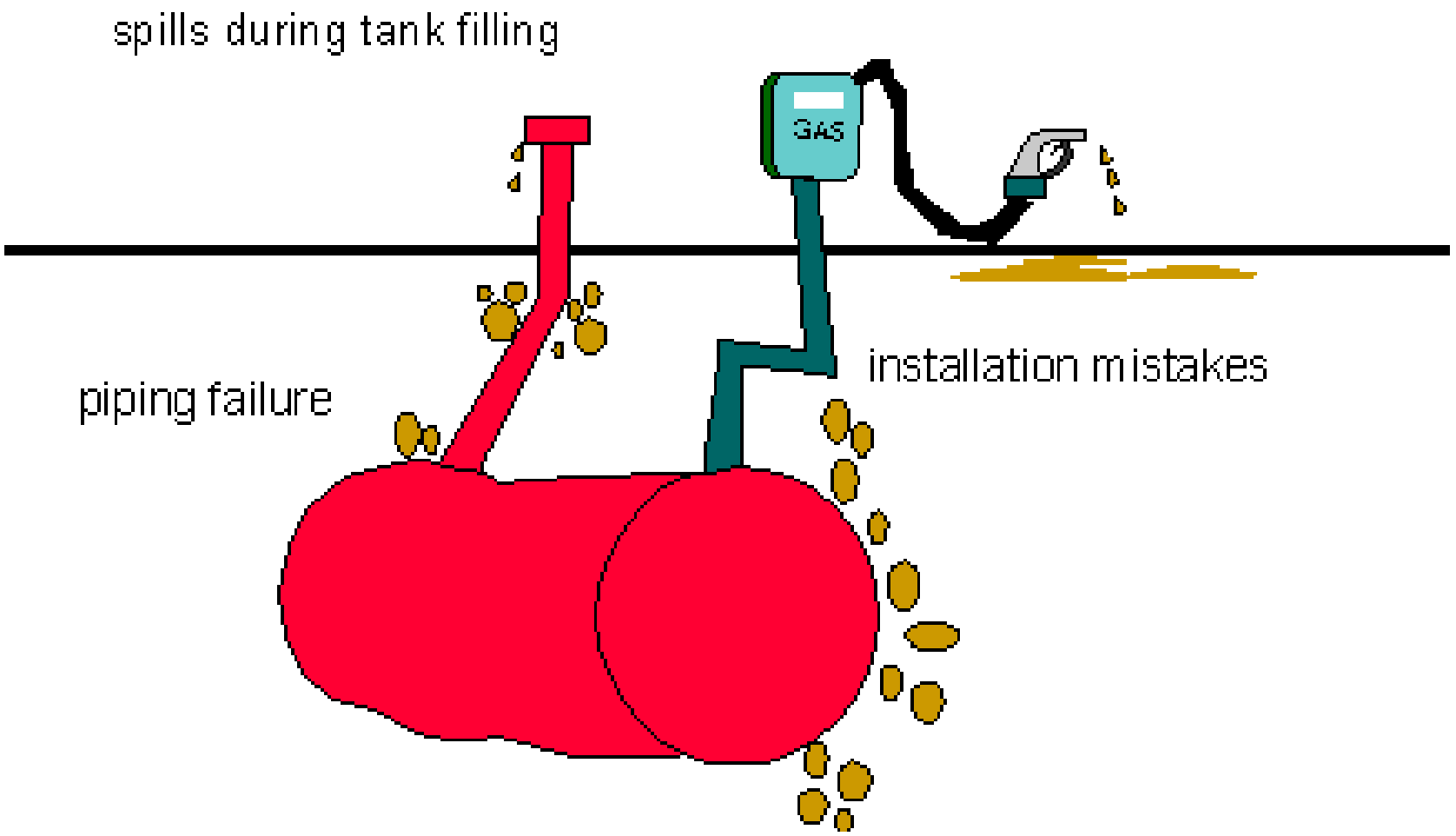
Treat the earth well.
It was not given to you by your parents,
it was loaned to you by your children.
We do not inherit the Earth from our Ancestors,
we borrow it from our Children.

~ Ancient Indian Proverb ~

3. Introduction



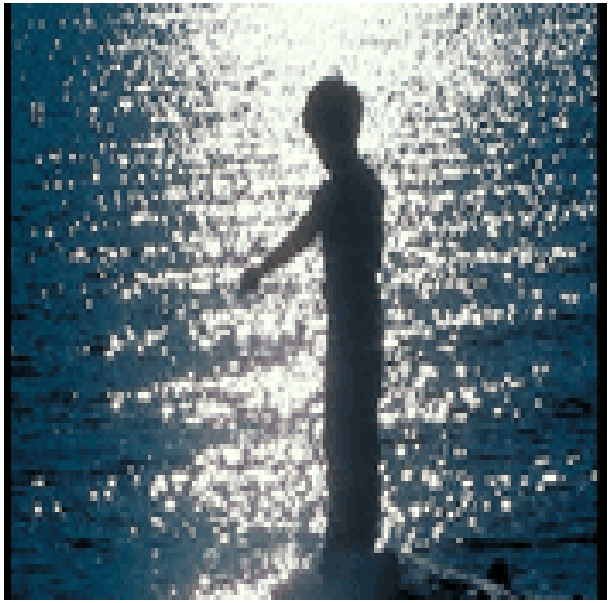
3. Introduction



3. Introduction

You have responsibilities if you:

- Own a storage tank system; OR
- Operate a storage tank system; OR
- Deliver fuel to a storage tank system.



3. Introduction

It is your responsibility to:

- Prevent leaks and spills – compliant systems;
- Report spills
- Implement emergency response; and
- **Exercise due diligence in everyday actions**.

☑ Understand how your actions impact the earth.

3. Introduction

Tank Tips

1 - What's new in the new regulations?
2 - Do the new regulations apply to you?
3 - Critical timelines for existing systems
4 - New storage tank system installations
5 - If you suspect or find a leak
6 - Identifying your system
7 - Preparing your emergency plan
8 - Leak detection and monitoring
9 - Withdrawing and removing systems
10 - Record keeping for your storage tank system
11 - If you deliver products

4. Application

Depends upon:

- ✓ Type of Tank
- ✓ Capacity
- ✓ Contents
- ✓ Location
- ✓ Ownership

4. Application

The application of the Regulations

1. **Aboveground and underground storage tank systems**
2. **Petroleum products and allied petroleum products**
3. **Selected Federal House (CEPA 1999, s. 207(1))**
   (- Includes Aboriginal Lands and Reserves)

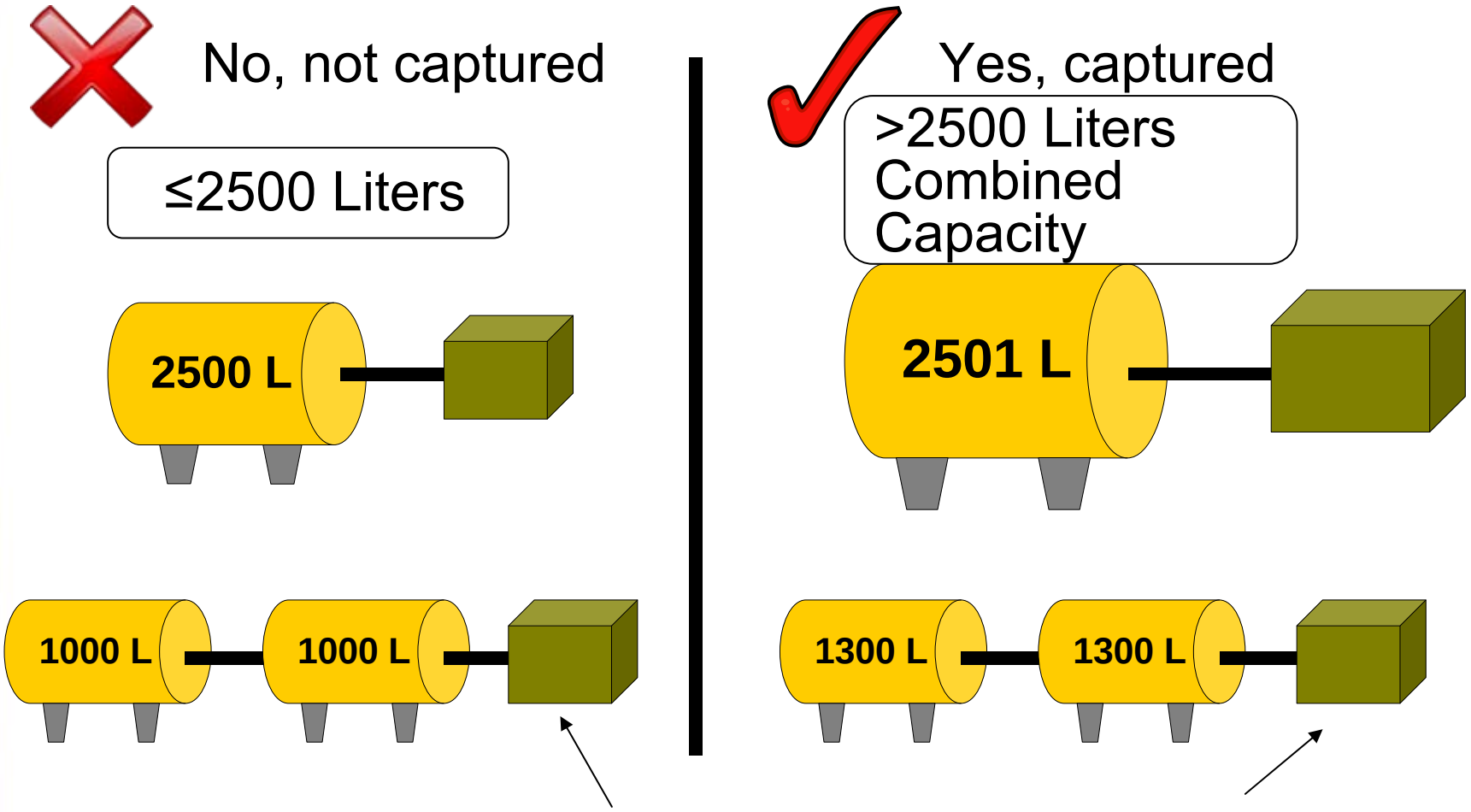
4. Application

Which systems are covered by the Regulations?

