



Puget Sound Clean Air Agency

Notice of
Construction No.

12147

Registration No. 30371

Date

MAY 06 2022

Clean Air Agency

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

10,000 wet tons per year of woody debris feedstock. All material put into each aerated static pile (ASP) is counted toward the incoming feedstock limits, including feedstock received from offsite, bulking agents, and any and all other materials placed into the ASPs.

The facility includes one storage pile for incoming feedstock (exempt from permitting), six Primary Phase ASP cells (of 590 cy each), six Secondary phase ASP cells (of 490 cy each), seven aerated curing pile (of 816 cy), grinder, & screen. All ASP phases and curing piles are positively aerated and active phases are covered with at least 6" of biofilter material.

OWNER

Ueland Tree Farm LLC
Mark Mauren, 6323 Pioneer Way E
Puyallup, WA 98371-4952

INSTALLATION ADDRESS

Ueland Tree Farm LLC
819 Archie Ave West
Bremerton, WA 98312

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.

EMISSION LIMITS

3. The aeration systems for the Phase I aerated static piles, Phase II aerated static piles, and Phase III curing piles shall be operated in positive aeration mode to meet the oxygen demands of the piles. The aeration systems can be intermittent as necessary during the process.
4. There shall be no detectable odor of Level 2 or greater (as defined in Agency Regulation I, Section 9.11(b)(1)) associated with the Ueland Tree Farm LLC composting facility at or beyond the facility's boundary.
5. Visible particulate emissions from grinding and screening shall not exceed 5% opacity for any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour as measured by WDOE Method 9A.

FEEDSTOCK STORAGE REQUIREMENTS

6. Acceptable feedstock for the feedstock storage pile shall be limited to "woody organic material", meaning any solid waste that is a biological substance of plant origin capable of microbial degradation. Acceptable organic materials include the following:
 - a) Land clearing debris;
 - b) Wood waste as defined by WAC 173-350-100, with the exception of paint or stain, laminates,

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bonding agents, chemically treated wood, food, garbage, liquids, grasses and weeds, dimensional wood, construction and demolition waste, plastic, or other contaminants greater than 5% by volume per WAC 173-350-220.

7. Incoming feedstock shall be visually inspected for contaminants prior to being accepted into the facility. The following types of feedstock are unacceptable and shall be turned away as soon as possible:
 - a) Feedstock types that are not an acceptable feedstock as defined in Condition 6;
 - b) Acceptable feedstock as defined in Condition 6 contaminated with material that is not acceptable for composting. Visible non-acceptable material as defined in Condition 6 observed during the inspection may render a load as contaminated unless it can be removed from the feedstock outside of the topsoil/compost facility;
 - c) Approved feedstock decomposed or putrefied to a degree that could cause an immediate odor problem in the receiving area that cannot be mitigated by mixing and/or bulking with other materials; and
 - d) Any load that is determined to have the potential to cause an immediate, unreasonable nuisance that cannot be mitigated by mixing and/or bulking with other materials.
8. For each load of feedstock received, the owner or operator shall record the following information:
 - a) Feedstock type;
 - b) Weight of load;
 - c) Results from inspection of the load;
 - d) Date and time of receipt of the load; and
 - e) Name(s) of employee(s) who performed the inspection.
9. The owner or operator shall record the total weight of material placed into the aerated static pile systems including feedstocks, bulking agents, and composted material or overs for inoculant or structure. This total shall not exceed 10,000 tons during any consecutive 12-month period. For the purposes of compliance with this condition, any finished compost that is added to the surface of the aerated static piles to act as a biofilter for emission control is not counted toward the limit. Processed weight may be estimated from density of the ground material and the number of times a cell is loaded. For the purposes of estimating the weight of material, the density of ground material to be composted shall be evaluated at least once per calendar quarter. No later than 30 days after the end of each month the owner or operator shall calculate the weight of material placed in the cells during the previous 12 months. Records shall be kept of:
 - a) Each quarterly material density evaluation.
 - b) The date and time each cell is loaded with material.
 - c) How full each cell is loaded.
 - d) the total weight of material placed in the cells each month.

