

PUGET SOUND CLEAN AIR AGENCY

Additional Notice of Construction Application Requirements for

ORGANIC LIQUID STORAGE TANKS

General

Description of Equipment and its Purpose [Specify the type of tank (vertical fixed roof, internal floating roof, external floating roof, domed external floating roof) and its purpose (rental storage, dedicated product storage for on-site use only, terminal, or bulk plant).]

Identify which of the following categories the project fits into:

1. New Construction (*New construction also includes existing, unpermitted equipment or processes*)
2. Reconstruction (*Reconstruction means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility*)
3. Modification (*Modification means any physical change in, or change in the method of operation of, a source, except an increase in the Hours of Operation or production rates (not otherwise prohibited) or the use of an alternative fuel or raw material that the source is approved to use under an Order of Approval or operating permit, that increases the amount of any air contaminant emitted or that results in the emission of any air contaminant not previously emitted*)
4. Amendment to Existing Order of Approval Permit Conditions

Date of Equipment Manufacture (month/yr) [*This is the date when the unit was built by the manufacturer.*]

Estimated Hours of Operation (hr/day, day/wk, wk/yr) [*Estimate the hours of operation for the new tank - not necessarily the entire facility.*]

Estimated Installation Date [*Estimate the date when the new tank will be put into service.*]

Liquid Properties

Product Stored [*Specify the product(s) to be stored.*]

Maximum Storage Temperature [*If unheated, specify 'ambient'.*]

Vapor Pressure at Maximum Storage Temperature (psia) [*If the tank will be used for multiple products, specify the vapor pressure of each product.*]

Estimated Annual Throughput (gal/yr) [*Estimate the throughput(s) of each product to be stored.*]

Design of Vertical Fixed Roof Tanks

Tank Diameter (ft) [*Specify the diameter of the tank in feet.*]

Shell Height (ft) [*Specify the height of the tank in feet. (For horizontal fixed roof tanks, specify the length of the tank.)*]

Maximum Liquid Height (ft) [*Specify the maximum fill height of the tank in feet - not the shell height.*]

Average Liquid Height (ft) [*Specify the average fill height in feet. If unknown, assume half of the maximum fill height.*]

Working Capacity (gal) [*Specify the working capacity of the tank. For vertical tanks, this is equal to π (3.14159) times the diameter times the maximum fill height divided by 7.48 gallons per cubic foot.*]

External Shell Color/Shade [*Specify white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, or red/primer.*]

External Shell Condition [*Specify 'good' or 'poor'*]

Roof Color/Shade [*Specify white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, or red/primer.*]

Roof Paint Condition [*Specify 'good' or 'poor'*]

Roof Type [*Specify cone or geodesic dome*]

Pressure/Vacuum Vent Settings (psig) [*Specify the pressure and vacuum settings at which the valve on the roof of the tank opens to the atmosphere*]

Control Equipment [*Specify the type of control equipment and complete the applicable permit form for flares, thermal oxidizers, or adsorbers. Not required for storing products other than asphalt or products with a true vapor pressure less than 0.75 psia.*]

Design of Internal Floating Roof Tanks

Tank Diameter (ft) [*Specify the diameter of the tank in feet*]

Working Capacity (gal) [*Specify the working capacity of the tank. For vertical tanks, this is equal to π (3.14159) times the diameter times the maximum fill height divided by 7.48 gallons per cubic foot*]

External Shell Color/Shade [*Specify white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, or red/primer.*]

External Shell Condition [*Specify 'good' or 'poor'*]

Roof Color/Shade [*Specify white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, or red/primer.*]

Roof Paint Condition [*Specify 'good' or 'poor'.*]

Number of Columns Supporting Fixed Roof (if any) [*Specify the number of vertical supports within the tank supporting the fixed roof. If self-supporting, specify 'none'.*]

Effective Column Diameter [*Specify 9"x7" built-up column or 8" diameter column. Not required for roofs without support columns.*]

Internal Shell Condition: [*Specify light rust, dense rust, or gunite coating.*]

Type of Primary Seal [*Specify mechanical shoe, liquid mounted, or vapor mounted*]

Type of Secondary Seal [*Specify shoe-mounted, rim mounted, or weather shield.*]

Type of Deck [*Specify welded or bolted.*]

Number of Each Type of Deck Fitting [*For example, access hatch (24" diam.), automatic gauge float well, column well (24" diam.), gauge-hatch/sample well (8" diam.), ladder well (36" diam.), rim vent (6" diam.), roof drain (3" diam.), roof leg (3" diam.), roof leg or hanger well, sample pipe or well (24" diam.), slotted guide pole/sample well, stub drain (1" diam.), unslotted guide pole well, vacuum breaker (10" diam.)*]

Design of External Floating Roof Tanks

Tank Diameter (ft) [*Specify the diameter of the tank in feet.*]

Working Capacity (gal) [*Specify the working capacity of the tank. For vertical tanks, this is equal to π (3.14159) times the diameter times the maximum fill height divided by 7.48 gallons per cubic foot.*]

External Shell Color/Shade [*Specify white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, or red/primer.*]

External Shell Condition [*Specify 'good' or 'poor'.*]

Roof Color/Shade [*Specify white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, or red/primer.*]

Roof Paint Condition [*Specify 'good' or 'poor'.*]

Internal Shell Condition: [*Specify light rust, dense rust, or gunite coating.*]

Type of Primary Seal [*Specify mechanical shoe, liquid mounted, or vapor mounted.*]

Type of Secondary Seal [*Specify shoe-mounted, rim mounted, or weather shield.*]

Type of Roof [*Specify pontoon or double deck.*]

Tank Construction *[Specify welded or riveted.]*

Number of Each Type of Deck Fitting *[Specify the number of each of the following deck fittings: access hatch (24" diam.), automatic gauge float well, column well (24" diam.), gauge-hatch/sample well (8" diam.), ladder well (36" diam.), rim vent (6" diam.), roof drain (3" diam.), roof leg (3" diam.), roof leg or hanger well, sample pipe or well (24" diam.), slotted guide pole/sample well, stub drain (1" diam.), unslotted guide pole well, and vacuum breaker (10" diam.).]*

Operation and Maintenance

Method Used to Fill Tank *[Specify from truck, railcar, barge, ship, and/or pipeline.]*

Method Used to Drain Tank *[Specify to pipeline, ship, barge, railcar and/or truck. For truck loading operations, specify top loading or bottom loading and specify the year of construction of the loading rack.]*

Describe Preventive Maintenance *[Specify the periodic maintenance recommended by the manufacturer and its frequency.]*