- **All underground storage tank systems**
- **For aboveground storage tank systems:**
  - attached to a heating appliance or emergency generator: 2500L or larger
  - all other outdoor tanks over 230L

*2500 liters = 550 Imperial Gallons

4. Application



4. Application

Exceptions s.2(2)

- Indoor storage tank systems
- Unprocessed petroleum products
- Tanks lesser than or equal to 2500 liters in capacity **AND** connected to heating appliance or emergency generator
- Tank systems regulated under the *National Energy Board Act* or the *Canada Oil and Gas Operations Act*

5. Responsibility

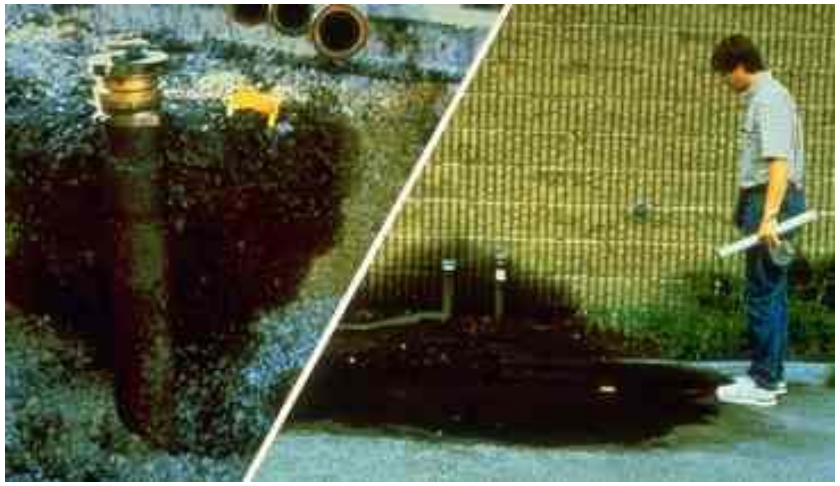
Roles of owner / operator:

- Addressing out-of compliance issues
- Installation as per requirements
- Identification / record keeping
- Leak detection
- Withdrawal of systems
- Operation / maintenance
- Spill responses/emergency planning

5. Responsibility

Suppliers' responsibilities…

- Not transfer products into storage system unless ID visible and record ID
- Immediately notify the operator of spill or leak



6. Critical Timelines

June 12, 2008 – Already Past!

- Leaking storage tank systems must be withdrawn from service
- Release reporting for all systems

- New Systems -Technical Requirements
  -Product Transfer Area Requirements
  -Emergency Plans

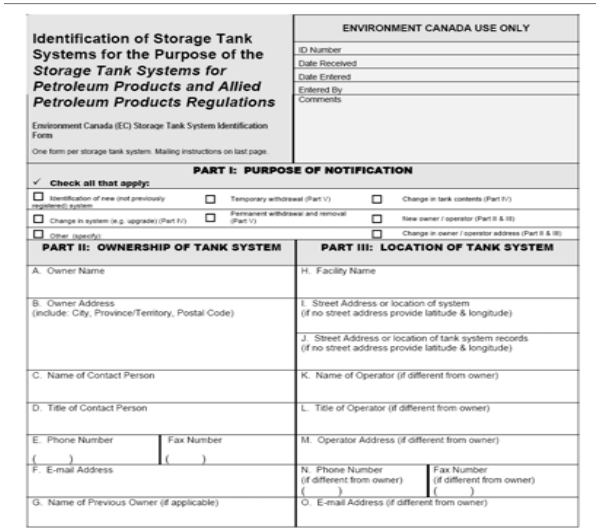
6. Critical Timelines

June 12, 2009 – Already Past!

- Storage tank systems identified to EC

OR

- Progress report to EC for all systems not identified



Identification of Storage Tank Systems for the Purpose of the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*

Environment Canada (EC) Storage Tank System Identification Form

One form per storage tank system. Mailing instructions on last page.

ENVIRONMENT CANADA USE ONLY

ID Number
Date Received
Date Entered
Entered By
Comments

PART I: PURPOSE OF NOTIFICATION

✓ Check all that apply:

☐ Identification of new (not previously registered) system
☐ Temporary withdrawal (Part V)
☐ Change in tank contents (Part IV)
☐ Change in system (e.g. upgrade) (Part IV)
☐ Permanent withdrawal and removal (Part V)
☐ New owner / operator (Part II & III)
☐ Other, (specify)
☐ Change in owner / operator address (Part II & III)

PART II: OWNERSHIP OF TANK SYSTEM	PART III: LOCATION OF TANK SYSTEM
A. Owner Name	H. Facility Name
B. Owner Address (include: City, Province/Territory, Postal Code)	I. Street Address or location of system (if no street address provide latitude & longitude)
	J. Street Address or location of tank system records (if no street address provide latitude & longitude)
C. Name of Contact Person	K. Name of Operator (if different from owner)
D. Title of Contact Person	L. Title of Operator (if different from owner)
E. Phone Number ( ) / Fax Number ( )	M. Operator Address (if different from owner)
F. E-mail Address	N. Phone Number (if different from owner) ( ) / Fax Number (if different from owner) ( )
G. Name of Previous Owner (if applicable)	O. E-mail Address (if different from owner)

6. Critical Timelines

June 12, 2010

- All systems now identified to EC and display an ID number
- Emergency plans in place for all systems
- Product delivered only to systems that have ID displayed

6. Critical Timelines

June 12, 2010, continued…

All: -single-walled USTs and u/g piping,
-ASTs and a/g piping without secondary containment,
-sumps

☑Initial prescribed leak detection test completed

☑Ongoing leak detection or monitoring program in place

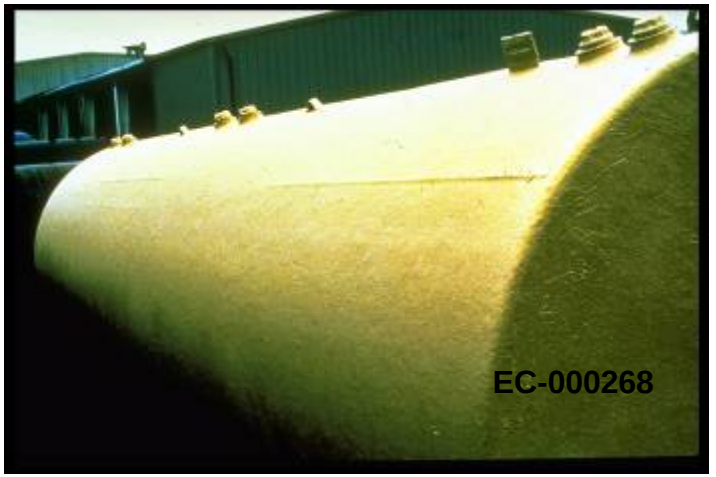
6. Critical Timelines

June 12, 2012

- All "high-risk" systems removed
- Spill containment at product transfer areas in place for all systems

7. Definitions

Definition: Storage tank



- Closed container
- Capacity larger than 230 liters (50 Imperial gallons = 227 liters)
- Designed to be installed in a fixed location

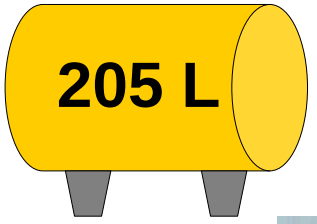
Not a “tank”

Not a “tank”

7. Definitions

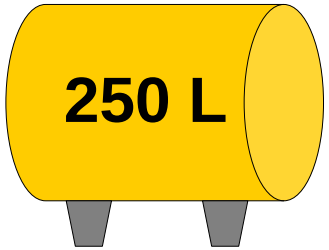
No, not captured

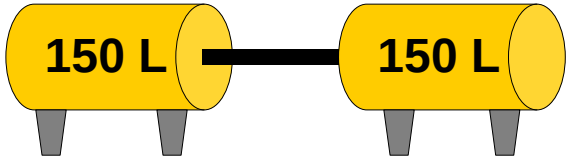
≤230 Liters



Yes, captured

>230 Liters
Combined Capacity





7. Definitions

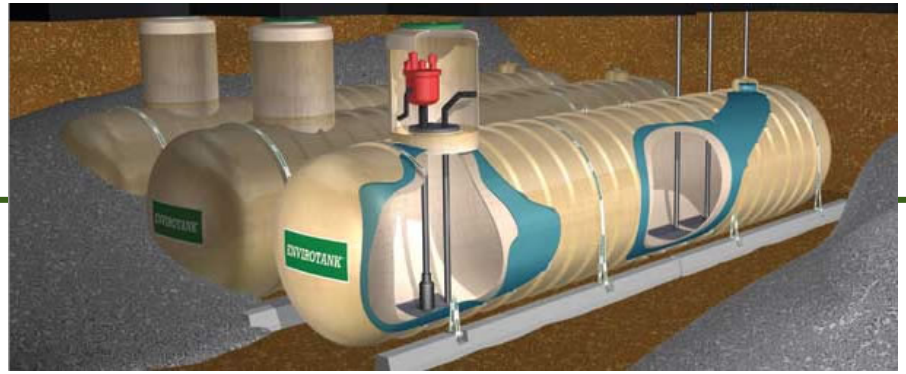
Definition: AST

- All storage volume above grade **OR** encased in unfilled secondary containment
- Operates at atmospheric pressure

Note –

Partially buried tanks are not an option!

7. Definitions



Definition: UST

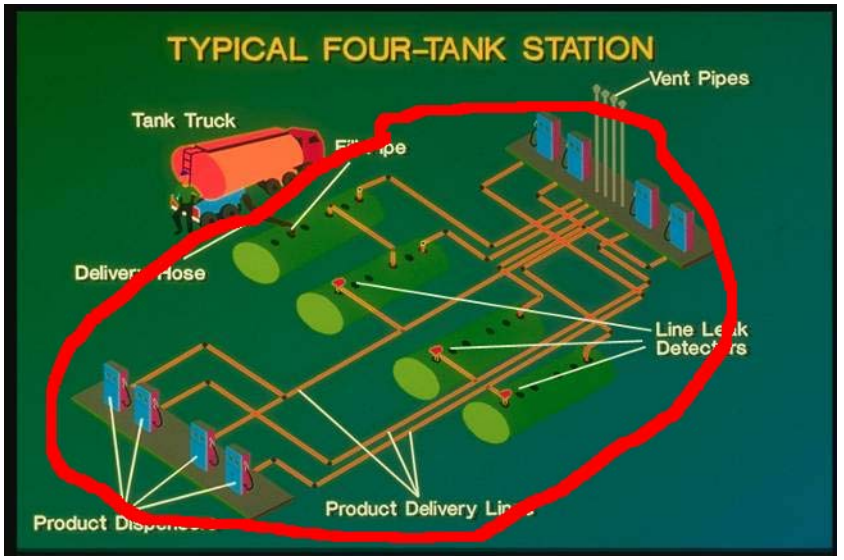
- All storage volume below grade **AND** completely surrounded by fill
- Operates at atmospheric pressure

Note –

Partially buried tanks are not an option!