OPERATIONAL LIMITS and REQUIREMENTS

10. The owner or operator shall install and properly operate a fine water mist system on all grinders used to grind processing or finished compost to control fugitive dust.
11. The owner or operator shall route standing water and water runoff from feedstock storage and the compost pads to the stormwater collection and treatment system. Stormwater from the compost facility may be used for dust suppression and may be used for moisture addition during feedstock preparation or moisture addition during the composting process provided the water emits no odors at Agency Level 2 as defined in Agency Regulation I, Section 9.11(b)(1) and does not contribute to any violation of Condition 4.
12. The aerated static piles shall be constructed within the following parameter ranges:
 - a) Biofilter layer material shall be at least 6 inches in depth across the whole of Phase I and Phase II aerated static pile.
 - b) Moisture content shall be adjusted to between 50 percent and 70 percent in the feedstock mix prior to placement in aeration.
13. Each aerated static pile and curing pile shall be operated within the following operational limits:
 - a) If the temperatures in a Phase I or Phase II pile average over 175°F for more than 3 days, the operator will take steps to reduce the temperature. Steps may include increasing aeration to blow off heat or disassembling the pile to mix and cool the materials and/or other steps as determined by the operator.
 - b) At all times, the average oxygen content throughout the Phase I and Phase II aerated static piles shall be maintained at or above 10%.

AERATED STATIC PILES, CURING PILE and FEEDSTOCK MONITORING

14. At least quarterly during the first 12 months of operation, a sample of the ground feedstock mix shall be sent to a laboratory for determination of C:N. This will help to inform the operator of the seasonal variability of the material.
15. For the first year of operation: temperatures in Phases I and II will be monitored at a minimum of every other day for at least 11 days following achieving PFRP or until the temperatures naturally decline below 150°F for at least 3 consecutive days. Thereafter, the temperatures may be monitored weekly. If a weekly reading averages above 155°F, every other day readings will be resumed until the material temperature declines to less than 155°F or the pile is moved to the next phase. After two years of minimum every other day monitoring, if temperatures during that period have been shown to be stable across several days as defined by increases or decreases not greater than 15°F per day, outside of the normal first week temperature increases to above 145°F, the temperature monitoring condition would be eliminated on weekends but for no more than 2 consecutive days. Should temperatures exceed the 175°F limit then every other day monitoring shall resume for another year. The components of the temperature monitoring system shall be calibrated and maintained in accordance with manufacturer instructions and operating manuals.
16. Site inspections shall be conducted at the same schedule as the temperature measurements of Condition 15. Inspections shall record the presence or absence of any Level 2 or greater odors (as defined in Agency Regulation I, Section 9.11(b)(1)). If Level 2 odors are detected the inspection shall be expanded to check the blower and aeration lines for proper operation. If the blower is not operating properly or the aeration lines are blocked and/or otherwise damaged the problem shall be corrected as expeditiously as possible. Records shall be kept of the results of all blower and aeration line inspections, and of any corrective actions taken. If, after corrective actions were taken, the observed Level 2 or greater odor persists then oxygen shall be measured in the pile daily until the odor inspection detects no Level 2

or greater odor and oxygen is within the range required by Condition 13.b).

17. All material put into the composting process shall remain within an aerated static pile or curing pile until the organic material has stabilized to “moderately unstable to very stable” per WAC 173-350-220 Table 220-B. Stability will be measured at a frequency of “every 5,000 cubic yards produced or every 365 days, whichever is more frequent” per WAC 173-350-220(6)(a)(x)(B). Stability is measured by a Solvita Maturity Index of 5 or greater as measured using the TMECC Method 05-08-E – Solvita® Maturity Test or a laboratory stability test measuring the CO₂ evolution related to “moderately unstable to very stable”.

