



SPILL CONTAINMENT AT PRODUCT TRANSFER AREAS

Under section 15 of the Storage
Tank Systems for Petroleum
Products and Allied Petroleum
Products Regulations, product
transfer areas must be designed
to contain spills. This fact sheet
will help you determine how
to comply with this requirement.



Tank Tip 13

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

What is a product transfer area?

The regulations define a transfer area as "the area around the connection point between a delivery truck, railcar, aircraft or vessel and a storage tank system." In other words, it is the general area where product is transferred into a storage tank system from a delivery vehicle. The product can be any petroleum or allied petroleum product covered under the storage tank regulations (please see Tank Tip 2 - Do the Regulations Apply to You? for a list).

If you are the owner or operator of a storage tank system, you need to design your transfer area to make sure it can contain spills.

Who is required to have a product transfer area?

If your tank system has a total storage capacity of more than 2500 litres, then the regulations apply to your system.

How do you design a product transfer area that works?

The owner or operator of the storage tank system must be able to demonstrate that the product transfer area has been designed to contain spills that may occur during the transfer process. The design could involve a combination of:

- permanent or temporary physical containment
- standard operating procedures to reduce risk
- training



The main goal of the design is to ensure that any product released during fuelling is contained, so it does not leak into the environment. A secondary goal is to prevent spills from happening in the first place. Since each tank system will be different, with its own location (sometimes on gravel, sometimes on sloping land, etc.), each product transfer area will also be different. The method you choose to contain spills will be specific to your own system.

Here are some recommended steps for designing a product transfer area that works:

- Step 1: Assess the storage tank system and its surrounding environment;
- Step 2: Identify potential accidents that could happen during product transfer;
- Step 3: Identify and design ways to prevent and contain spills;
- Step 4: Implement and test your design;
- Step 5: Document the results; and
- Step 6: Revise your design if changes are needed.

Remember that you should keep records of this process. You may have to produce them if your product transfer area is inspected.

Is a spill box enough to make a product transfer area safe?

No. Spill containment devices are required for aboveground and underground tanks. The product transfer area has its own requirements.

Is it enough to have a spill kit for cleaning up spills?

No. A spill kit is an important part of your emergency plan, but it does not prevent spills—or contain them. It is used after product has been spilled inside your transfer area.

Do you need permanent physical containment?

Not necessarily. You may certainly wish to have permanent physical containment such as a concrete pad with sides if you have frequent fuel deliveries. It is also possible to have temporary physical containment, such as berms that are inflated during fuel delivery. If temporary berms are used, we recommend taking photographs of them in use during product transfer. Remember to keep the photos with your other records, in case of inspection.

Is physical containment enough?

Probably not. With physical containment, you also need some standard operating procedures to make the design work properly. For example, a concrete dike around a transfer area will have a drain for rainwater to escape when fuel is not being transferred—but you need a procedure for blocking off that drain when transferring fuel.

Is it enough to have operating procedures in place to prevent spills?

Probably not. As stated above, a design to contain spills at a product transfer area would usually involve a combination of procedures, training and physical barriers. Using correct procedures during the transfer process is essential, but it will not completely prevent human error, the most common cause of spills at transfer areas.



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