Definition: Storage Tank System

- One or more commonly connected tanks and components:
  - **Piping and vents**
  - **Pumps and sumps**
  - **Diking**
  - **Overfill protection devices**
  - **Spill containment devices**
  - **Oil water separators**



7. Definitions

Definition: Petroleum Product

- A single hydrocarbon or mixture of greater than or equal to 70% hydrocarbons by volume
- Refined from crude oil
- With or without additives

- Used as fuel, lubricant or power transmitter
- Includes used oil
- Does not include propane, paints or solvents

7. Definitions

Definition: Allied Petroleum Product

1. Thinners for Vinyl Coatings
2. Antiblush Thinner for Cellulose Nitrate Lacquer
3. Boiled Linseed Oil
4. Petroleum Spirits Thinner
5. High Solvency Thinner
6. General Purpose Thinners for Lacquers
7. Solvent for Vinyl Pre-treatment Coating
8. Acetone, Technical Grade
9. Methyl Ethyl Ketone, Technical Grade

7. Definitions

Definition: Allied Petroleum Product

10. Offset Lithographic Printing Ink
11. Isopropanol
12. Methanol, Technical Grade
13. Ethylene Glycol, Uninhibited
14. Benzene
15. Toluene
16. Biodiesel
17. E85
18. Oxygenated gasoline

Example of benzene storage tank

7. Definitions

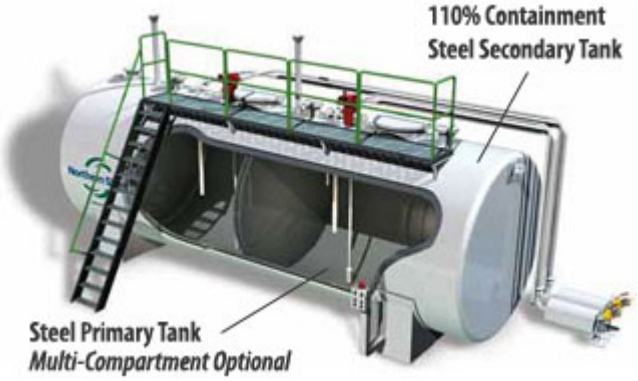
Definition: Product transfer area

- Area around connection point
- Between delivery and storage tank systems
- Tanks have combined capacity of more than 2500 liters

7. Definitions

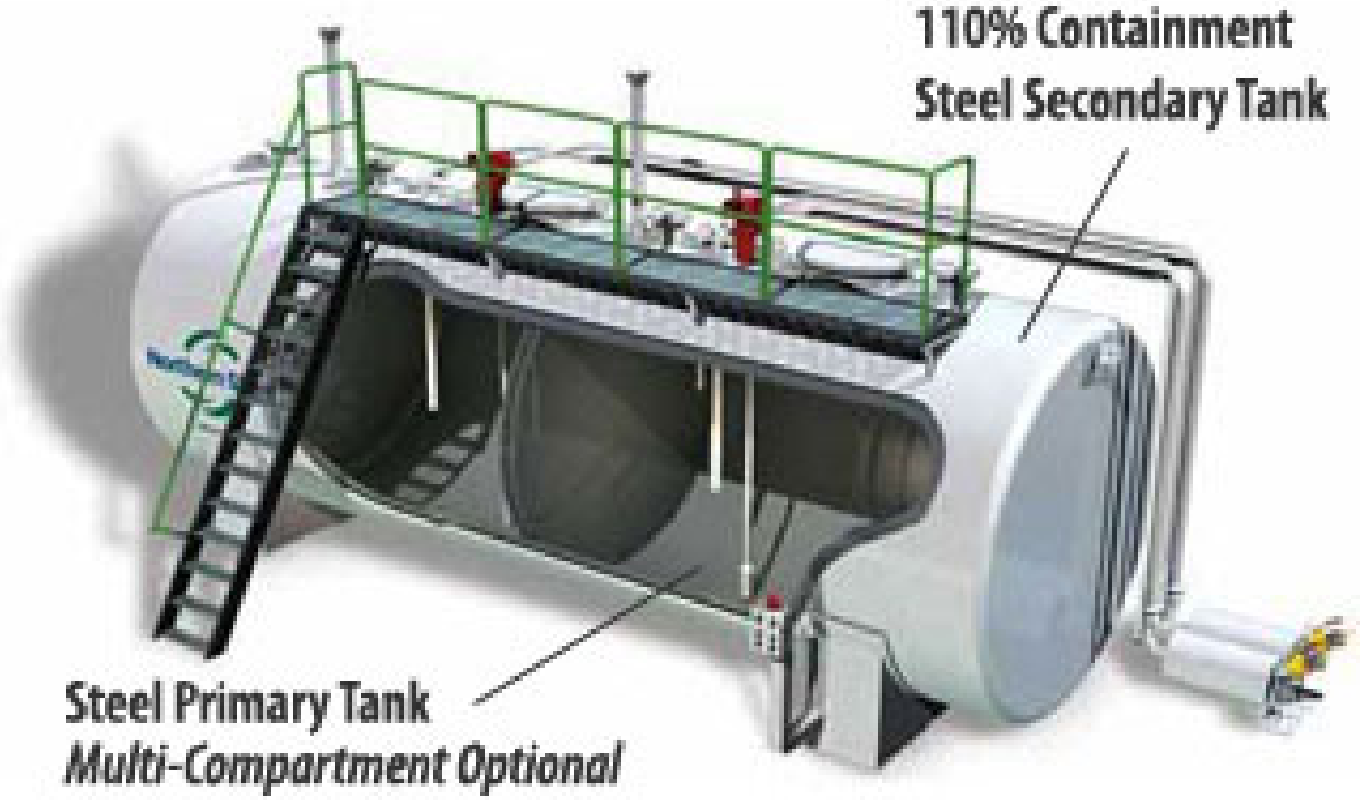
Definition: Secondary containment

- Containment that confines leaks
  - Double walled tanks
  - Double walled piping
  - Liners
  - Impermeable barriers e.g. steel



7. Definitions

Examples of Secondary Containment



7. Definitions

Examples of Secondary Containment

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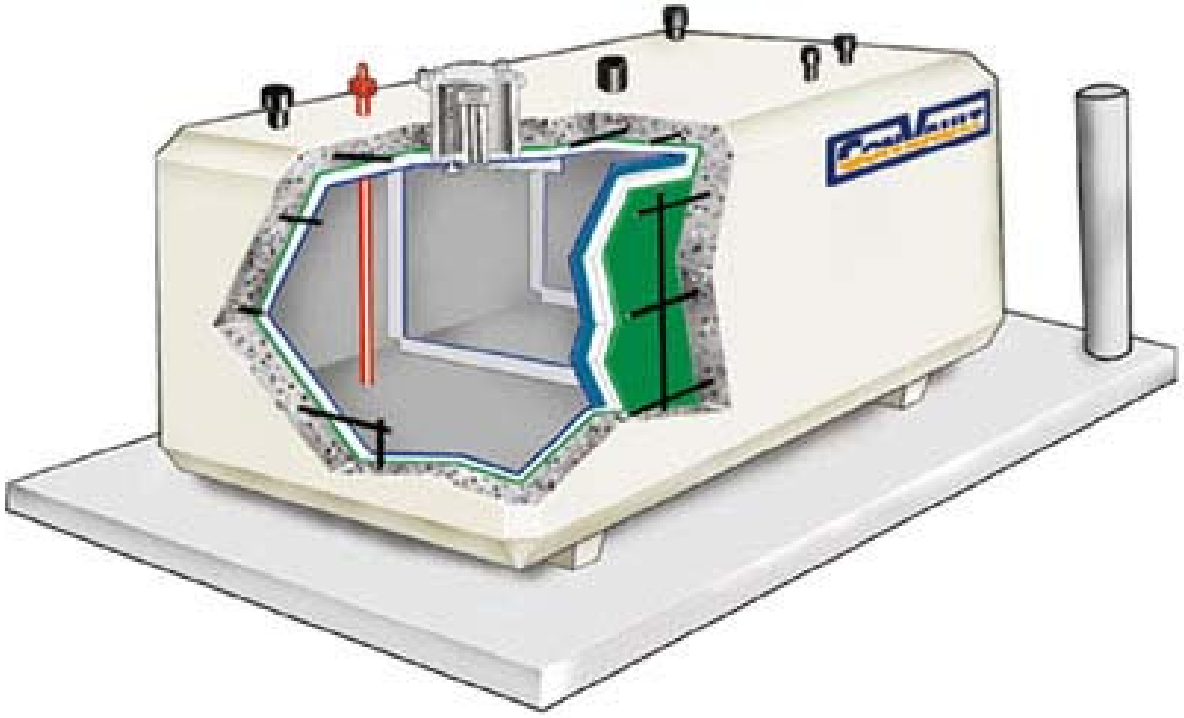


7. Definitions

Examples of Secondary Containment

8. Overview of the Regulations

8.1 Identification with EC

8.2 Withdraw leaking systems

8.3 Remove 'high risk' systems

8.4 Mandatory compliance with technical requirements for 'new' systems

8.5 Leak detection for components without secondary containment

8.6 Containment of spills at product transfer areas

8. Overview of the Regulations, cont'd…

8.7 Emergency plans

8.8 Approved installers

8.9 Operation and Maintenance requirements

8.10 Release Reporting

8.11 Withdrawal from Service

8.12 Record keeping

8.1 Identification with EC

What is the identification process?

