

Proposed Rule Changes for Marine Loading Operations Fact Sheet

Q: What are marine loading operations?

A: Marine loading operations include many activities. The primary activity is the loading of a liquid into storage tanks onboard a ship or barge. Loading can occur from an on-shore facility (marine terminal) or between two ships (lightering). Usually the liquid being loaded is a finished petroleum product or one being sent for further processing. This rule also covers any material that is loaded into “dirty” tanks (tanks that contain organic vapors from a previous cargo) on ships or barges. For example, water is typically loaded onto ships as they leave the bay for stabilization. This is called ballasting. Most ships have separate “clean” tanks for ballast water. However, if water is loaded into “dirty tanks”, then organic vapors have the potential of being released. This rule also covers maintenance such as tank cleaning and the relieving of tank pressure. These miscellaneous activities are called “housekeeping activities”.

Q: Why is the District considering changing this rule?

A: The primary reason for considering a rule change is to meet the federal and state standards for ground-level ozone (smog). Organic compounds are a component in the creation of smog and these rule changes are intended to reduce organic compound emissions. This will improve the air quality in general, not just on smoggy days.

Q: How do marine loading operations produce organic compound emissions?

A: When organic liquid is stored inside a tank, the space that is not filled, the “headspace”, becomes saturated with organic compounds over time. Depending on a number of factors such as volatility of the liquid (the ease at which the liquid vaporizes), agitation of the liquid, the storage time, and temperature, the amount of organic compounds in the headspace can be high. As the tank is filled, the contents of the headspace become displaced and must be recovered in order to prevent them from being released into the atmosphere.

Q: What are the major changes being proposed?

A: Here is a summary of the major elements of the proposed rule changes:

- (1)** The current regulation only applies to 5 types of petroleum products. The proposal would apply to any loading or housekeeping activity on ships or barges that would emit organic compounds above a set limit.
- (2)** The proposal would reduce the amount of organic compound leakage allowed from marine loading equipment.
- (3)** The proposal contains several requirements that would have companies demonstrate that they are meeting the requirements of the regulation. These requirements include testing, monitoring, and recordkeeping.
- (4)** Since marine loading happens periodically, new reporting requirements will allow the District better opportunities to determine compliance of these operations.