

Purpose and Need for Storage Tank at the One Hour Martinizing (OHM) Store Located at 13405 Watertown Plank Road

Description:

One (1) aboveground poly-tank with a capacity of 1,000 gallons is being used to store treated condensate water generated by the soil vapor extraction (SVE) system. The tank is located on the east side of the SVE system, between the system and the existing storage shed.

Purpose:

The SVE system draws in cold air from the subsurface. Soil moisture within this air then condenses within the piping and other SVE system components. Some soil types and subsurface conditions produce more condensate than others. We have found the subsurface at this location produces more soil moisture (and condensate) than is typical. The condensate must be temporarily accumulated until disposal.

Treatment:

The condensate contains small amounts of chlorinated compounds that we are removing from the subsurface using the SVE system. We are treating the condensate to remove these compounds by pumping the condensate through an activated carbon vessel prior to accumulation within the storage tank.

Disposal:

A discharge permit has been obtained from the Milwaukee Metropolitan Sewerage District (MMSD) for disposal of the treated condensate water. The permit is for discharge to the MMSD sanitary sewer system and the discharge location is the manhole just south of the sidewalk along Watertown Plank Road and directly north of the OHM building. Periodically, the water is tested to ensure it meets required MMSD discharge standards. When the 1,000 gallon poly tank is near full, a 2-inch diameter hose (similar to fire hose) and transfer pump are connected to the poly-tank, and the treated water is discharged to the sanitary sewer system at the manway north of the OHM building.