- Identify storage tank system to EC:
  - **Before first fill for new tank systems**
  - **Before June 12, 2010 for existing tank systems**
    - If tank systems not all identified by June 12, 2009, then the owner must submit a progress report to EC
- Receive ID number from EC
- Display ID number on or near tank system
- On-line, or mail or FAX

8.1 Identification with EC

On-line

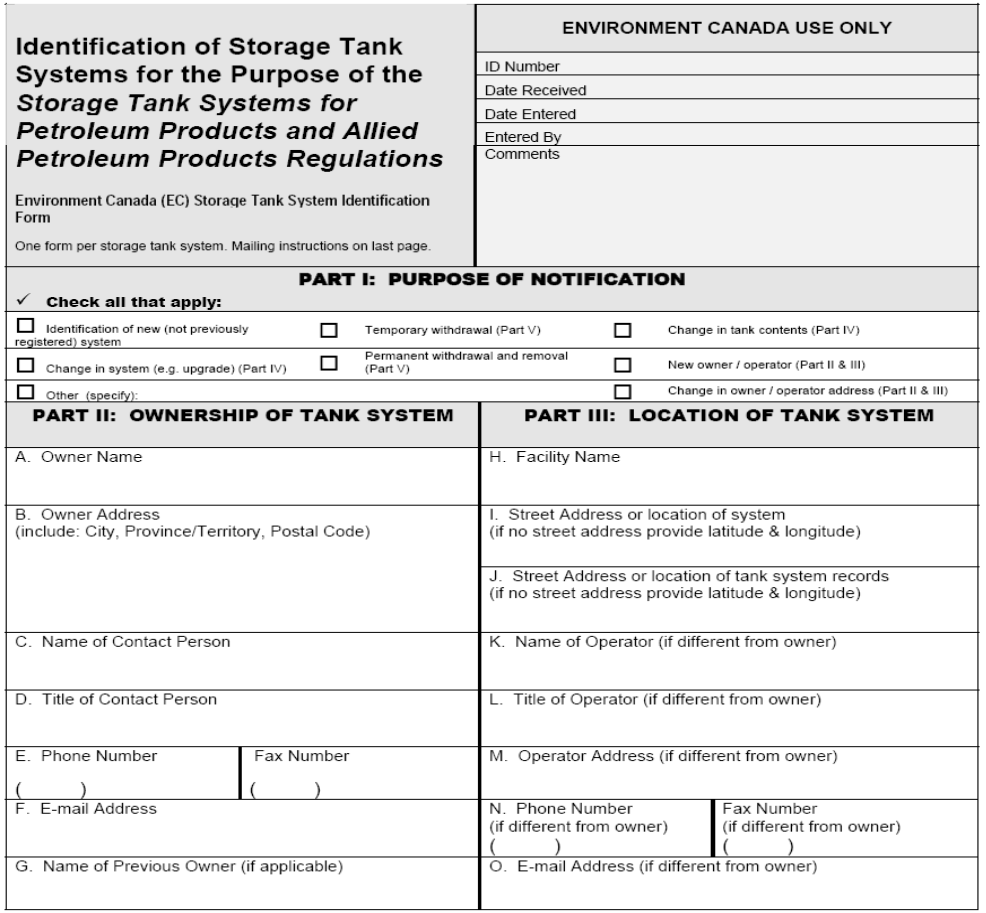
“FIRSTS”

8.1 Identification with EC

Fax # 819-953-7253

Mail or FAX Hard Copy

Remember: no ID = no delivery to new systems <u>now</u>, no delivery to existing systems effective <u>June 12, 2010</u>



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ID Number
Date Received
Date Entered
Entered By
Comments

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- ☐ Change in tank contents (Part IV)
- ☐ Change in system (e.g. upgrade) (Part IV)
- ☐ Permanent withdrawal and removal (Part V)
- ☐ New owner / operator (Part II & III)
- ☐ Other (specify):
- ☐ Change in owner / operator address (Part II & III)

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G. Name of Previous Owner (if applicable)	O. E-mail Address (if different from owner)

(Page 1 of 6)

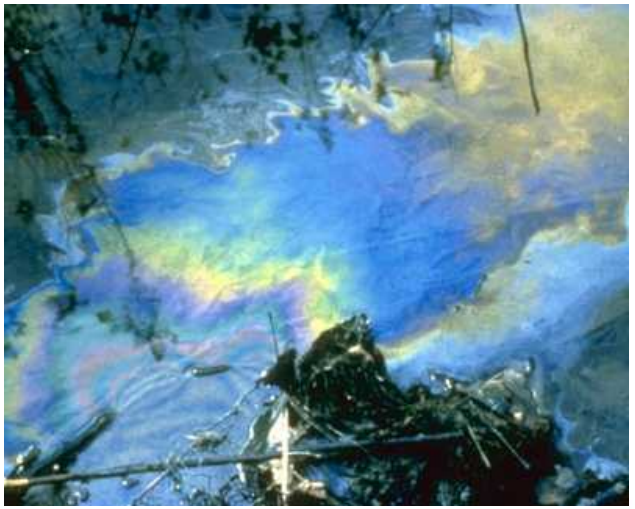
8.2 Withdraw leaking systems

Leaking systems

- A system that leaks must be ***withdrawn*** from service **immediately**
- After *repairs* and *leak detection*, system may be *returned to service*

OR

- *Removed*



8.3 Remove 'high risk' systems

High-risk systems

- Leaking single-walled underground tanks and piping

  Withdraw from service now and remove by June 12, 2010*

- Aboveground tanks installed underground
- Underground tanks installed aboveground
- Partially buried tanks
- Single-walled underground tanks and piping without corrosion protection and leak detection

Permanent withdrawal & removal is required by June 12, 2012

8.3 Remove 'high risk' systems

* If you have an existing single-walled underground storage tank system that isn't leaking, you may keep it in service for the life of the system, as long as it has existing (as of June 12, 2008):

☑ leak detection, and

☑ corrosion protection.

8.4 New Systems

8.4.1 Design Requirements

8.4.2 Installation Requirements

8.4.3 ASTs

8.4.4 USTs

8.4.5 Piping

8.4.1 New Systems – Design Requirements

What are the design requirements for new systems?

- ASTs, USTs, and piping in accordance with certain clauses of CCME Code of Practice
- Tank system design stamped by a professional engineer

8.4.2 New Systems – Installation Requirements

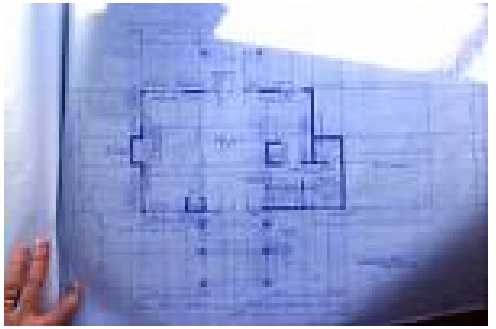
What are the installation requirements for new systems?

- System installation by:
  - provincially approved installer, where applicable
  - If not applicable, supervised by a professional engineer
- As-built drawings stamped by a professional engineer

8.4.2 New Systems – Installation Requirements

As-built drawings s.34(2)

- Outline of all tanks and buildings
- Centreline of all piping and underground electrical power / monitor sensor conduits
- Property lines
- Secondary containment systems



Must be stamped and signed by P.Eng.

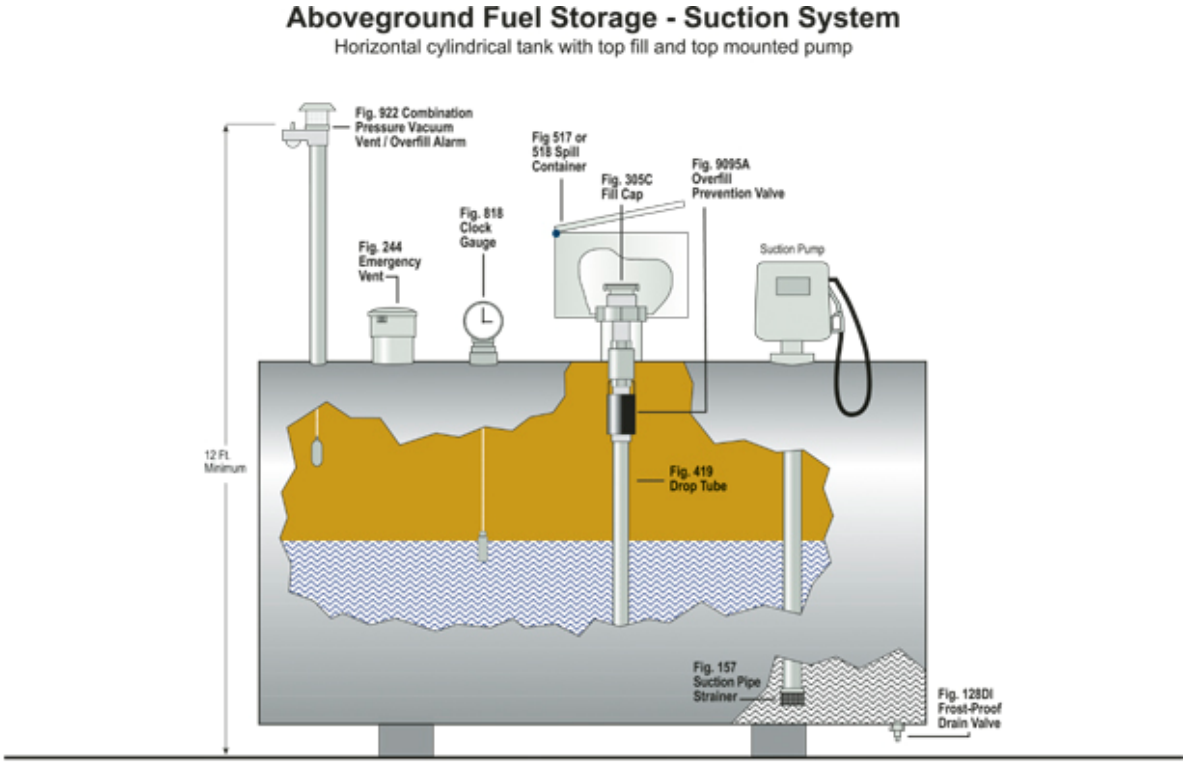
8.4.2 New Systems – Installation Requirements

New installation checklist: ☑

- Obtain permits and approvals
- Arrange approved installer or P.Eng. to supervise installation
- Design in accordance with applicable Codes
- Install using design plans, drawings and specifications stamped and signed by P.Eng.
- Product Compatibility

