

# OIL AND FLAMMABLE INTERCEPTORS

Minnesota Department of Labor and Industry

## REQUIREMENTS FOR OIL AND FLAMMABLE INTERCEPTORS

Refer to the 2015 Minnesota Plumbing Code, Sections 1009.1 through 1009.7, Section 1011.1 and Sections 1017.0 through 1017.2 for more information about oil and flammable waste interceptors contained in this fact sheet.

### APPROVAL

All oil and/or flammable waste interceptors, including the construction material type, must be approved by the administrative authority for the proposed application.

### WHEN ARE INTERCEPTORS REQUIRED?

The 2015 Minnesota Plumbing Code requires that any harmful waste that will damage a sewer system must be prevented by the proper use of interceptors or clarifiers as determined under Sections 1009, 1009.2, 1011.1 and 1017.1.

- Drains in auto repair shops, service stations and factories discharging oily and flammable waste must connect to an oil and flammable waste interceptor.
- Drains in commercial garages and car wash facilities may receive flammable and/or oily waste that may potentially harm the sewer system, and therefore, these drains discharge into an oil and flammable interceptor before discharging into the public or private sewer.
- Drains subject to these requirements in facilities served by private disposal systems including holding tanks must discharge into an approved interceptor prior to discharging into an exterior holding tank. It is necessary to separate the oil and flammable waste for proper disposal of both the oil and flammable wastes contained in the interceptor *and* the liquid wastewater in the holding tank.

### GENERAL DESIGN REQUIREMENTS

- Interceptors must be provided with a flammable vapor vent of at least 2-inches and vented independent to outer air to an approved location. Vapor vents must be properly designed so they do not become airborne.
- Drains upstream of the flammable interceptor must be sized for the proper application and be un-trapped.
- Outlet drains must be sized at least 3-inches in diameter with full-size cleanout to grade and be vented at a maximum of 6 feet from the outlet water seal. This vent must rise within 45 degrees of the vertical to 6 inches minimum above the lowest floor drain flood level before offsetting horizontally and be separate and independent from the flammable vapor vent.
- Drains must be uniformly pitched at 2 percent.
- Interceptors must be readily accessible and provided with a gas-tight cover.

### TYPES OF INTERCEPTORS ALLOWED

**1.) Rated interceptors** – Manufacturer-rated interceptors are sized and stamped and/or labelled by the manufacturer with the full discharge rate in gallons per minute.

- Each interceptor shall be rated equal or greater than the incoming flow and shall be provided with 2-inch minimum overflow line to a 550-gallon-minimum underground tank.
- The overflow storage tank must be approved for the application and must have a 2-inch minimum pump-out connection at grade, and a 1.5-inch minimum vent terminating independently outside the building at least 10 feet above grade at an approved location.
- The local fire department may have additional requirements for the overflow storage tank and should also be consulted prior to installation.

**2.) Unrated interceptors** – Interceptors not rated by manufacturers must be sized as follows:

- At least 2 feet of depth below the invert of the discharge pipe.
- A water seal of not less than 18 inches on the outlet.
- Where not more than three motor vehicles are in areas where they are serviced, stored, or both, the minimum capacity is 6 cubic feet. For each additional vehicle after three vehicles and up to 10 vehicles, 1 cubic foot must be added for each vehicle. In excess of 10 vehicles, the sizing must be approved by the administrative authority.
- Where vehicles are serviced and not stored, the minimum capacity is 6 cubic feet or 1 cubic foot for each 100 square feet of drained surface, whichever is greater. "Serviced" means areas of facilities where vehicles are repaired, maintenance performed, oil or other fluids changed, or similar.

**3.) Engineered interceptors** – Interceptors not defined as rated or unrated types may be considered as engineered interceptors when specifically designed for the project by a licensed professional engineer and documented by the manufacturer as approved for this application. The engineer must provide documentation that the interceptor is properly designed and sized for the specific project.