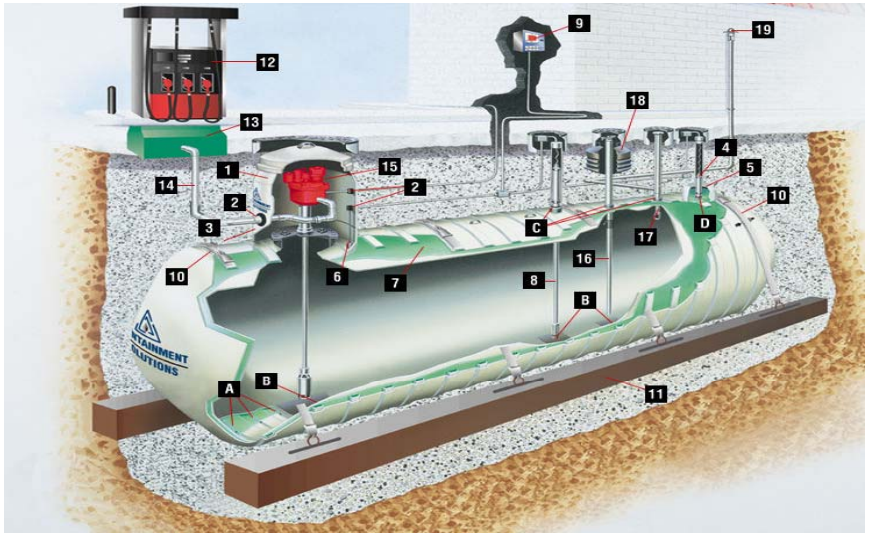
Environment Canada Environnement Canada

Canada

Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations



Environmental Stewardship Branch

Environment Canada

OPCA Conference

March 4, 2010

Toronto, ON

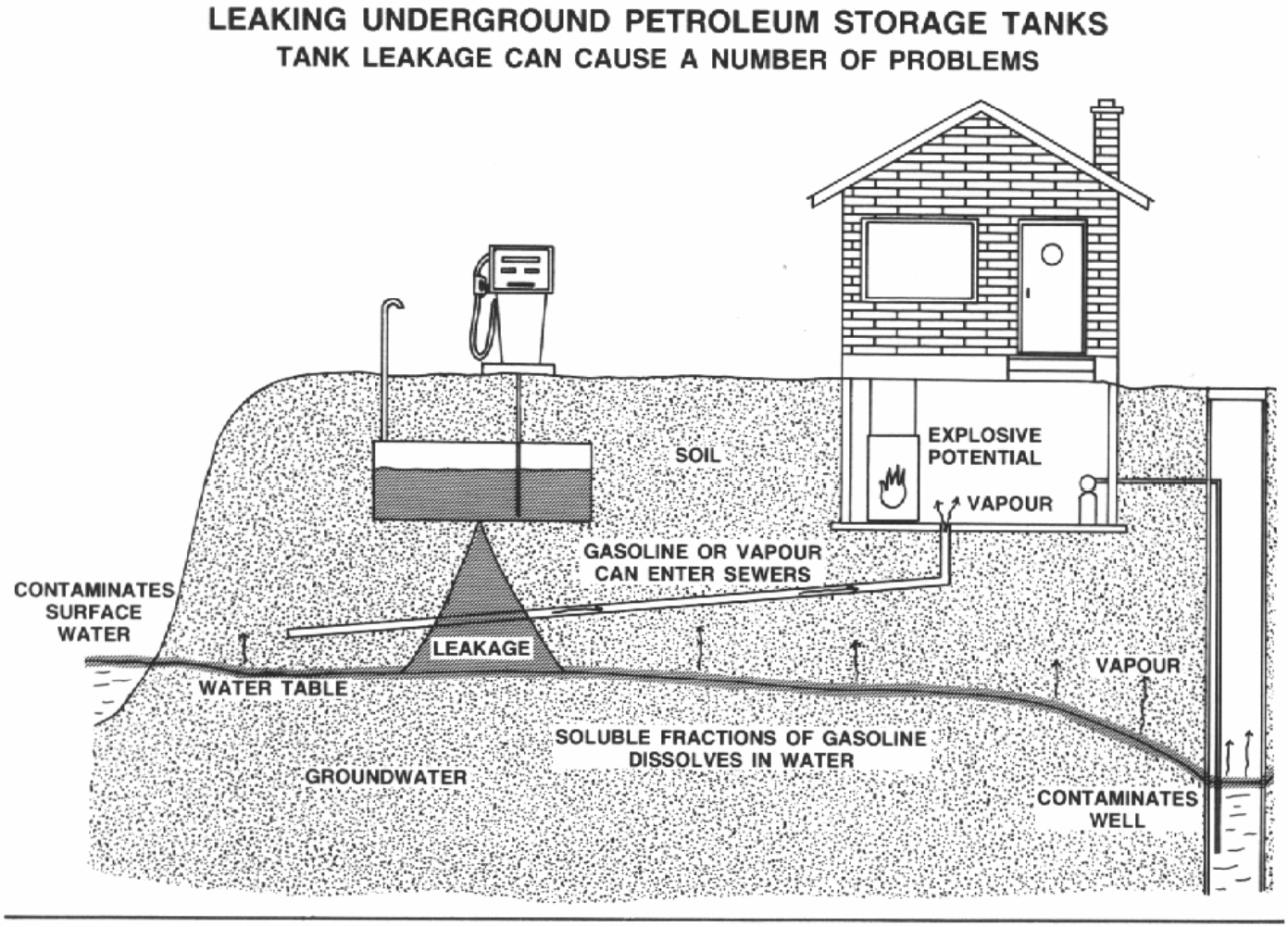
Purpose of the Regulations

Reduce leaks into environment

Reduce impact of spill events

SOIL AND GROUNDWATER PROTECTION

Purpose of the Regulations



Purpose of the Regulations

Soil and groundwater contamination affect 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 ~

Authority

Canadian Environmental Protection Act, 1999 (CEPA)

- Government of Canada's primary legislation for control of harmful substances in the environment

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