8.4.3 New Systems – ASTs

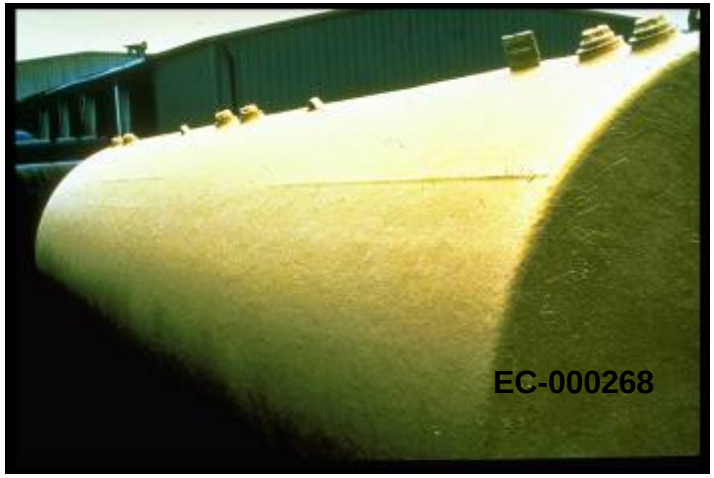
Typical Installation:



8.4.3 New Systems – ASTs

ASTs vs USTs…

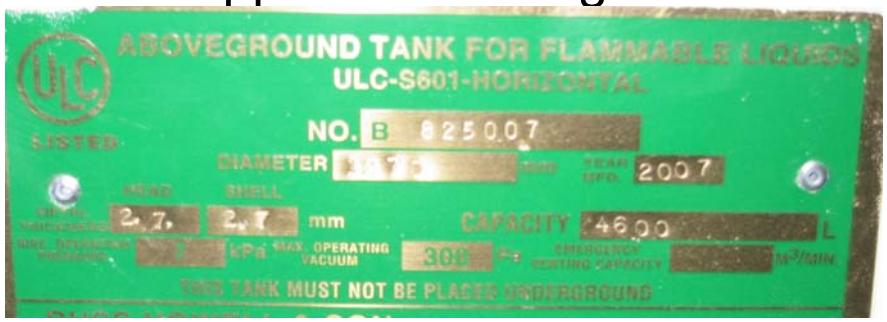
- Manufacture ratio of 3 to 1
- Advantages of ASTs
  - Visually monitored
  - Less $ to install / repair
- Disadvantages of ASTs
  - Fire
  - Space
  - Exposed to weather



8.4.3 New Systems – ASTs

Shop-fabricated requirements

- Corrosion control
- Secondary containment
- Containment sumps as applicable
- Overfill protection as specified
- Horizontal AST supported above grade level



8.4.3 New Systems – ASTs

Corrosion control:

- Required for steel ASTs
  - Cathodic protection (for field erected tanks)
  - Corrosion resistant coating

Remember…

Corrosion can be eliminated by using a non-corroding material (i.e., composite).

8.4.3 New Systems – ASTs

Aboveground systems for storing used oil:

- Secondary containment
- Specific design standards based on whether they are manually or mechanically filled

8.4.3 New Systems – ASTs

Secondary containment volume:

- If one tank, **≥110%** of tank capacity
- If 2 or more tanks, **≥100%** of largest tank **plus 10%** of greatest volume of either largest tank or aggregate of others

8.4.3 New Systems – ASTs

Secondary containment volume, examples:

10,000 Liter Tank:

Secondary Containment =

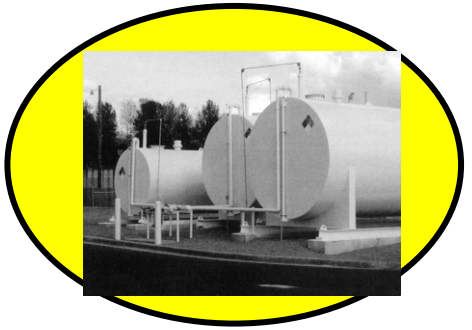
110% = 11,000 Liters

10,000 Liter Tank + 3 2,500 Liter Tanks:

Secondary Containment =

110% = 11,000 Liters

(10,000 > 7500)



10,000 Liter Tank + 8000 Liter Tank + 4000 Liter Tank:

Secondary Containment =

110% = 12,000 Liters

(12,000 > 10,000)

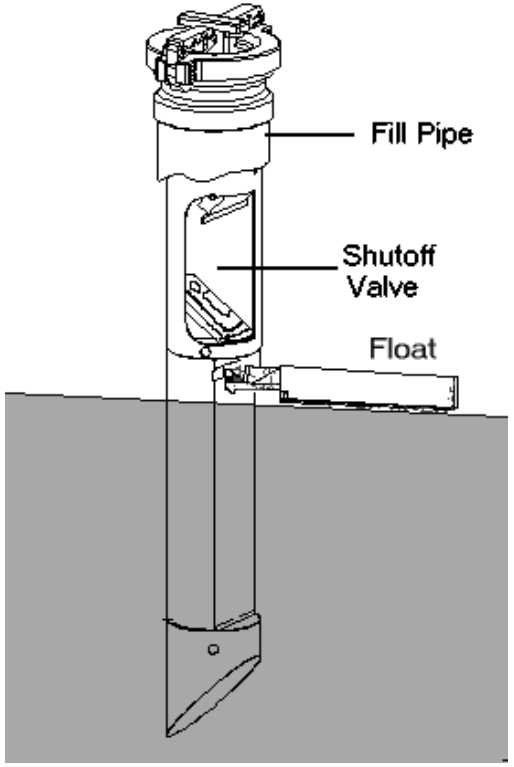
8.4.3 New Systems – ASTs

Overfill protection (shop-fabricated):

- Compatible with filling method
- Device to prevent fill to greater than 95% capacity ***or*** audible / visual alarm at 90% capacity with personnel

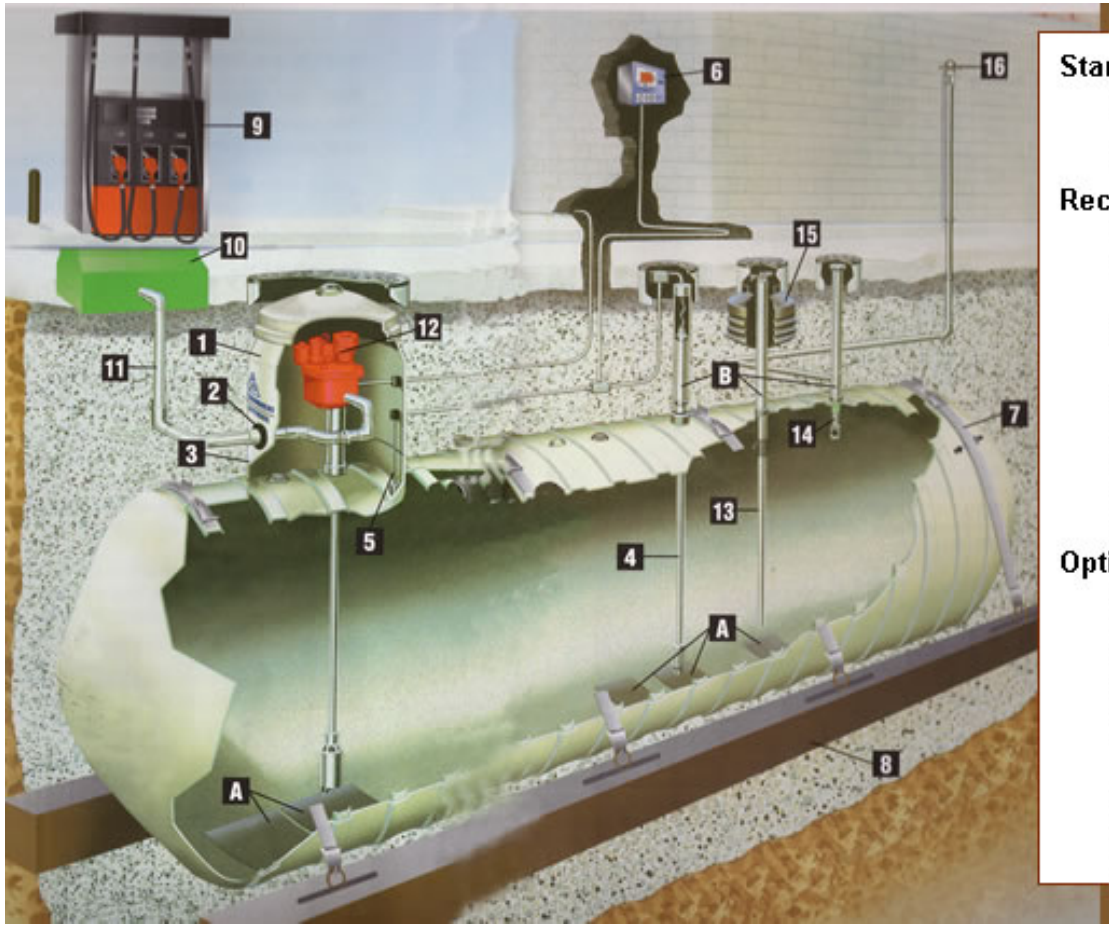
OR

- If less than 5000 liters, constant visual monitoring and level gauging by trained personnel



8.4.4 New Systems – USTs

Typical Installation



Standard Features:

A. Tank Bottom Deflector Plates
B. Primary Tank Fittings

Recommended Accessories:

1. Turbine Enclosure
2. Fitting Kits for Turbine Enclosure
3. Secondary Containment Collar
4. Electronic Inventory Gauge
5. Containment Collar Sensor
6. Electronic Control Panel
7. Split-Strap Anchor System
8. Deadman Anchor

Optional Accessories:

9. Dispenser
10. Dispenser Sump
11. Double-Wall Pipe
12. Submersible Pump
13. Fill Tube with Overfill Shut-Off Device
14. Ball Float Valve
15. Spill Box
16. Primary Tank Vent

8.4.4 New Systems – USTs

UST materials:

Steel

- Advantage:
  Compatible, strong
- Disadvantage:
  Corrosion, maintenance

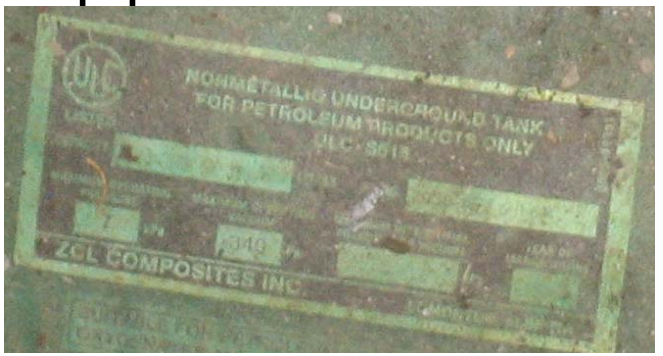
Fibreglass reinforced plastic

- Advantage:
  Long life, low maintenance
- Disadvantage:
  Compatibility, installation

8.4.4 New Systems – USTs

UST requirements

- Double-walled tank with monitorable interstitial space
- Overfill protection device
- Spill containment device on fill pipe
- Containment sumps
- Leak detection
- Corrosion protection



Remember…

Certification mark is required.

