



Puget Sound Clean Air Agency

Notice of
Construction No.

12301

Clean Air Agency

HEREBY ISSUES AN ORDER OF APPROVAL
TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. 11993

Date

DRAFT

34.6 Million ton Capacity Municipal Solid Waste Landfill, with the potential to send landfill gas to a separate landfill gas-to-energy facility. Landfill gas is also treated to remove hydrogen sulfide before being routed to the flare or gas-to-energy facility. Currently operating one 2,200 scfm temporary flare, which will be replaced by a 4,000 scfm permanent flare within 24 months of permit issuance.

OWNER

INSTALLATION ADDRESS

**Pierce Co Recycling Composting and Disposal
LLC
17925 Meridian St. E
Puyallup, WA 98375**

**Pierce Co Recycling Composting and Disposal
LLC
30919 Meridian St E
Graham, WA 98338**

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND CONDITIONS

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the INSTALLATION ADDRESS in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.
2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.
3. The owner and/or operator shall comply with the applicable requirements of 40 CFR 62 Subpart OOO as well as 40 CFR 63 Subpart A and AAAA.
4. The permitted landfill gas generation rate is 7,000 scfm @ 50% methane. The owner and/or operator shall demonstrate compliance with this operational limit by having a flaring capacity of no more than 7,000 scfm shown with documentation such as vendor documents or nameplate capacity.
5. The owner and/or operator shall install and maintain an active landfill gas collection and control system that meets the parameters of 40 CFR 63.1959(b). This gas collection and control system shall, at a minimum, comply with the most recent design plan submitted to the agency for review or be updated and submitted if the facility decides to use a different design.
6. The landfill gas collected with the landfill gas collection and control system can be routed to a gas-to-energy facility for processing. Any landfill gas not routed through the gas-to-energy facility shall be routed to the flare station for processing as follows:
 - a. The owner and/or operator shall ensure the permanent 4,000 scfm enclosed flare operated under this condition achieves a minimum of 98.9% destruction of all non-methane organic compounds; or
 - b. Reduce the outlet NMOC concentration to less than 20 ppm by volume, dry basis as hexane at 3 percent oxygen.
 - c. The owner and/or operator shall the Flares be designed for and operated with no visible

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emissions as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

7. The owner and/or operator shall install and maintain a sulfur removal system that controls the sulfur content of both the gas sent to the flare station and the gas sent to the gas-to-energy facility.
8. The sulfur removal system shall be operated such that the outlet concentration of the sulfur removal system shall not exceed 150 ppmv total reduced sulfur (TRS), calculated as hydrogen sulfide (H₂S), recorded as a calendar month average. The sulfur removal system shall be installed immediately upon permit issuance, and compliance with the 150 ppmv sulfur outlet standard on a calendar month average shall be met no later than nine months after permit issuance.
 - a. The owner and/or operator shall monitor the sulfur content as follows:
 - i. Most recent TRS calendar month average < 100 ppm
 1. Sample monthly using SCAQMD Method 307-91 or other Agency approved method.
 - ii. 100 ppm ≤ Most recent TRS calendar month average < 125 ppm
 1. Sample bi-weekly (i.e., every other week) using SCAQMD Method 307-91 or other Agency approved method.
 - iii. 125 ≤ Most recent TRS calendar month average ≤ 150 ppm
 1. Sample weekly using SCAQMD Method 307-91 or other Agency approved method.
 - iv. Readings above 150 ppm shall be reported to the Agency as possible compliance deviations. The reports shall contain explanations on the believed root cause along with any corrective action taken (if any) as a result. Sampling as outlined in iii. above shall continue until readings fall below specified thresholds of this condition.

Compliance with the 150 ppmv monthly average sulfur limit of this permit condition shall be determined by averaging all SCAQMD method measurements taken during the month if more than one reading is taken.

9. Emissions of sulfur dioxide (SO₂) from flaring of landfill gas from all flares at the landfill may not exceed 100 tons in any 12-consecutive-month period. Compliance with this condition shall be calculated as outlined in Permit Condition 10.
10. The owner and/or operator shall submit to the Agency annual reports of the total sulfur content of the landfill gas and the resulting SO₂ emissions. The report shall contain all sulfur readings taken for the month and show the calculated monthly average based on the sampling conditions outlined in Permit Condition 8. The first report is due no later than 60 days following the end of the first 12 months of H₂S or TRS sampling following the compliance dates specified in Permit Condition 8. An annual report shall be submitted no later than 60 days following the end of each reporting year and shall consist of the amount of total landfill gas combusted in the flare, the applicable monthly rolling average sulfur content of the landfill gas as determined by Permit Condition 7, and total calculated SO₂ emitted from the flares.
11. Any spent media from the sulfur control system that is disposed of in the landfill must be enclosed,

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encapsulated, or treated in such a way as to prevent the return of the adsorbed sulfur back into the landfill gas.

