



Tank Tips 2

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

Do the new regulations apply to you? Environment Canada has passed new regulations governing storage tank systems under federal jurisdiction as described in the regulations. This includes tanks located on federal or Aboriginal lands. The regulations cover tanks storing petroleum products and allied petroleum products, and compliance with these regulations is mandatory. This fact sheet will help you determine if the new regulations apply to you and it will provide you with websites and contact numbers for more information.

Petroleum products are found in approximately 66% of the known contaminated sites on federal and Aboriginal lands in Canada.

What has changed?

Until recently, owners of storage tank systems under federal jurisdiction as described in the regulations were required to register their systems and were provided with technical guidelines to ensure that tanks were properly equipped and maintained to avoid leaks and spills. Compliance with these guidelines, however, was voluntary.

Environment Canada estimates that, of the approximately 10 000 storage tank systems within federal jurisdiction, around 3000 are more than 20 years old and, with no leak detection systems, corrosion protection, or secondary structures to contain spills or leaks, are very likely leaking. To protect communities and the environment, on June 12, 2008 Environment Canada brought in new regulations aimed at preventing leaks and spills.

Under the new *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* both owners and operators of storage tank systems must comply with the regulations, unless only one or the other is specified in a particular requirement. In other words, if you operate a storage tank system the terms in this fact sheet 'your tank system' and 'my tank system' mean 'the storage tank system you operate', and compliance with the regulations is mandatory.

Petroleum products released into soil pose a variety of risks in the geo-environment. These risks include combustion hazards, direct toxic risks to humans, plants and animals, effects on soil processes such as water retention and nutrient cycling, movement to water and air, and aesthetic problems such as objectionable odour and sheen. Left unmanaged, petroleum products in the geo-environment can cause important adverse effects.

Do the new regulations apply to your tank system?

To know if these new regulations apply to your system (i.e. the system you operate or own), you must be able to answer the following questions.

1. *Is my tank system located on federal or Aboriginal land, or within federal jurisdiction as described in the regulations?*
2. *Are the products I'm storing in my tanks covered by these regulations?*
3. *Do these regulations apply to my type of storage tanks or containers?*

1) Is my tank system located on federal or Aboriginal land, or within federal jurisdiction as described in the regulations?

- The new regulations cover storage tank systems located on federal or Aboriginal land. For example, storage tank systems operated by band councils are subject to the regulations, as are tanks owned by private businesses such as lodges or marinas located on Aboriginal land. The regulations also apply to tanks operated by, say, private mining or forestry companies located in a federal park or on Crown land.
- The new regulations also apply to storage tank systems operated by any federal department, board or agency, or owned by the Crown.
- Finally, the regulations apply to storage tank systems operated by or belonging to a federal work and undertaking that is a railway, port authority, or airport.

2) Are the products I'm storing in my tanks covered by these regulations?

The new regulations cover only specific products. The most common are stored petroleum products such as gasoline, diesel, jet fuel and home heating oil. The definition of petroleum product used in the regulations is:

A single hydrocarbon or a mixture of at least 70% hydrocarbons by volume, refined from crude oil, with or without additives, that is used or could be used as a fuel, lubricant or power transmitter, and includes used oil, but does not include propane or most paints or solvents. (section 1)

What the regulations refer to as 'allied petroleum products' include substances such as isopropanol, uninhibited ethylene glycol and E85 fuel. A complete list of 'allied petroleum products' is found in Schedule 1 of the regulations and at the end of this fact sheet. If you are storing any of these products, even in an aboveground tank, then the regulations may apply to you. The regulations do not, however, apply to unprocessed petroleum products.

Soils are hydrologically linked to groundwater systems. A major concern with soil contamination is that it can and does lead to groundwater contamination, which may be technically, economically, or otherwise difficult or currently impossible to remediate.

3) Do these regulations apply to my type of storage tanks or containers?

