SPCC Regulations

Many facilities with railroad transloading racks are required to have a Spill Prevention, Control and Countermeasure (SPCC) Plan. This plan is a part of the Environmental Protection Agency’s Protection Rule published under the authority of Section 311(j)(i)(c) of the Federal Water Pollution Control Act (Clean Water Act). This prevention rule calls for facilities subject to the rule to prepare and implement a plan to prevent discharge of oil into or upon navigable waters in the United States or adjoining shorelines. The regulation may be found at Title 40, Code of Federal Regulations, Part 112 (40CFR112). Enacted in July 2002, the regulations have been extended several times to provide sufficient time for facilities subject to the regulation to plan, prepare and implement an SPCC plan. Some issues regarding the Spill, Prevention, Control and Countermeasures Plan regulations have been involved in litigation causing extensions to final implementation and enforcement. The new compliance deadlines for SPCC plans are as follows:

Oil Company Railroad Tank Car Transloading Rack

- EPA – SPCC Extension, November 20, 2010 Federal Register, pp. 74236-323, 40 CFR 112, Rule – Extends the dates by which facilities must prepare or amend Spill Prevention, Control, and Countermeasure (SPCC) Plans, and implement those plans. An owner or operator of a facility that was in operation on or before August 16, 2002, must make any necessary amendments to the SPCC plan, and implement that plan, on or before November 20, 2009. An owner or operator of a facility that came into operation after August 16, 2002, must prepare and implement an SPCC plan on or before November 20, 2010. On June 19, 2009, EPA published in the Federal Register a SPCC compliance date extension for all facilities until November 10, 2010. Facilities must amend or prepare, and implement SPCC Plans by the compliance date in accordance with revisions to the SPCC rule promulgated since 2002.

Facility Tank Car Loading Rack

Features & Benefits:
A facility may be required to implement the SPCC regulations if it meets the following criteria:

Biodiesel Railcar Loading Facility

1. It handles Petroleum and / or Non-Petroleum oils.
2. It must be non-transportation related.
3. It must have aggregate above ground storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons.
4. There must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines.

Many facilities such as oil refineries, power generation stations, ports, railroad transloading facilities, food processing facilities and petro chemical complexes are required to have an SPCC plan.
What is considered oil by the Environmental Protection Agency?
The term “oil” means “oil of any kind or in any form, including but not limited to - petroleum; fuel oil; sludge; oil mixed with wastes other than dredge spoil; fats; oils; greases of animal, fish, or marine mammal origin; vegetable oils, including oil from seeds, nuts, fruits, or kernels; and other oils and greases, including oils and mineral oils.”

Note that the list and definition of oil is a dynamic document and has changed over the years and one should expect that there will be additional products added over time. If your facility handles a product which you think may be considered an oil click on the link below to verify if it is considered an oil by the EPA. Should you have other questions concerning SPCC regulations one should contact their regional EPA office and ask for the person in charge of SPCC regulations.

What determines whether a facility could reasonably discharge oil into or upon navigable waters or adjoining shorelines?
The location of your facility geographically and aspects of the facility in relation to navigable waters is one of the main factors that determine whether you must have an SPCC plan. Is there a reasonable chance that if you have an accidental discharge of oil and that it could find its way into a ditch, storm drain or sanitary sewer that leads to a wetland, mudflat, stream, river, bay and/or ocean then your facility may require an SPCC plan.

How does the SPCC regulations relate to railroad tank cars and railroad transloading facilities?
The SPCC regulations CFR 112.7(h)(l) states “Facility tank car and tank truck loading/unloading rack (excluding offshore facilities); (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading/unloading areas. You must design a containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded/unloaded at the facility.”
Below are excerpts and comments regarding “SPCC Guidance For Regional Inspectors” published by the EPA.

**“Sufficiently Impervious”**
Requirements set forth in Section 112.7(c) which states that the entire secondary containment system “including walls and floors, must be capable of containing oil and must be constructed so that any discharge from a primary containment system will not escape before cleanup occurs”.

The purpose of the secondary railroad spill containment requirement is to prevent discharges as described in 112.1(b); therefore, effectively's secondary containment methods must be able to contain oil until the oil is cleaned up. EPA does not specify permeability or retention time performance criteria for these provisions.

The HDPE Enviropan® in most all cases meets the EPA SPCC “Sufficiently Impervious”. Because the Century Enviropan® system is manufactured out of one of the most durable high-density polyethylene compounds in which many fuel and storage tanks are manufactured, in most every case the HDPE Enviropan® system will overwhelmingly meet the sufficiently impervious criteria. Normally the Enviropans are a part of the total secondary containment plan to sufficiently contain the accidental spillage of a railroad tank car. In most cases the Enviropan® system is piped to a wastewater treatment, retention pond, holding tank or an oil/water separation system whose aggregate containment capacity including the HDPE railroad spill collection pans meets or exceeds SPCC regulations.

**“Impracticability”**
In some cases owners and operators of facilities which handle oil products in railroad transloading operations, fueling and rail carwash operations will claim that it’s impractical to provide secondary containment of railroad tank cars and locomotives in transloading, fueling and carwash facilities.

The Enviropan® system is widely used across North America for railroad spill containment and is considered the best available technology among engineers, railroads, industry and the military because its durable, economical and easy to install. Because of the track record and reasons mentioned above, the use of the Century railroad spill collection pans as part of secondary containment at railroad transloading racks, etc... negates the argument of “impracticability”.

Century Group HDPE railroad spill collection pans at the Kinder Morgan Bulk Terminals in Portland, Oregon
“Transfer Operation”
Regulation 112.7(c) applies to both loading and unloading areas. A transfer operation is one in which oil is moved from or into some form of transportation, storage, equipment, or other device, into or from some other or similar form of transportation, such as a pipeline, truck, tank car or other storage, equipment or device (67 FR 47130).

