

OIL/SAND-MUD INTERCEPTORS

Oil/Sand-Mud interceptors are used in commercial establishments to remove excessive amounts of oil/sand-mud and silt, which may interfere with the proper drainage, and treatment of wastewater. Local plumbing codes generally require the installation of an oil/sand-mud interceptor prior to discharging into the public sanitary sewer system. Typical applications include vehicle/equipment wash down, maintenance garages and manufacturing facilities. The waste discharge, from these facilities, usually contains high inorganic loads, including oil/sand-mud, silt and detergents.

The Purpose of the oil/sand-mud interceptor is to intercept the wastewater and retain it for a sufficient amount of time, which allows for separation of the solids from the water by the use of 6 oil dams. 2 in each 1500 gallon vault. The oil/sand-mud interceptor is typically located outside of the building and buried below grade. The buried interceptor is typically constructed of precast concrete, providing years of continuous service. The interceptor is divided into several compartments where solids will sink to the bottom. The discharging effluent comprises of the clarified water.

Regardless of the size or design, and interceptor is only as good as its maintenance program. For this reason, most plumbing codes require the interceptor be installed and located so that it will be easily accessible for inspection, cleaning, and removal of intercepted waste products. A manhole should be located near the inlet and the outlet. The manhole will not be less than 18" in the least dimension. All manholes should extend to grade. The interceptor should be located near the source of the wastewater for the protection of the piping system. The oil/sand-mud interceptor should be buried so as to intercept the building sewer or holding tank/lift station for reclamation. Inlet and outlet piping shall be a minimum of 4". The frequency of cleaning at any given installation will vary depending on use. The oil/sand-mud interceptor should be cleaned (or pumped out) routinely to prevent the escape of appreciable quantities of solids. Oil/sand-mud and silt should be removed before accumulations effectively reduce storage capacity and detention time of the interceptor. A professional pumping company should pump the interceptor out, familiar with regulations regarding proper disposal.

All below grade oil/sand-mud interceptors, manufactured by Precon Precast Concrete Products, LLC, are constructed of quality precast concrete, Class 4500 PSI @ 28 days. Concrete reinforcement complies with ASTM A615 grade 60 and bar bending in accordance to the American Concrete Institute. Precasting the concrete vault insures that all units achieve structural and physical uniformity. The units are structurally engineered for H-20 traffic loading and can be buried without any need for any other structural protection. The unit is of monolithic construction at bottom to insure against joint leakage.

Operation of the Water Reclaim System is as follows:

Wastewater enters through the steel grate located on top of the Catch Basin and moves along the 4" piping to the Oil/Sand-Mud Interceptors where the oil/sand-mud is separated and clear water is moved to the Pump Tank. Here, the water from the Interceptors is treated with an NSF approved Tablet Chlorinator resulting in water that contains 1mg per liter chlorine residual. The treatment of the water will kill bacteria, remove foul odors and allow the water to be reused in the wash down bay.