•Maximum penalties include fines of up to $1 million a day for each day an offence continues, imprisonment for up to three years, or both.

•Enforcement tools range from warnings to prosecutions.

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))**
   - *Federal departments, boards and agencies*
   - *Crown corporations*
   - *Airports, railways and ports*
   - ***Federal lands and Aboriginal lands***

Which systems are covered by the Regulations?

- **All underground storage tank systems**
- **For aboveground storage tank systems:**
  - outdoor and connected to a heating appliance or emergency generator tanks larger than 2500 liters*
  - all other outdoor tanks

*2500 liters = 550 Imperial Gallons

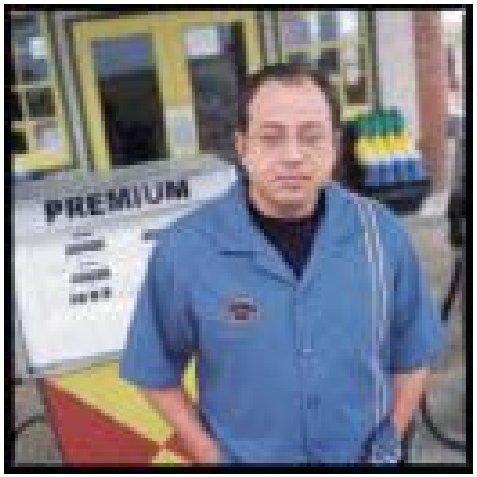
Application

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*

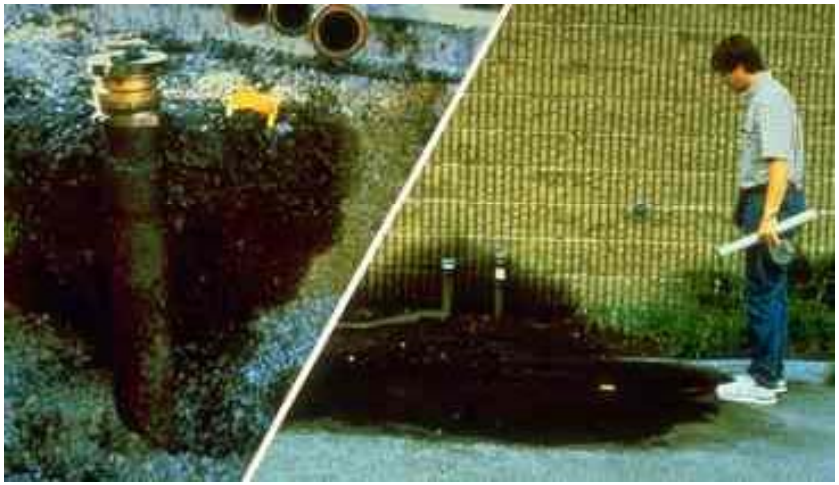
Roles of owner / operator:

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



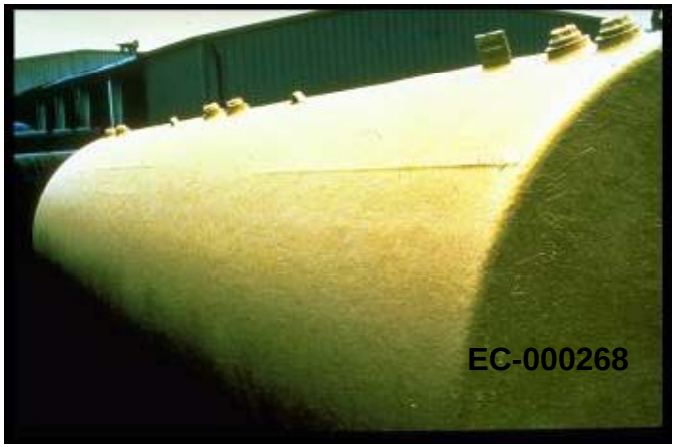
Suppliers' responsibilities…

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



Definitions

Definition: Storage tank



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

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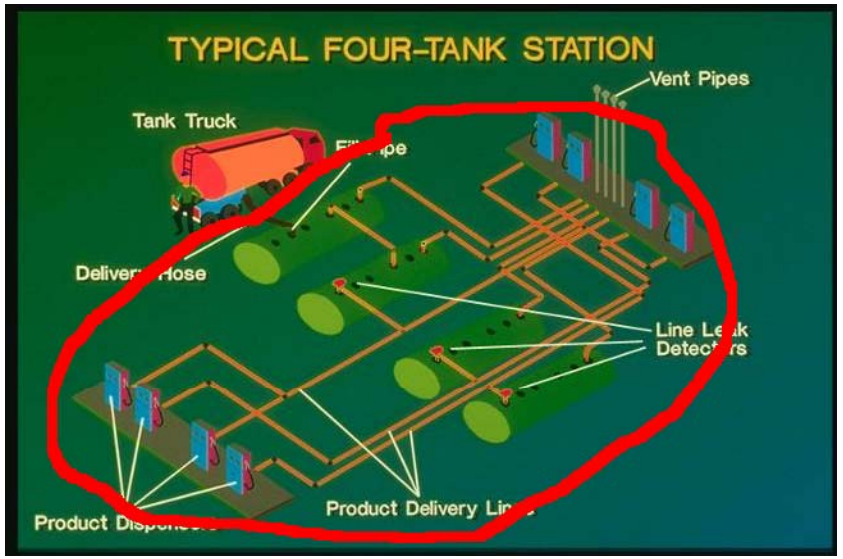
Definition: Storage Tank System

- One or more commonly connected tanks and components:

- **Piping and vents**
- **Pumps and sumps**
- **Diking**
- **Overfill protection devices**
- **Spill containment devices**
- **Oil water separators**



Overview of the Regulations

- Withdraw leaking systems
- Remove 'high risk' systems
- Mandatory compliance with technical requirements for 'new' systems
- Leak detection for components without secondary containment
- Identification with EC
- Containment of spills at product transfer areas

Overview cont'd...

- Transfer of product to ID'd systems only
- Emergency plans
- Approved installers
- Operation and maintenance requirements
- Spill reporting
- Record keeping

Overview of the Regulations

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
- On-line, or mail or Fax (819-953-7253)
- Receive ID number from EC
- Display ID number on or near tank system

Overview of the Regulations

On-line

“FIRSTS”

Overview of the Regulations

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>

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)

(Page 1 of 6)

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*

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 without corrosion protection and leak detection
- Single-walled underground piping without corrosion protection and leak detection

Permanent withdrawal & removal is required by June 12, 2012

Overview of the Regulations

* 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

What are the design requirements for new systems?