12. To the greatest degree possible, roads used by the vehicular traffic at the facility shall be paved. Truck wheels shall be washed and an aggressive dust control and road sweeping program developed and implemented through the facility's Operation and Maintenance (O&M) Plan as required by Puget Sound Clean Air Agency Regulation I, Section 7.09.
13. The owner and/or operator shall maintain and follow a complaint response plan, including the following:
 - a. Designation of a responsible person to respond to and record complaints regarding odor, fugitive dust or nuisance.
 - b. An informational bulletin that will be mailed out to any person that contacts the landfill, or to other interested persons forwarded from a local governmental agency that has a complaint or questions about the complaint response process. This informational bulletin shall include an explanation of the landfill's odor and nuisance control plans, and the name and phone number of the person responsible for responding to the complaints.
 - c. Land Recovery Inc shall record and investigate complaints regarding odor, fugitive dust, or nuisance as soon as possible, but no later than 12 hours after receipt of the complaint. The investigation will include documentation of wind direction and speed during the time the complaint occurred. Land Recovery Inc shall document its findings and use good industrial practices to correct any problems identified by the complaint investigations within 24 hours.
 - d. Land Recovery Inc shall maintain records on-site of all complaints received regarding odor, fugitive dust or nuisance including the date and time of the complaint, the nature of the complaint, the wind speed and wind direction at the time of the complaint, and the date, time and nature of any corrective action taken.
 - e. The complaint response plan shall be maintained on-site and made available to Puget Sound Clean Air Agency personnel upon request.
14. The owner and/or operator shall conduct an initial performance test on the permanent 4,000 scfm flare (once it has replaced the temporary flare) within 180 days after initial startup in order to verify compliance with the standards in Condition No. 6a or 6b, and 6c. The flare does not need to be started up just to conduct a performance test; the owner and/or operator may wait until LFG is used in the flare or is not routed to the landfill gas to energy facility. The test shall be conducted as close as possible to normal operation.
15. The initial performance test required by Permit Condition 13 shall use the test methods and procedures outlined in 40 CFR § 62.16718(d) and any other applicable EPA test reference methods
16. The owner and/or operator shall submit a test notification to the Puget Sound Clean Air Agency in accordance with Section 3.07 of Regulation I before any source test required by this permit is conducted.
17. The owner and/or operator shall submit a test protocol to the Agency 30 days before conducting performance tests required by this permit.

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18. The owner and/or operator shall submit a test report to the Puget Sound Clean Air Agency in no later than 60 days after any performance test is conducted. This source test shall outline the results of the test and indicate whether the owner and/or operator failed any test.
19. The owner and/or operator shall operate the permanent 4,000 scfm enclosed flare at an average set point temperature at or above the temperature range recorded during the most recent source test showing compliance with Condition No. 6a or 6b. The owner or operator must collect at least one measured data point for each 15-minute monitoring period in every hour the flare is receiving landfill gas. For the purposes of this condition, flare operating temperature shall be based on a rolling 3-hour average and shall only include hourly data which has at least one measured data point during three 15-minute monitoring periods during each hour. The flare operating temperature requirement does not apply to periods of start-ups, shutdowns and/or malfunctions provided that these events are not actively processing landfill gas and do not last for more than 1 hour.
20. The owner and/or operator shall report to the agency within the semi-annual NSPS/NESHAP report when either:
 - a. The 3-hour rolling average flare temperature readings were more than 82 degrees F below the set point temperature.
 - b. Startup, shutdown or malfunction events lasted longer than an hour and the flare was actively receiving landfill gas.
21. The owner/or operator shall develop a written start-up, shutdown, and malfunction plan according to the provisions of 40 CFR 63.6(e)(3). A copy of the plan must be maintained on site at all times.
22. The flare shall be equipped with both local and remote alarms, automatic combustion air control, and automatic gas shutoff valves.
23. The owner and/or operator shall either remove or seal in the closed position any valve that has the potential to bypass the flare unless that bypass is meant to send the landfill gas to a gas-to-energy facility. Any bypasses of the flare not being sent to gas-to-energy facility shall be measured and logged. The records shall be maintained on file and made available upon request of Agency personnel.
24. The owner and/or operator may test emissions from the flare at any time in order to update flare operating set points established in Permit Condition 18, using the test methods specified in 40 CFR 62.16718(e) following the notification procedures of Section 3.07 of Regulation I, and submitting the test report to the Agency within 60 days after the testing.
25. The owner and/or operator shall take corrective action whenever the 3-hour rolling average flare temperature drops below the set point temperature determined during the most recent performance test.
26. The temporary flare rated at 2200 scfm, shall only be located on the facility for no more than 24 months from the date of issuance of this order of approval.
27. Records demonstrating compliance with this order must be kept and maintained onsite for at least 5 years. Such records and the O&M plan shall be made available for review by the Puget Sound Clean Air

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Agency upon request.

28. The owner and/or operator shall permanently remove the existing 1,500 scfm flare that the temporary flare is intended to replace with this order of approval.
29. This order, issued for the increase in landfill capacity from 19.8 MM tons to 34.6 MM tons, the addition of a new enclosed flare and a temporary flare, and the addition of a sulfur removal system, hereby cancels and supersedes Orders of Approval 8023, 8912, and 9245.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

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Ralph Munoz
Reviewing Engineer

John Dawson
Engineering Manager