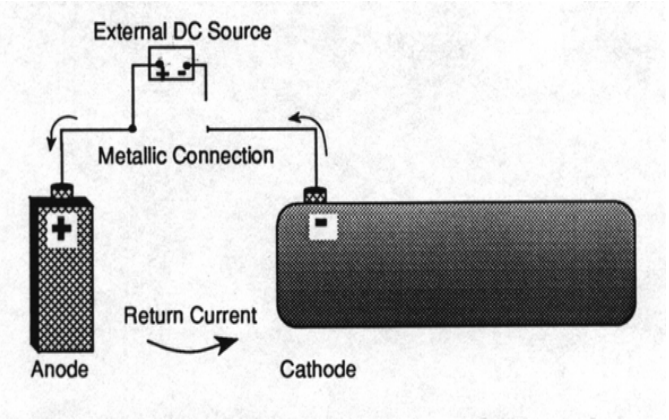
8.4.4 New Systems – USTs

Corrosion protection:

- Required for steel USTs
- Certification mark ***OR*** cathodic protection designed by corrosion expert
- Types include:
  - Cathodic protection
  - Corrosion resistant coating
  - Corrosion control program

8.4.4 New Systems – USTs

Examples of USTs with corrosion protection:



- Jacketed steel tank
- Double-walled fibreglass reinforced plastic
- Coated and cathodically protected steel tank

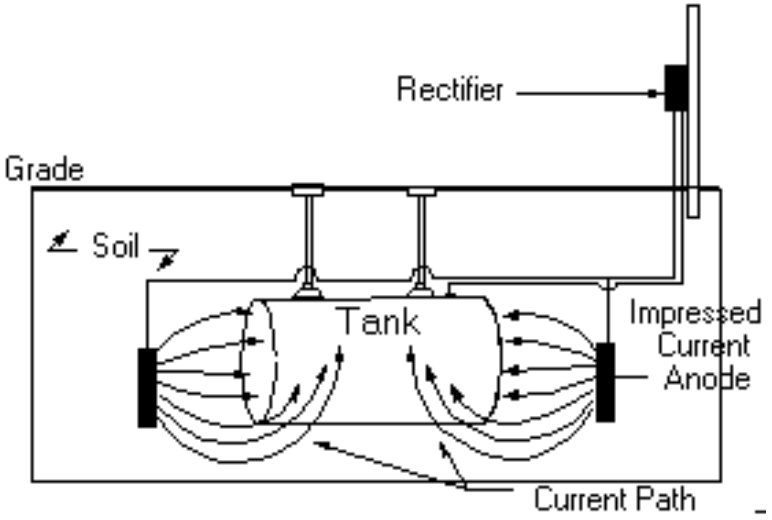
8.4.4 New Systems – USTs

Cathodic protection

- Galvanic (sacrificial) anode systems

Type EHA 2 x 60" 44lb anodes before and after consumption

- Impressed current systems



8.4.4 New Systems – USTs

Secondary containment

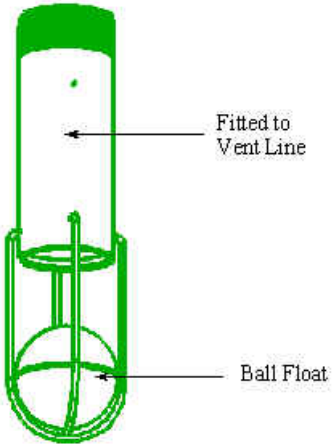
- Required by Regulations
- Three examples:
  - Double-walled steel
  - Double-walled FRP
  - Jacketed steel

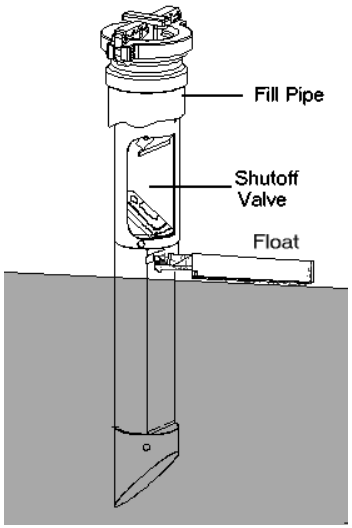
Test interstitial monitoring system according to manufacturer's instructions.

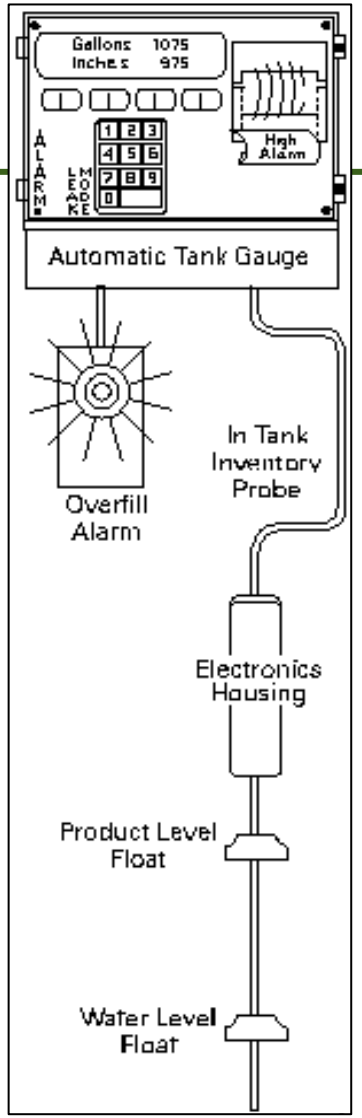
8.4.4 New Systems – USTs

Overfill protection

- Required by Regulations
- Three examples:
  - Overfill alarm
  - Automatic shut-off
  - Ball float valves







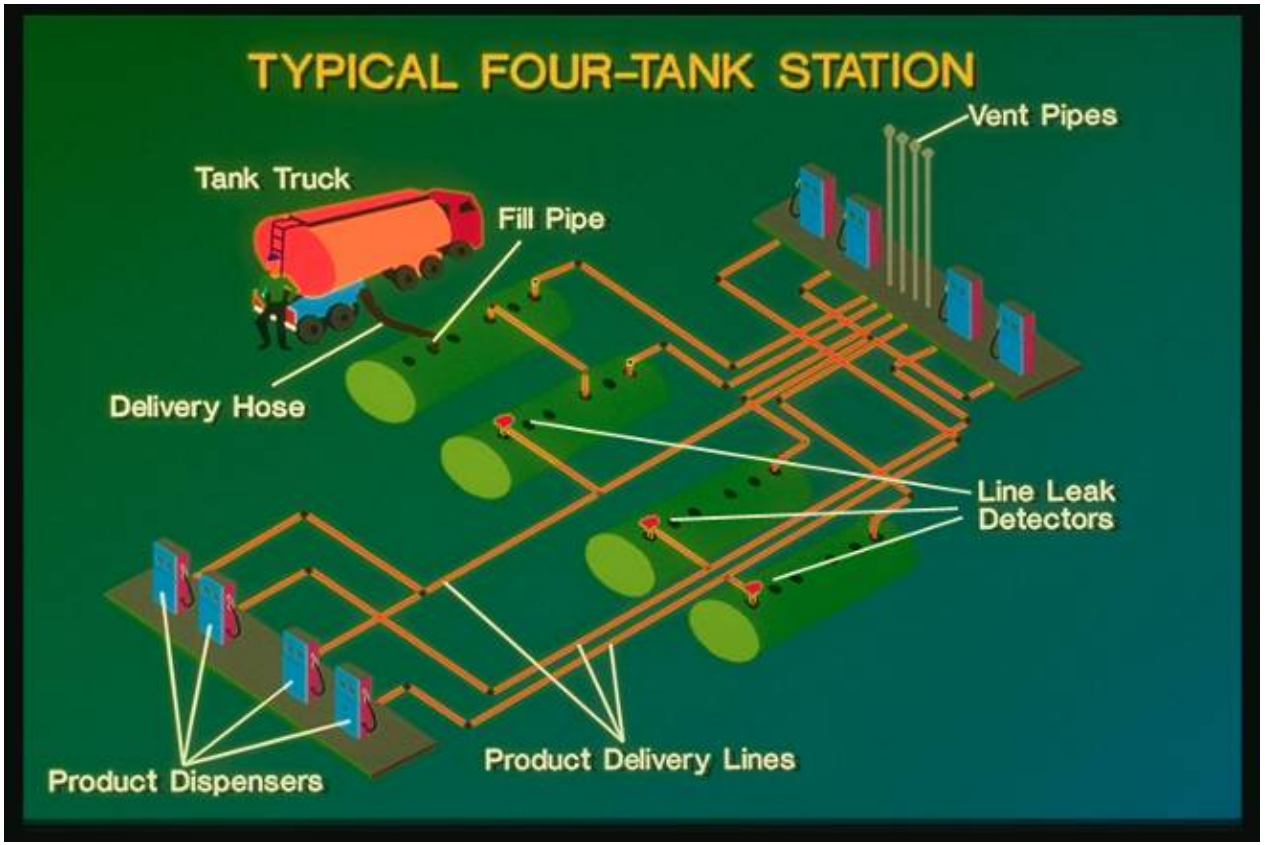
8.4.4 New Systems – USTs

Spill containment device

- Fill pipe spill containment device required
- Where applicable, containment sumps needed

8.4.5 New Systems – Piping Systems

Typical Installation



8.4.5 New Systems – Piping Systems

All storage tanks must have

- Fill pipe and vent line installed s.12
- All other system openings sealed or connected to piping s.12

National Fire Code of Canada

- Protected from impact (aboveground)
- Allowable design load (underground)

8.4.5 New Systems – Piping Systems

Type of piping

- Carbon steel
- Stainless steel
- Cast iron
- Copper
- Plastic
- Fibreglass reinforced plastic (FRP)

8.4.5 New Systems – Piping Systems

Piping requirements:

- Meet a standard
- Secondary containment
- Leak detection
- Manual shut-off valve (lockable)
- Thermal relief valve
- Anti-syphon devices

Remember…

Conform with standards.