BIOFILTER LAYER MONITORING

18. The biofilter layer for each aerated static pile shall be inspected from an accessible side only by ladder for moistness at least weekly during periods of dry weather to check if sprinkler/soaker hose/water truck spray is sufficient or needed. While inspecting for moisture, observe and document visual condition of biofilter. Excessive channeling, gaps or cracking, if noticed, may be corrected if reachable with excavator. If not correctable, the biofilter construction technique will be reviewed and adapted for the next pile.
19. Record the results of the inspections required by Condition 18. Upon disassembly of each pile, if the biofilter layer was observed to have been disturbed or discontinuous, the construction process will be reviewed and improved upon. This review and any change of process will be documented and included in the facility Operations and Maintenance Plan.

PERFORMANCE TESTING

20. Within 60 days of achieving maximum capacity but no longer than 180 days after completing construction, conduct an Ecology Method 9A observation on both the screening and grinding operations for compost in process or finished compost. Submit notifications of the test and the test report as required by Agency Regulation I, Section 3.07(b) & (c).

FACILITY-WIDE REQUIREMENTS

21. The owner or operator shall inspect the entire facility for visible emissions of fugitive dust at least once per calendar day screening or grinding (for compost in process or finished compost) operates or construction of piles occurs including an evaluation of whether dust control equipment (e.g., water spray bars, water truck) is being operated and in good working order. If visible emissions are observed, the owner or operator shall investigate the cause and take immediate corrective action to minimize emissions. If visible fugitive dust emissions were observed during any inspection, the owner or operator shall record the cause and what precautions were taken to minimize emissions. Records documenting the inspection shall be kept as to:
 - a) Whether the screen or grinder were in operation;
 - b) Whether dust control equipment was in operation;
 - c) Whether visible emissions were observed (and if so, from where);
 - d) Any corrective actions taken; and
 - e) The dates and times of inspections
22. The owner or operator shall conduct an inspection of its entire facility at least once per calendar week the facility operates to monitor along and outside the property line for detectable odors from the facility. If odors of Level 2 or greater from the facility are detected at or outside the property line during the monitoring or at any other time, the owner or operator shall take immediate corrective action to eliminate the odors. The weekly inspection shall also include a visual inspection of the storage piles, each aerated static pile to evaluate whether these piles are being maintained and operated in good working order. The owner or operator shall record the date, time, and results of each inspection, including any corrective

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actions taken to eliminate odors or maintenance performed.

COMPLAINTS

23. The owner or operator shall establish a complaint response program for complaints received regarding air quality, including but not limited to odors and/or fugitive dust, as part of an Operation and Maintenance (O&M) Plan. The program shall include a complaint phone line, criteria and methods for establishing whether the Ueland Tree Farm facility may be the source of the air emissions related to the complaint, and a format for communicating results of investigation and advising complainants of Ueland Tree Farm's corrective actions.

- a) The owner or operator shall record and investigate complaints received regarding air quality as soon as possible, but no later than one working day after receipt.
- b) The owner or operator shall begin corrective actions for any Level 2 or higher odor sources identified by these complaint investigations as soon as possible but within 24 hours of identification, with records maintained of the time the odor was identified and the time corrective actions began. Any Level 2 or higher odor identified by these complaint investigations shall be corrected within 48 hours from the time corrective actions began. Records shall be kept of the date and time corrective actions were completed and the estimate of the odor level once actions were complete.
- c) Records of all complaints received regarding air quality issues shall include information regarding date and time of complaint; name and address of complainant (if known); nature of the complaint; investigation efforts completed and basis for conclusion reached; and date, time, and nature of any corrective action taken.

OPERATION & MAINTENANCE

24. The owner or operator shall develop an O&M Plan consistent with the requirements of Regulation I, Section 5.05(c). The plan must address procedures for determining when the composting systems, tipping building, and biofilters are operating properly and the corrective actions that will be taken when they are not.

RECORDS AND OTHER REQUIREMENTS

25. All records of observations and supporting documentation required by this Order of Approval shall be completed contemporaneously and no later than the end of each day the required inspection is to occur.

26. The owner or operator shall maintain records required by this Order of Approval for two years and make them available to Puget Sound Clean Air Agency personnel upon request.

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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.

for S. M. Van Daele
Brian Renninger
Reviewing Engineer

John P. Dawson PE
John Dawson
Engineering Manager