Railroad secondary containment food processing facility.

Secondary containment size should be based on the magnitude of a most likely discharge, taking into consideration the specific features of the facility and operation. Specific features of different loading/unloading operations include the hardware, procedures and personnel who are able to take action to limit the volume of a discharge.

In regard to railroad transloading racks, the Century Enviropans alone in most cases will provide the necessary containment required to capture the volume of material spilled until the necessary emergency action takes place to stop the discharge.

A large majority of accidental spills in railroad transloading racks occur due to the following:
- Failure of hose connection, valve
- Accidental overfill of tank car
- Residual fluid spills from hoses, valves, covers and other equipment disconnected
- Leaking tank car valve

When designing secondary spill containment at a railroad loading/unloading rack, EPA recommends that a determination of adequate secondary containment consider:
- The reasonably expected sources and causes of a discharge. This could be a failed hose connection; failed valve; overfill of a railroad tank car or breach of the tank car itself.
- The reasonably expected maximum rate of discharge. This will be dependent on the mode of failure. It may be the maximum rate of transfer or the hypothetical leakage rate from a breached tank car.
- The ability to detect and react to the discharge. This will be dependent on the availability of monitoring instrumentation for prompt detection of a discharge and/or the proximity of personnel to detect and respond to the discharge.
- The reasonably expected duration of the discharge. This will be dependent on the availability of manual or automatic valves, the proximity of qualified personnel to the operations and other factors that may limit the volume of the discharge.
- The time it would take a discharge to impact navigable waters and adjoining shorelines. This could depend on the proximity to waterways and storm drains and the slope of the ground surface between the loading area and the waterway or drain.
Century Group Service

If your facility meets the criteria for a SPCC plan and you have a railroad tank car transloading rack then you most probably need a railroad spill collection system. This is where Century Group Inc. can assist engineers, planners and EH & S personnel in developing a system that provides the most innovative, cost-effective and user friendly railroad spill collection and secondary containment at your railroad transloading or fueling area.

Commonly referred to as railroad drip pans or spill pans, the Century Enviropan® system is far more than just a pan in the railroad tracks when it comes to secondary containment and spill collection. The Century Enviropan® system was designed by our highly experienced staff with extensive experience in designing and constructing railroad spill containment systems. The Enviropans were developed to overcome many of the shortcomings that were encountered constructing poured-in-place concrete secondary containment systems and/or using other types of railroad spill collection equipment.

Railroad Tank Car Loading Rack Petroleum / Fuels

Over the past two decades Century Group Inc. has assisted engineers, Environmental, Health & Safety personnel and facility managers in developing a railroad spill collection system that is a key part of SWPP (Stormwater Pollution Prevention Plans) and the new SPCC regulations. Century Group’s goal is not only compliance, but making sure that the spill containment system being installed is compatible with the materials being handled, easy to install, is safe and will provide the maximum service life.

Century Group’s experienced and innovative staff is committed to making sure that your railroad spill collection and containment project minimizes railroad track downtime, runs smoothly and meets all expectations. Some of the services that we offer are:

1. Consultation regarding rehabilitation of the existing railroad tracks to accept the HDPE Enviropan® systems. If new track construction is required, we can assist with track construction specifications for materials such as crossties, rail, ballast, etc... Century Group can also recommend construction procedures to be adhered to such as welding of rail, surfacing and final ballast dressing of the railroad tracks.
2. Century Group also offers pre-construction inspection of the project site to make sure that there is proper clearances to allow for installation of the spill collection pans and make recommendations if the railroad track requires upgrading of rail, etc...
3. Customization of your spill containment system to fit around loading platforms, piping and other obstructions
4. Century Group can also provide written specifications, CAD shop and as-built drawings of our spill collection systems to be incorporated into your project plans and specifications. These shop drawings will also become a valuable piece of information when putting together safety, quality control and environmental compliance plans and documentation.
5. Century Group Inc. can also assist your company in providing documentation and even meeting with state or federal environmental regulators to insure that your railroad spill containment project satisfies all mandated regulations.
6. Once Century Group manufactures and delivers the railroad spill collection system, we offer technical personnel to assist your railroad contractor in installing the railroad spill collection pans to insure that you are totally satisfied with the Century HDPE Enviropan® system.

www.centurygrp.com
Contact the Century Group Railroad Products Division at 1-800-527-5232, Ext. 118
PROACTIVE
As a supplier, Century Group Inc. is proactive in the railroad industry by ensuring that all sales and technical field representatives have been through the Class I Railroad’s e-rail safe program, the Roadway Worker On-Track Safety program overseen by the Federal Railroad Administration (FRA) and the Transportation Worker Identification Credential Program (TWIC) implemented by Transportation Security Agency (TSA) and the U. S. Coast Guard. Safety and security at jobsites is the highest priority at Century Group Inc. All Century Group products are American made, manufactured at our five locations across the U.S.

Railroad Tank Car Transloading Facility

With over five decades of railroad construction and maintenance experience, the Century Group technical staff can be a valuable working partner in assisting industry in developing a railroad spill collection system that is compliant with SPCC and other environmental regulations. Our record working with Class I and shortline railroads, industry, light rail transit authorities and U. S. military facilities across North America allows us to provide the most advanced and unparalleled expertise in railroad spill collection systems.

We’re committed in providing you with a full range of railroad spill collection and secondary containment technology that will be compliant and will assist your company in meeting its environmental objectives and demonstrate its commitment to being a good steward of the environment.

Commuter Rail Fueling Area

Aviation Fuel Transloading Facility

Class I Railroad Fueling Facility