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Puget Sound Clean Air Agency

Puget Sound Clean Air Agency

Notice of Construction No. **11935**

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

Registration No. **30291**

Date DEC 0 3 2020

Commercial composting facility (maximum of 14,000 wet tons of feedstock per year) for recycling green yard waste, fish waste, pre-consumer food waste, and agricultural manure and bedding using Extended Aerated Static Pile composting technology. The compost operation consists of a tipping area, two Extended Aerated Static Pile composting bays with four zones each, concrete composting pad (100'x300'), curing piles, final product storage piles, and a leachate pond.

OWNER

Crane & Crane Holdings LLC (dba TILZ)
PO Box 10875
Bainbridge Island, WA 98110

INSTALLATION ADDRESS

Crane & Crane Holdings LLC (dba TILZ)
12112 Miller Road NW
Bainbridge Island, WA 98110

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. At all times, each aerated static pile shall be covered with at least 12 inches of biofilter media. The biofilter cover layer for the aerated static piles shall provide a minimum removal efficiency of 75.0% for volatile organic compounds. The biofilter cover layer for the aerated static piles shall provide a minimum removal efficiency of 53.0% for ammonia.

4. No detectable odor associated with the composting facility is allowed at or beyond the facility's boundary.

5. Visible 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 REQUIREMENTS

6. Acceptable feedstock shall be limited to "organic material", meaning any solid waste that is a biological substance of plant or animal origin capable of microbial degradation. Acceptable organic materials include but are not limited to the following:

   a) Animal manure and bedding;
   b) ASTM compostable films and containers;
   c) Yard debris;
   d) Whole fish mortalities and fish parts;
   e) Pre-consumer food waste; and
   f) Wood waste as defined by WAC 173-350-100, which does not contain paint or stain, laminates, bonding agents, or chemically treated wood.

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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 approved feedstock as defined in Condition 6;
   b) Approved feedstock contaminated with material that is not approved for composting. Visible non-approved material observed during the inspection may render a load as contaminated unless it can be removed from the feedstock during pre-processing or is inert and can be screened from the finished compost at the end of the process;
   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) Mass 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 calculate and record the total mass of feedstock and the amount of fish-based feedstock received on a monthly and 12-month rolling basis. The total amount of feedstock for the composting process shall not exceed 14,000 wet tons during any consecutive 12-month period. The amount of fish-based feedstock for the compost process shall not exceed 700 wet tons during any consecutive 12-month period (5% of the permitted capacity). For the purposes of this feedstock limit, feedstock does not include any finished compost that is added to the surface of the aerated static piles to act as a biofilter for emission control.

10. The owner or operator shall not accept more than 16 wet tons of fish-based feedstock during a single calendar day.

11. Stockpiled material shall be limited to a maximum of 163 tons of feedstock at all times. Feedstock containing fish waste or pre-consumer food waste shall be processed and placed in an aerated static pile within 4 hours of receipt. Feedstock containing grass clippings or other high-nitrogen green waste shall be processed and placed in an aerated static pile within 24 hours of receipt. At the end of each day, each stockpile shall be covered with at least 12 inches of biofilter media.

OPERATIONAL LIMITS

12. The owner or operator shall install and properly operate a fine water mist system on all wood grinders to control fugitive dust.

13. The owner or operator shall route standing water and water runoff from the compost pad to the leachate collection system. Leachate from the compost facility shall not be used for dust suppression but may be used for moisture addition during feedstock preparation or moisture addition during the composting process.

14. The aerated static piles shall be constructed within the following parameter ranges:

   a) Each pile shall contain no more than 14.0% combined pre-consumer food waste and fish waste by weight.
   b) Carbon to nitrogen ratio shall be between 20:1 and 40:1.

c) Bulk density shall be less than or equal to 950 lbs/yd^3.

15. Each aerated static pile shall be operated within the following operational limits at all times during the active composting phase:

    a) The moisture content throughout the entire pile shall be maintained between 40% and 65%.
    b) The pH throughout the entire pile shall be maintained between 6 and 8.5.
    c) The oxygen content throughout the entire pile shall be maintained between 10% and 18%.

AERATED STATIC PILE MONITORING

16. Within the same calendar day that each aerated static pile is constructed, the owner or operator shall record the date the pile was constructed, amount of material in the pile, percent food waste, carbon to nitrogen ratio, and bulk density of the pile.

17. At least once every 7 calendar days after construction of each aerated static pile until the end of the active composting phase, the moisture content, oxygen content, and pH of each ASP shall be measured and recorded. The date and time that each parameter was measured shall also be recorded.

18. The temperature of each aerated static pile shall be monitored daily and recorded during the active composting phase. At least three temperature measurements shall be taken per day per ASP. The first measurement shall be taken roughly 10-feet from one end of the ASP; the second measurement shall be taken at the midpoint of the ASP; and the third measurement shall be taken roughly 10-feet from the opposite end of the ASP.

FACILITY-WIDE REQUIREMENTS

19. The owner or operator shall inspect the entire facility for visible emissions of fugitive dust at least once per calendar day, including an evaluation of whether dust control equipment (e.g. water spray bars, water truck) is being operated 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. The owner or operator shall record the date, time, and results of each inspection. 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.

20. The owner or operator shall conduct an inspection of the entire facility at least once per calendar day to monitor along and outside the property line for detectable odors from the facility. If odors 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 owner or operator shall record the date, time, and results of each inspection, including any corrective actions taken to eliminate odors.

COMPLAINTS

21. The owner or operator shall establish a complaint response program as part of the O&M Plan. The program shall include a complaint phone line, criteria and methods for establishing whether the TILZ facility may be the source of emissions related to the complaint, and a format for communicating results of investigation and advising complainants of TILZ'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 correct any problems identified by these complaint investigations within 24 hours of identification or cease operation of the equipment until the problem is resolved;

    c) Records of all complaints received regarding air quality issues shall include information regarding

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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

22. The owner or operator shall develop an Operation and Maintenance (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 are operating properly and the corrective actions that will be taken when they are not.

RECORDS

23. 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. Each inspection and observation required on a daily basis by this Order shall be completed for each operational day for the site. An operational day is defined as any day that feedstock, actively composting material, or finished compost is located onsite.

24. 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.

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.

Sara Conley
Reviewing Engineer

for John Dawson
Engineering Manager