Environment Canada's new regulations apply to both aboveground and underground storage tanks and containers that:

- have a capacity of more than 230 litres
- are vented to the atmosphere (in other words operate at atmospheric pressure)
- and are designed to be installed in a fixed location

The regulations also apply to all the piping and other equipment associated with the tanks.

The following tank systems **DO NOT** fall under the new regulations.

- Containers smaller than 230 litres
- Indoor storage tanks
- Pressurized tanks like those storing propane
- Mobile tanks such as those on the back of pickup or other trucks
- Outdoor, aboveground tanks that have a total combined capacity of 2500 litres or less and are connected to a heating appliance or an emergency generator
- Tanks regulated by the National Energy Board

To summarize, if the tank system you operate or own:

- falls within federal jurisdiction as described in the regulations (Question 1)
- stores petroleum or an allied petroleum product (Question 2)
- AND falls into a type of tank or container covered by these regulations (Question 3)

you need more information. Please see section 2 of the regulations for specific information on what systems are subject to the regulations.

Petroleum products have been known to affect buried infrastructure, including underground utilities. Of particular concern is the potential for petroleum products to enter water distribution systems, though impacts on other utilities are undesirable as well.

There are now specific requirements for leak detection, corrosion protection and the removal of high risk tanks and piping. While tank owners/operators have between two and four years to comply with many of the requirements, some take effect immediately.

An important new requirement is that storage tank system owners identify their tank systems with Environment Canada by June 12, 2009 for existing systems, and before the first fill for new systems. This can be done quickly online through our website or we can mail you a form. Please note that as of June 12, 2010, suppliers will no longer be allowed to fill tanks that do not display an Environment Canada identification number.

Where do you get more information?

On our website: www.ec.gc.ca/st-rs. If you'd like us to mail you the information below please call: 819-934-2991 (0900 h – 1700 h EST/EDT).

The following documents are available on our website:

- *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*
- *Tank Tips* fact sheets, each one covering a specific part of the new regulations
- *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products*, Canadian Council of Ministers of the Environment
- *Canadian Environmental Protection Act, 1999*
- Compliance and Enforcement Policy for the *Canadian Environmental Protection Act, 1999*

If you have specific questions on the regulations please contact your regional office.

Pacific & Yukon	storage.tanks.pyr@ec.gc.ca	604-664-9100
Prairie & Northern		780-951-8600
Ontario	EnviroInfo.Ontario@ec.gc.ca	416-739-4826
Quebec	quebec.lavoieverte@ec.gc.ca	800-463-4311
Atlantic	15th.reception@ec.gc.ca	902-426-7231

Allied Petroleum Products

1. Thinner for Vinyl Coatings (CGSB 1-GP-124)
2. Antiblush Thinner for Cellulose Nitrate Lacquer (CGSB 1-GP-136)
3. Boiled Linseed Oil (CGSB CAN/CGSB-1.2-89)
4. Petroleum Spirits Thinner (CGSB CAN/CGSB-1.4-92)
5. High Solvency Thinner (CGSB CAN/CGSB-1.70-91)
6. General Purpose Thinners for Lacquers (CGSB CAN/CGSB-1.110-91)
7. Solvent for Vinyl Pretreatment Coating (CGSB CAN/CGSB-1.164-92)
8. Acetone, Technical Grade (CGSB 15-GP-50)
9. Methyl Ethyl Ketone, Technical Grade (CGSB 15-GP-52)
10. Offset Lithographic Printing Ink (CGSB 21.1-93)
11. Isopropanol (CGSB 3-GP-525)
12. Methanol, Technical Grade (CGSB 3-GP-531)
13. Ethylene Glycol, Uninhibited (CGSB 3-GP-855)
14. Benzene
15. Toluene
16. Biodiesel
17. E85 fuel
18. Oxygenated gasoline

This material has been prepared for convenience of reference and accessibility and does not have an official character. It is of a general nature only. For all purposes of interpreting and applying the regulations, users must consult the official version of the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations.