

Canadian Federal Legislation Pertinent to Contaminated Site Management

Remediation Technologies
Workshop 2 – “Licence to
Spill?” Banff, AB

Oct. 17, 2012

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Federal Legislation & Jurisdiction

- Legislative authority over contaminated sites is primarily the jurisdiction of provinces & territories
- Federal government has the authority to legislate “Government Operations and Federal and Aboriginal Land” (Section 9, CEPA)
- Federal regulatory authorities may be triggered by substances or impacts of contamination
- Mostly aimed at prevention

Contaminated Sites - General

- Polluter pays principle - Polluter is responsible for the cost of repairing any damage (site clean up, off-site impacts)
- CCME principles guide jurisdictions in allocating financial and legal liability
- Clean up can be costly!
- No federal regulatory instrument applies to all contaminated sites
- Proper management needs to consider potential adverse affects of the remedial strategy to migratory birds and species at risk

Federal Environmental Acts & Regulations

1. Canadian Environmental Protection Act (CEPA)
2. Fisheries Act (FA)
3. Migratory Birds Convention Act (MBCA)
4. Species at Risk Act (SARA)
5. Canadian Environmental Assessment Act (CEAA)





1. Canadian Environmental Protection Act (CEPA)

- Purpose -to contribute to sustainable development through protection of the environment and human health and through pollution prevention
- “Cradle to Grave” approach for management of toxic substances to prevent or minimize release



1. Canadian Environmental Protection Act (CEPA)

Guiding principles:

- sustainable development
- pollution prevention
- precautionary principle
- polluter pays



1. Canadian Environmental Protection Act (CEPA)

Currently > 40 regulations

-Relevant to contaminated sites:

1. Storage Tank Regulations
2. FHR Regulations
3. PCB Regulations
4. Interprovincial Movement of Hazardous Waste
5. Export/Import of Hazardous Waste Regulations
6. New Substances Notification Regulations





1.1 (CEPA) Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations

Purpose: reduce the risk of contaminating soil and groundwater from tank system discharges on sites of federal jurisdiction

Poor management of fuel storage & handling facilities is the cause of many legacy contaminated sites



1.1 (CEPA) Storage Tank Systems

- Identification of all systems in an EC central database
- Design and installation of new systems according to CCME Code of Practice
- Removal of “high-risk” systems by June 12, 2012
- Leak detection testing
- Immediate removal from service of leaking systems
- Spill reporting and emergency planning
- Requirements for suppliers of petroleum products



1.1 (CEPA) Storage Tank Systems



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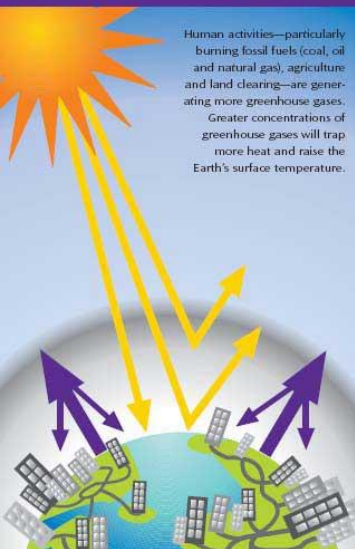
1.2 (CEPA) FHR Regulations

- Intent: to protect Canada's ozone layer
- Purpose: control end-use of halocarbons by
 - setting prohibitions and restrictions
 - phasing out use of some substances
 - improving preventive maintenance

1.2 (CEPA) FHR Regulations

- halocarbons must be recovered from a system any time work is done that could cause a release**
- during installation, service, leak test or charging halocarbons to any system
- prior to dismantling, disposing or decommissioning of any system**

ENHANCED GREENHOUSE EFFECT



Human activities—particularly burning fossil fuels (coal, oil and natural gas), agriculture and land clearing—are generating more greenhouse gases. Greater concentrations of greenhouse gases will trap more heat and raise the Earth's surface temperature.



1.2 (CEPA) FHR Regulations



Halocarbons from contaminated sites must be Recovered & disposed of properly



1.3 (CEPA) PCB Regulations

- Purpose: destruction of PCB wastes and elimination of in-use PCB equipment
- Limits the period of time PCBs can be stored before being destroyed
- Prohibits the release to the environment of *2 ppm* or more for a liquid containing PCBs or 50 mg/kg or more for a solid containing PCBs in storage [*i.e. contaminated soil*]

1.3 (CEPA) PCB Regulations



- *Poor management of PCB equipment & waste storage is the cause of many legacy contaminated sites*



1.4 (CEPA) Interprovincial Movement of Hazardous Waste Regulations

Purpose:

To ensure that the Canadian manifest tracking and hazards classification conditions for waste, formerly set out in the *Transportation of Dangerous Goods Regulations*, are maintained for the interprovincial movements of hazardous wastes.



1.4 (CEPA) Interprovincial Movement of Hazardous Waste Regulations

- *All transits of hazardous wastes or recyclable materials across provincial borders require a movement document to accompany shipment and be submitted to provincial authorities*
- Obtain movement document form and waste generator, carrier and receiver numbers from province of origin or destination
- If a province does not issue movement document forms (eg., Saskatchewan), obtain forms from Environment Canada

1.5 (CEPA) Export/Import of Hazardous Waste Regulations

Purpose: *To ensure that hazardous waste and hazardous recyclable materials that are transported across international borders (to be exported, imported, or to transit through Canada) are managed appropriately to protect the environment and human health. The Regulations also implement Canada's international obligations.*





1.5 (CEPA) Export/Import of Hazardous Waste Regulations

- Send EC a completed and signed **notice** indicating your intent to import or export
- Obtain EC approval (**permit**)
- Proceed with shipment with proper documentation (the **permit** and a **movement document**)
- Complete the final disposal or recycling
- Submit to EC movement documents and notice of final disposal/recycling and retain records



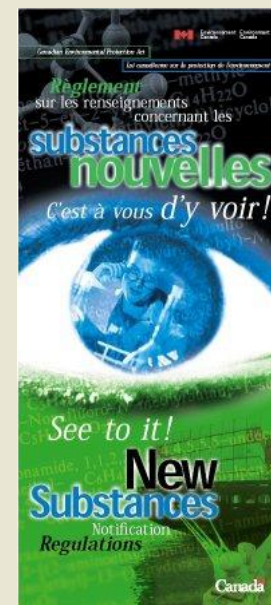
1.6 (CEPA) New Substances Notification Regulations

- to ensure no new substances (chemicals, polymers or animate products of biotechnology) are introduced into the Canadian marketplace before completion of an assessment of potential toxicity and any appropriate or required control measures have been taken
- Includes chemicals, polymers and micro-organisms
- *Helps to ensure that no toxic compounds are accidentally introduced to the environment during remediation activities*



1.6 (CEPA) New Substances Notification Regulations

- Applies to: Importers or manufacturers of any new chemical (including **nano-particles**), biochemical, polymer or biopolymers
- Any new substances used for example, in mining, oil and gas extraction, waste water treatment, bioremediation, natural health products, cosmetics etc.
- Requirements: Any company or individual who intends to import or manufacture a new substance in Canada must submit a notification to Environment Canada prior to importing or manufacturing the substance.



2. Fisheries Act



- Purpose – to protect Canada's fishing industry, both coastal and inland
- Applies to all waters that may contain fish, permanently or seasonally
- Minister of Fisheries and Oceans is legally responsible for the Act
- EC administers and enforces the pollution prevention provisions, subsection 36(3)

2. Fisheries Act



- Very broad prohibition against “deposit of deleterious substances into waters frequented by fish”
- specific compounds not defined
- *Many compounds migrating from contaminated sites may be considered “deleterious” to fish and therefore subject to controls under the FA*

2. Fisheries Act

Deleterious substance

“...any substance that, if added to any water, would degrade or alter ... the water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat...”



3. Migratory Birds Convention Act

Purpose

- to ensure the conservation and protection of migratory birds (protection from indiscriminate harvesting and destruction)
- Very broad prohibition against “deposit of deleterious substances into areas frequented by migratory birds”
- specific compounds not defined
- *Many compounds at contaminated sites may be considered “deleterious” to migratory birds and therefore subject to controls under the MBCA*

3. Migratory Birds Convention Act



- No person shall disturb or destroy the nests or eggs of migratory birds
- Permits are required for certain activities related to disturbance of migratory birds, eggs or nests

EC may:

- recommend that project activities be avoided during the nesting season
- have proponent confirm there are no active nests in vicinity of activities; and if so, halt activities until nesting is completed

4. Species at Risk Act (SARA)

Purpose: to prevent endangered or threatened wildlife from becoming extinct or extirpated (lost from the wild in Canada)

- to help in the recovery of these species
- to ensure species of special concern do not become endangered or threatened
- *The presence of SARA species and/or habitat must be considered during site remediation options*

4. Species at Risk Act (SARA)

SARA and contaminated sites:

- Any project requiring a federal environmental assessment must:
 - identify potential adverse effects on species at risk, their residence and their critical habitat
 - take steps to avoid or lessen impact and conduct monitoring



5. Canadian Environmental Assessment Act (CEAA)

EA is a process for predicting, mitigating and managing environmental effects of a proposed project

- CEAA is a planning and decision-making tool to ensure that projects undertaken by federal entities do not cause significant adverse environmental impacts

Project reviews allow for the identification and resolution of contaminated site issues

Summary

- Legislative authority over contaminated sites is primarily the jurisdiction of the provinces and territories; federal focus is on “federal facilities”
- Federal environmental legislation is in place to: (a) prevent the creation of contaminated sites; & (b) address risks associated with legacy contaminated sites
- Specific Federal environmental legislation exists to protect fish/fish habitat, migratory birds/ migratory bird habitat and species at risk or their habitat from adverse impacts of contaminated sites

Website Links for Further Information

CEPA & FA: www.ec.gc.ca/pollution

MCBA: www.ec.gc.ca/nature

SARA: www.sararegistry.gc.ca

CEAA: www.acee-ceaa.gc.ca

Questions?

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