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

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 and signed by a professional engineer

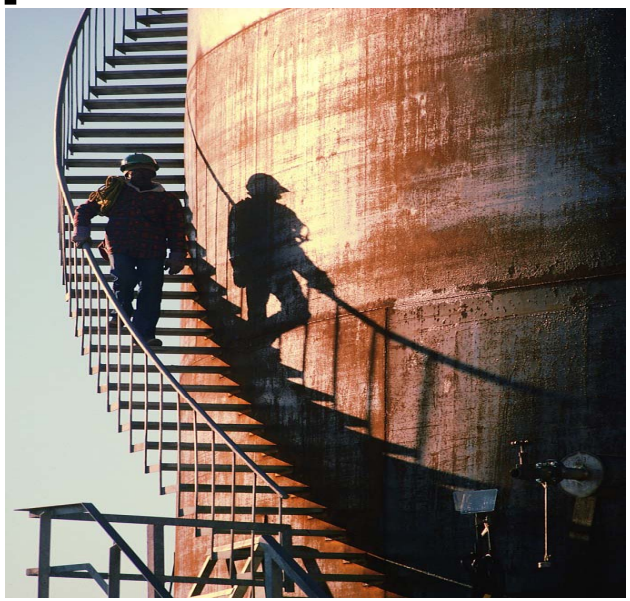
Product Transfer Areas

Product Transfer Areas – s.15

- **Designed to *contain spills***
- **Applies to storage tank systems larger than 2500 liters**
- **Applies June 12, 2012**

Leak Detection

What are the leak detection requirements?



For existing tanks or piping that is single-walled:

-one-time leak detection test by June 12, 2010, followed by various options for continuous leak detection

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

Release Reporting

Spill reporting requirements s.41

- Verbal notification as soon as possible
- Written follow up for spills 100 liters or larger

Will Use Existing Spill Reporting Lines Across Canada

In Ontario – Spills Action Centre

1-800-268-6060

ID & New installations

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

Keep these for the life of the tank!

**** Must be retained until system removed***

Critical timelines

June 12, 2008

- Leaking storage tank systems must be withdrawn from service
- Release reporting for all systems
- Technical requirements for all new systems
- Product transfer area requirements for all new systems
- Emergency plans in place for all new systems

June 12, 2009

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

Critical timelines

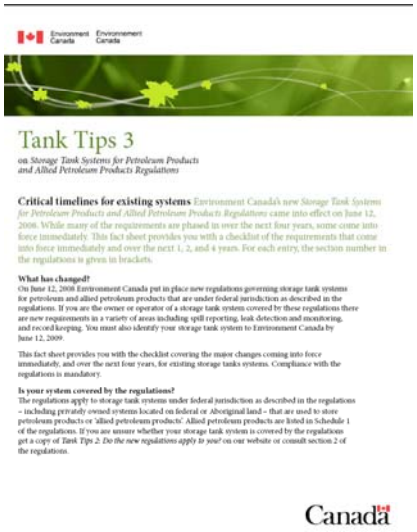
June 12, 2010

- 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
- Initial prescribed leak detection test completed on all single-walled USTs and u/g piping, all ASTs and a/g piping without secondary containment, and all sumps
- Ongoing leak detection or monitoring programme in place for all single-walled USTs and u/g piping, all ASTs and a/g piping without secondary containment and all sumps

Critical timelines

June 12, 2012

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



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Tank Tips 3

on *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*

Critical timelines for existing systems Environment Canada's new *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* came into effect on June 12, 2008. While many of the requirements are phased in over the next four years, some come into force immediately. This fact sheet provides you with a checklist of the requirements that come into force immediately and over the next 1, 2, and 4 years. For each entry, the section number in the regulations is given in brackets.

What has changed?
On June 12, 2008 Environment Canada put in place new regulations governing storage tank systems for petroleum and allied petroleum products that are under federal jurisdiction as described in the regulations. If you are the owner or operator of a storage tank system covered by these regulations there are new requirements in a variety of areas including spill reporting, leak detection and monitoring, and record keeping. You must also identify your storage tank system to Environment Canada by June 12, 2009.

This fact sheet provides you with the checklist covering the major changes coming into force immediately, and over the next four years, for existing storage tanks systems. Compliance with the regulations is mandatory.

Is your system covered by the regulations?
The regulations apply to storage tank systems under federal jurisdiction as described in the regulations – including privately owned systems located on federal or Aboriginal land – that are used to store petroleum products or 'allied petroleum products' Allied petroleum products are listed in Schedule 1 of the regulations. If you are unsure whether your storage tank system is covered by the regulations get a copy of *Tank Tips 2: Do the new regulations apply to you?* on our website or consult section 2 of the regulations.

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These timelines may all be found in Tank Tips # 3

Useful websites

- **EC's Storage Tank website for Petroleum and Allied Petroleum Products – http://www.ec.gc.ca/st-rs/. Contains link to Regulations.**
- **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**

Available Resources – Ontario & HQ

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Tanks a lot!