

GUIDANCE DOCUMENT

**Title: Guidelines for Drum-Based Petroleum Products Storage And
Operation At Remote Sites**

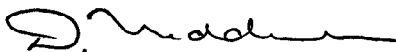
Prepared By: Derrick Maddocks, Robert Locke

Issue Date: January 20th, 2014

**This document replaces “Provincial Environmental Guidelines
for Drum-based Petroleum Products Storage and Operation”
dated November 30, 1999**

Revised: August 14, 2014

Approved By:



Derrick Maddocks, Director

1.0 SUBJECT:

The storage of petroleum products in drums at remote sites.

This document does not address storage of used oil in drums. Storage of used oil in drums is addressed in Subsection 21(2) of the *Used Oil Control Regulations*.

This document does not address the storage of drums in preparation for shipment to remote sites (see Guidance Document GD-PPD-072.2).

2.0 OBJECTIVES:

- To define acceptable situations where petroleum products may be stored in drums at remote sites.
- To define requirements which provide acceptable environmental protection when storing petroleum products in drums.

3.0 LEGISLATION:

- *Environmental Protection Act*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003*

4.0 DEFINITIONS:

Certificate of Approval:	an approval as defined in Section 7.0 of this document
Drums:	nominal 205 litre/55 U.S. gallon metal or plastic containers for storage of petroleum products, and includes similarly sized drums or containers designed for storage of petroleum products. Containers must have the capability to be closed
ENVC:	Department of Environment and Conservation
Factory Pre-Filled Drums	means drums which have been filled by the product manufacturer, usually at a refinery or bulk storage facility, for the purpose of supplying pre-packaged product
Registered:	registered under Section 13 of the <i>Storage and Handling of Gasoline and Associated Products Regulations, 2003</i>
SNL:	Service Newfoundland and Labrador

5.0 PRINCIPLE:

Petroleum products shall be stored in registered tanks meeting the requirements of the applicable construction and installation code. These tanks shall be secondarily contained.

Where ENVC or SNL on behalf of ENVC determine that use of a tank is not practical, petroleum storage in drums may be accepted where the requirements in Section 6.0 are met.

This means that drum storage will normally only be approved for remote sites, without road or easy sea access, only for short term storage and generally in small quantities.

Since transferring petroleum products increases the risk of spills, ENVC and SNL will accept storage in factory pre-filled drums in locations where the only option is to deliver product to the site in such drums.

Storage drums cannot be refilled on site from another source, such as a fuel delivery truck.

6.0 REQUIREMENTS FOR PETROLEUM STORAGE IN DRUMS:

The proponent is required to submit an application (see Application For The Establishment Of Fuel Caches At Remote Sites) with the required information:

- Submission of application at least 30 days in advance
- Proponent's name and contact information
- Location on a topographic map: demonstrate that the location is environmentally protective, i.e. on level terrain, away from water bodies, protected by a suitable secondary containment system (provide details)
- A secondary containment system is normally required. The secondary containment system must be non-permeable, meet engineering standards (either geosynthetic or engineered natural material), and must of sufficient capacity to contain a minimum of 110% of the total volume of product stored
- The secondary containment system must have a means to drain water/precipitation and should be protected from the weatherDuration of storage, estimated start and end dates
- Number of drums and product being stored
- Purpose of storage: explanation why a tank is not practical
- Supplier of petroleum products, base of operation of supplier and contact information
- Method of transportation to and from storage site, transporter's name and contact information
- Final destination of empty drums: disposal on site is not permitted. Regular removal is required. Reuse, or return to supplier is preferred.
- Location of drums in relation to sources of ignition or other human activities
- Contingency Plan (secondary containment will normally be required)
- Security Plan
- Operational Plan (how petroleum will be removed from drums, how drums will be handled, how damaged drums will be managed, how site will be decommissioned, etc.)
- Inventory Control Plan (see Fuel Cache Inventory for an acceptable format)

7.0 OTHER:

Any leak or spill of gasoline or associated product shall be reported immediately to SNL by calling the Canadian Coast Guard Environmental Emergency line at 772-2083 or 1-800-563-9089. Any resulting cleanup shall be conducted as per ENVC legislation, regulations, policies and procedures.

Where the proponent has provided sufficient and acceptable information as per Section 6.0, and storage is for 5 or more drums, SNL will issue a Certificate of Approval for the proposed drum-based petroleum storage. Where less than 5 drums are to be stored, notification by the proponent with the information in Section 6.0 is sufficient, no Certificate of Approval will be issued.

All drums shall be permanently labelled indicating contents and the owner's name.

Where operations are seasonal, storage of drums off season at a remote site is not permitted.

Approval will not normally be given for storage of more than 50 drums, including filled, partially filled and empty.