8.4.5 New Systems – Piping Systems

Secondary containment

- Required for underground
- Types
  - Double-walled steel
  - Double-walled FRP
  - Metal with flexible secondary containment piping

8.4.5 New Systems – Piping Systems

Corrosion control

- Required (various forms)
- Cathodic protection
  - Required for double-wall steel underground piping
  - Designed by corrosion expert

8.4.5 New Systems – Piping Systems

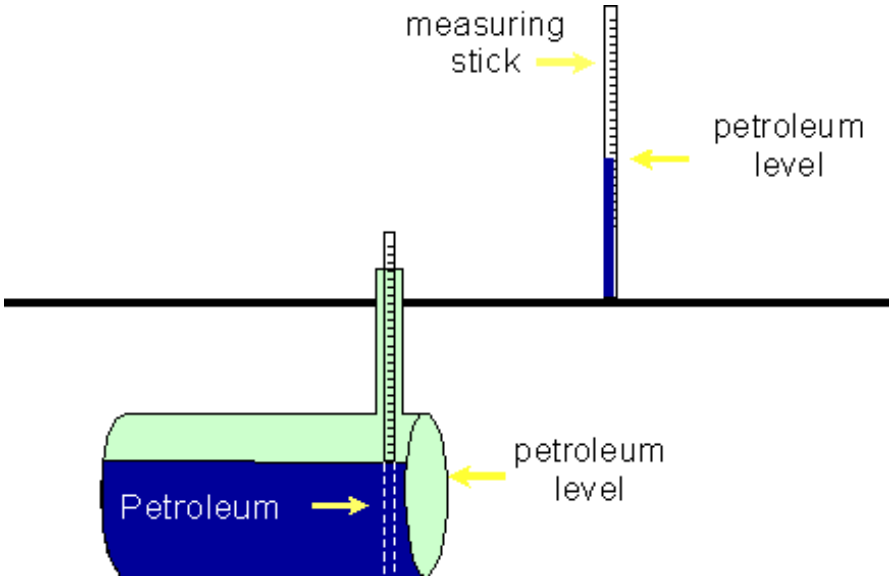
Product transfer

- Where greater than 5000 liters, fill pipe:
  - Liquid / vapour tight connection at filling
  - Otherwise sealed with liquid / vapour tight cap
- Where used oil, suction tube:
  - Liquid tight fitting when in use
  - Otherwise sealed with liquid tight cap

Leak detection

- Should be part of regular operations and maintenance of storage tank system

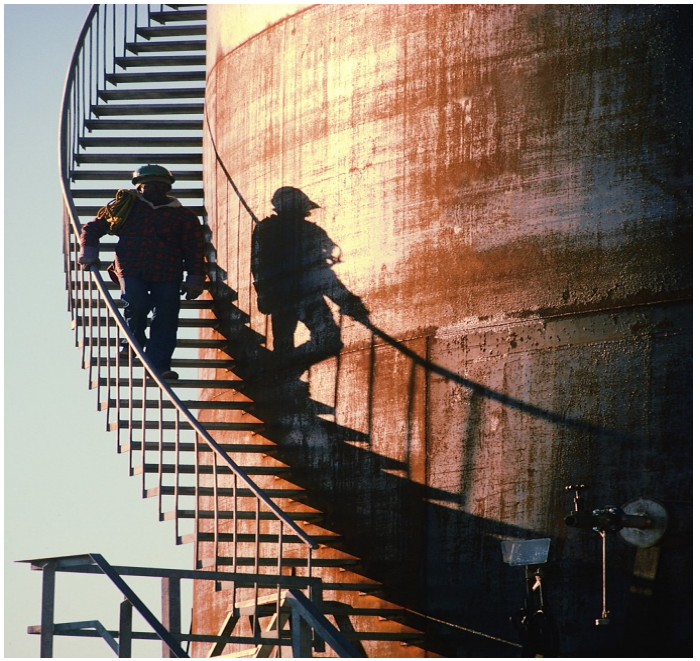
Proper leak detection is a wise investment!



8.5 Leak Detection

What are the leak detection requirements?

- Leak detection within 2 years
- Ongoing leak detection or monitoring on prescribed **frequency**



8.5 Leak Detection

Single-walled underground storage tanks:

- Precision leak test by June 12, 2010
- Then:
  - annual precision leak test, or
  - use automatic tank gauging, or
  - Use continuous in-tank leak detection

Canada

8.5 Leak Detection

Horizontal aboveground storage tanks without secondary containment:

- Visually inspect walls for leaks by June 12, 2010,
- Then:
  - annual precision leak detection test, or
  - monthly visual inspection of walls and inventory reconciliation at least weekly, or
  - continuous in-tank leak detection, or
  - continuous external leak monitoring

8.5 Leak Detection

Vertical aboveground storage tanks without secondary containment:

- Specified inspection by June 12, 2010
- Then:
  - specified inspection at ten year intervals, or
  - use continuous in-tank leak detection, or
  - use continuous external leak monitoring as prescribed

8.5 Leak Detection

Considerations

- System configuration / complexity
- Site specifics (e.g., soil, weather, sensitivity)
- Type of product
- Training and time of operational staff
- Availability of installers
- Cost (capital and maintenance)

8.6 Product Transfer Areas

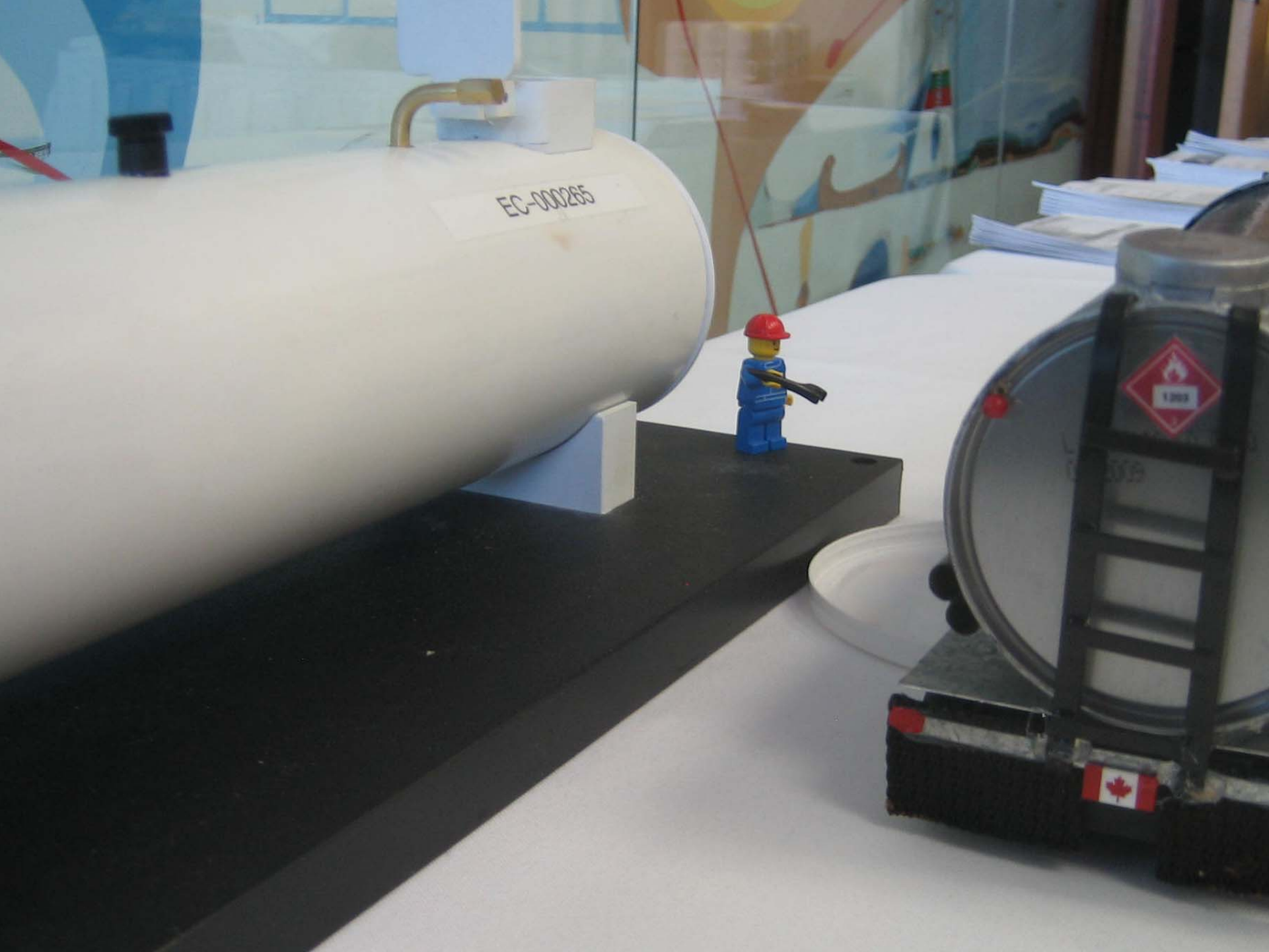
s.15

- Designed to *contain spills*
- Applies to storage tank systems greater than 2,500 liters (550 Gallons)
- By June 12, 2012 for existing systems, required immediately for new systems

8.6 Product Transfer Areas

- Volume = as much product as could be released before measures to stop the release can be taken
- Various configurations of containment


STORAGE


EC-000265

8.7 Emergency Plans

Considerations for preparation of emergency plans s. 30(1)

- Properties and characteristics of product(s)
- Max. quantity product(s) stored at one time
- Characteristics of site and surrounding area
  - Sensitivity of environment or human health risks

8.7 Emergency Plans

Contents of plan s. 30(2)

- ☑ Properties, characteristics and max. volume of product(s)
- ☑ Characteristics and sensitivity of site / surrounding area
- ☑ Measures used to prevent, prepare for, respond to and recover from any emergency
- ☑ List of individuals to implement plan, including roles
- ☑ Identification of training required
- ☑ List of emergency response equipment and their location
- ☑ Measures to notify members of the public, as required

8.8 Approved Installers

Province / Territory	Require licensed Installer contractors?	Require licensed removal contractors?
Alberta	Yes	Yes
Saskatchewan	Yes	Yes
Manitoba	Yes	Yes
NWT	No	No
Nunavut	No	No

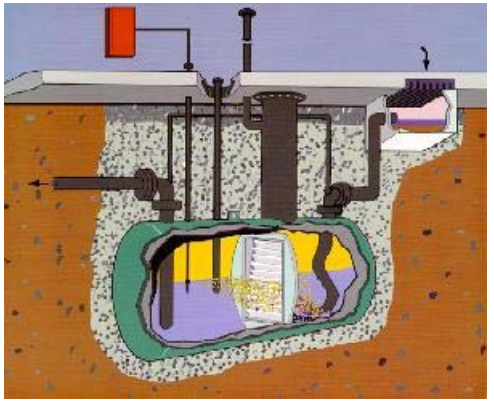
Or, supervised by professional engineer

8.9 Operation and Maintenance

Regular Operation and Maintenance is the key to safe & environmentally responsible operation of your storage tank system

-e.g. empty water from secondary containment

The regulations have specific requirements for oil-water separator maintenance and disposal from oil-water separators.



