

WO#2025-130: North Transfer Station (NTS) Vapor and High Misting Odor and Dust Control Systems

Project Location: 1350 N 34th St, Seattle, WA 98103

Project Description: Install the Vapor Odor Control System behind the existing push wall and install distribution pipes near exhaust vents on the tipping floor push wall as well as the lower-level compactors at the North Transfer Station.

Modify the existing high-pressure misting odor and dust control system, including extending coverage, replacing the chemical dosing pump, and adding a scale for the odor neutralizing chemical drum or tank.

Project Estimate: \$175,335

Scope of Work Description:

Vapor Odor Control System

Installation of the System shall include the distribution unit (blower and control skid), distribution pipes, supports for pipes from the walls and ceiling, and electrical connection to the disconnect located near the unit. Existing electrical conduits, safety devices and building structure shall be protected from damage and salvaged, as necessary. The electrical disconnect and connection to service panel will be provided by Owner.

The vapor distribution System will be located behind the push wall on the tipping floor along the south wall, next to the existing misting System. The piping will extend from the distribution system to the backside of the push wall and routed atop the push wall and on the lower level around the compactor exhaust stack intakes. The existing platen opening shall be used to route the pipe to the lower level.

The Contractor shall be responsible for the complete installation and testing of the System including the pipe distribution network with approvals from SPU.

The Contractor shall be responsible for installing bird control devices.

Furnish all labor, materials, equipment and incidentals required and design and deliver bird control devices for the Project. The work includes a system of bird control netting and spikes to prevent roosting and nesting of birds on structural steel elements, overhead piping, and similar locations.

Bird control spikes shall be provided on areas where birds may roost that are not protected by bird control netting, such as overhead piping in lower compactor level not protected by other bird control measures.

The equipment shall have a 1-year system warranty that includes parts, materials and labor. Warranty period to begin following final acceptance of Work.

High Pressure Misting Odor and Dust Control System:

The furnishing and installation of materials, equipment, and appurtenances associated with

modifications to the existing high-pressure misting odor and dust control system, including extending the coverage, replacing the chemical dosing pump, and the addition of a scale for the odor neutralizing chemical drum or tank. Furnish all labor, materials, tools, equipment, service, and incidentals required to modify the existing high-pressure misting odor and dust system as shown on the Drawings, Markup Photos (in Appendix) and as specified herein.

Inspect existing misting system including dosing pump, control unit, hoses, and nozzles. Notify Owner of any issues found and replace clogged or damaged misting nozzles, as necessary.

Replace existing chemical dosing pump.

Modifications of the existing misting system on the roof:

1. Connect high-pressure misting hoses to the existing Zone 2 lines present on the northern side of the Transfer Station roof and extend to the exterior of Bay Doors 1, 2, and 3 to reduce odor emissions during routine vehicular ingress and egress.
2. New tee connections shall be installed to the existing zone 2 hose along the transfer station roof parapet for each of the exterior of the Bay Doors 1,2 and 3 along the outside of the transfer station building.
3. Install 2 nozzles above the exterior of both Bay Doors 1 and 2. Install 3 nozzles above the exterior of Bay Door 3.
4. Install manual brass ball valve for existing misting hose in storage stairway beneath transfer station roof for existing, see Appendix for details and location.
5. Install manual brass ball valves prior to misting nozzles at each exhaust stack located on the roof to add ability to turn on/off the misting nozzles located at each exhaust stack. Location of valve to be reviewed and approved by SPU.
6. Extend the existing misting system to exhaust stacks 4A and 4B on the south side of the roof. Route a new hose branch from the existing main branch to the south side; and provide one misting nozzle at each stack (4A and 4B).
7. Add anchors to support the misting system hoses near each Bay Door and along roof parapet with approval from SPU for location and appurtenances used. Misting hose along roof parapet and decking may be anchored to existing grounding cable using zip ties, similar to existing hose on roof. If additional anchoring is required on the roof, adhesive-mounted appurtenances/supports shall be used. No drilling or roof penetrations are permitted.
8. Photos of the installation area, site plan markups with approximate distribution piping layout plans, and relevant record document sheets related to extending the existing misting system hoses to the Bay Doors are included in the Appendix. Contractor shall verify all dimensions and route the hoses and supports.

9. All required hose, piping, valves and appurtenances may not be indicated in the Appendix but shall be provided for a complete system compliant with the requirements indicated herein.

The Contractor shall install a drum scale with integrated secondary containment and an LCD indicator to track the consumption rate of the odor neutralizing chemical for the misting system. Location of the scale is shown in the Appendix.

Contractor shall verify all dimensions and field run pipe and supports as shown.

The Contractor shall be responsible for the complete installation and testing of the System including the pipe distribution network with approvals from SPU.

Testing and commissioning of the system installed shall be performed in the presence of, and approved by, the SPU Engineer.

Engage a factory-authorized service representative to train Owner's personnel to adjust, operate, and maintain the System for a minimum of 4 hours. The training includes instruction on operation and maintenance of the equipment, including startup, shut-down, operation, troubleshooting, lubrication, maintenance and safety.

Contractor must provide notice with a minimum of 10 working days in advance of planned training for appropriate scheduling and attendance by the Owner's staff.

Contractor-led training must not be scheduled for Mondays, Fridays, Owner-observed Holidays, or the day immediately before or after Owner-observed Holidays, unless otherwise approved in advance by the Engineer.

Supplier Experience: Provide a list of previous projects similar in size and scope to this projects that the supplier has previously supplied, and when these projects were completed.

System installation shall occur while NTS is open and operational. Available working hours are 7 AM to 7 PM, Monday through Friday. Holiday, nighttime and weekend work will not be allowed. Contractor will be required to coordinate with Seattle Public Utilities (SPU) Solid Waste Operations and Construction Manager for phasing of work and any necessary area closures or detours.