8.9 Operation and Maintenance

Don’t use secondary containment for storage!

8.10 Release Reporting

Spill reporting requirements s.41

- Verbal notification as soon as possible

Alberta	1-800-222-6514
Saskatchewan	1-800-667-7525
Manitoba	204-945-4888
NWT and Nunavut	867-920-8130

- Written follow-up for spills 100 liters or larger

8.10 Release Reporting

Contents of spill report s.41

- Name of owner and operator
- ID number of the system
- Date of spill or leak (estimated)
- Type and quantity of product(s) released
- Circumstances and mitigations
- Prevention measures taken

8.11 Withdrawal from Service

Temporary withdrawal s.43

- Either returned to service (<2 yrs) or becomes permanent
- Cathodic protection maintained
- If withdrawn for > 1 year
  - Precision leak detection for USTs or shop-fabricated ASTs
  - Internal inspection for field-erected ASTs
- Label affixed to fill pipe →
- Keep record with date of withdrawal

8.11 Withdrawal from Service

Permanent withdrawal s.44

- Remove and dispose of liquids and sludge
- Vapours purged to less than10% of lower flammability limit (verify via combustible gas meter)
- No immediate or long-term harmful effects
- Label affixed to fill pipe
- Keep record with date of withdrawal
- Written notification to Minister within 60 days
- Must be removed, except field erected

8.11 Withdrawal from Service

Removal of system s.45

- Must be completed by approved person or supervised by P.Eng.
- Appropriate records kept

8.12 Record Keeping

ID & New installations

- ID of system **s.28(2)**
  - Information and certification **Schedule 2**
- Design and construction records
  - Installer or supervision **s.33(2)**
  - Design plans, drawings & specifications **s.34(1)**
  - As-built drawings **s.34(2)**

Keep these for the life of the tank!

8.12 Record Keeping

Operation and maintenance

- Leak tests or inspections of any component
- Free oil and separated solids thicknesses for oil-water separators
- Disposal of free oil and separated solids and liquid discharge from oil-water separators
- Disposal of tank bottom water

Keep for 5 years

8.12 Record Keeping

Emergency plans and releases

- Up-to-date emergency plan both on-site and available to responsible persons **s.31(1)**
- Spill report for product 100 liters or larger **s.41**

Keep copy of spill report

8.12 Record Keeping

Temporary withdrawal

- Date of withdrawal **s.44(2)**
- Proof of operation of cathodic protection system **s.43(a)**
- Results of leak tests or inspections on tanks out of service for more than a year

8.12 Record Keeping

Permanent withdrawal and removal

- Date of withdrawal **s.44(2)**
- Withdrawal by approved person or supervised by P.Eng. **s.44(1)**
- Liquid and sludge disposal **s.44(3)**
- Proof of tank purge **s.44(3)**

Gasoline and Gasoline Blend Dispensing Flow Rate Regulations

Application:

- Retailers: Gas Stations
- Wholesalers purchasers-consumers (vehicle fleet operators with central refuelling facilities):
  - Taxi fleet
  - Rental cars fleet
  - Company owned vehicles fleet

Gasoline and Gasoline Blend Dispensing Flow Rate Regulations

Regulatory Obligation:

Fuel dispensing nozzles must not exceed a flow Rate of 38 L/min

Hardware is available in the market that is designed specifically to comply with a 38 L/min flow rate requirement.

EC enforcement officers may inspect fuel dispensing nozzles to verify compliance with this regulations.

9. Summary

-Authority: CEPA, 1999

-Purpose: <u>prevention</u> of soil and water pollution

-Introduction: we are responsible for our actions on the environment

CHAPTER 33

CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999

SUMMARY

This enactment repeals and replaces the *Canadian Environmental Protection Act*. Among the changes are provisions to implement pollution prevention, new procedures for the investigation and assessment of substances and new requirements with respect to substances that the Minister of the Environment and the Minister of Health have determined to be toxic or capable of becoming toxic within the meaning of Part 5, and provisions regarding animate products of biotechnology. The enactment also contains new provisions respecting fuels, interprovincial air and water pollution, marine emissions, animals whose release into water can cause excessive growth of aquatic vegetation and environmental emergencies, provisions to regulate the environmental effects of government operations and to protect the environment on and in relation to federal land and aboriginal land, disposal of wastes and other matter at sea, and the export and import of wastes.

The enactment provides for the gathering of information for research and the creation of inventories of data, which are designed for publication, and for the development and publishing of objectives, guidelines and codes of practice. The enactment also provides new powers for enforcement officers and analysts appointed by the Minister of the Environment to enforce the law. Environmental protection alternative measures and environmental protection compliance orders provide new mechanisms for the resolution of a contravention. The enactment also specifies criteria for courts to consider on imposing a sentence on an offender.

In addition, the enactment contains new rights for Canadians who, through written comments or notices of objection to the Minister of the Environment, may participate in decisions on environmental matters, may compel the Minister to investigate an alleged contravention of the Act, and may bring a civil action when the federal government is not enforcing the law. Aboriginal governments are provided the right of representation on the National Advisory Committee to be established under the enactment and, like the provinces and territories, may seek to have their laws declared equivalent to regulations under the *Canadian Environmental Protection Act, 1999*.

CHAPITRE 33

LOI CANADIENNE SUR LA PROTECTION DE L'ENVIRONNEMENT (1999)

SOMMAIRE

Le texte remplace la *Loi canadienne sur la protection de l'environnement*. Ses dispositions portent principalement sur la prévention de la pollution, l'établissement de nouvelles méthodes d'examen et d'évaluation des substances et la création d'obligations concernant les substances que le ministre de l'Environnement et celui de la Santé jugent effectivement ou potentiellement toxiques au sens de la partie 5. Sont en outre traités les substances biotechnologiques animées, les combustibles, la pollution transfrontalière de l'atmosphère et de l'eau, les gaz d'échappement des navires, les substances nuisibles dont la présence dans les eaux favorise la croissance de végétation aquatique, les urgences environnementales, les effets des activités de l'État sur l'environnement relativement au territoire domanial et aux terres autochtones, l'immersion en mer de déchets et autres matières, ainsi que l'exportation et l'importation de déchets.

Le texte prévoit aussi la collecte d'information en vue de la recherche, de l'établissement d'inventaires de données et de l'élaboration d'objectifs, de directives et de codes de pratique. Les agents de l'autorité et analystes nommés par le ministre de l'Environnement pour contrôler l'application de la loi sont investis de nouveaux pouvoirs. Le texte institue deux nouveaux mécanismes de règlement en cas d'infraction : les mesures de rechange en matière de protection de l'environnement et les ordres d'exécution des inspecteurs. Il propose de plus aux tribunaux des facteurs à prendre en considération au moment de déterminer la peine à infliger aux contrevenants.

Enfin, le texte confère de nouveaux droits aux Canadiens et Canadiennes qui peuvent intervenir dans la prise de décisions en présentant au ministre de l'Environnement des observations ou des avis d'opposition à la suite de certaines décisions, en demandant au ministre de faire enquête sur une infraction présumée et, finalement, en intentant des poursuites au civil en cas d'inaction du gouvernement. Les gouvernements autochtones auront le droit d'être représentés au sein du comité national consultatif et, à l'instar des provinces et territoires, de faire déclarer leurs règles de droit équivalentes aux règlements pris en vertu de la *Loi canadienne sur la protection de l'environnement (1999)*.

9. Summary

-Application: ASTs, USTs, Federal Departments, Federal Land, Aboriginal Land

-Responsibilities: If you own a storage tank system, operate a storage tank system, or deliver fuel to a storage tank system.

-Critical Timelines:

9. Summary

June 12, 2008 – Past!

- Leaking storage tank systems must be withdrawn from service
- Release reporting for all systems

- New Systems: -Technical requirements
  -Product transfer area requirements
  -Emergency plans in place

June 12, 2009 – Past!

- Storage tank systems identified to EC
- Progress report to EC for all systems not identified

9. Summary

June 12, 2010

- All systems now identified to EC and ID number displayed
- Emergency plans in place for all systems
- Product delivered only to systems that have ID displayed

All - single-walled USTs and u/g piping,
-ASTs and a/g piping without secondary containment, sumps

☑Initial prescribed leak detection test completed

☑Ongoing leak detection or monitoring program in place

June 12, 2012

- All "high-risk" systems removed
- Spill containment at product transfer areas in place for all systems

10. Resources / Contacts

Useful websites

- **EC's Storage Tank website for Petroleum and Allied Petroleum Products – http://www.ec.gc.ca/st-rs/**
- **CCME Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products – http://www.ec.gc.ca/ceparegistry/documents/regs/CCME/toc.cfm**
- **Compliance and Enforcement Policy for the *Canadian Environmental Protection Act, 1999* - http://www.ec.gc.ca/CEPARegistry/documents/policies/candepolicy/toc.cfm**
- **National Fire Code of Canada http://www.nationalcodes.ca/nfc/index_e.shtml**

10. Resources / Contacts

Contacts for Prairie & Northern Region

Albert Potvin, Environment Canada, Gatineau
albert.potvin@ec.gc.ca
(819) 994-0738

Cristina Ruiu, Environment Canada - Regina
cristina.ruiu@ec.gc.ca
(306) 780-7365

Amanda Lwanga-Thomson, Environment Canada – Regina
amanda.lwanga@ec.gc.ca
(306) 780-7637

Gillian Brown, Environment Canada – Edmonton
gillian.brown@ec.gc.ca
(780) 951-8950

Murray Heap, Environment Canada – Edmonton
murray.heap@ec.gc.ca
(780) 951-8752

Tanks a lot!