

State of Washington Department of Ecology  
Notice of Construction Approval Order

In the matter of approving a ) **Order No. 14AQ-C191**  
compliance at an existing contaminant ) **First Revision**  
source at Dirt Hugger )

**To: Dirt Hugger**  
PO Box 1848  
Hood River, OR 97031

**Project Summary**

Dirt Hugger, herein referred to as ‘the Permittee’, operates an existing compost facility located at 111 E Rockland Rd, Dallesport, in Klickitat County, Washington. The facility accepts feedstock from industrial, institutional, and residential, sources. The facility is classified as a ‘Synthetic Minor 80% Source’, that is a source with potential to emit for VOC in excess of 80% of the Title V threshold of the federal Clean Air Act.

This project consists of the expansion of the facility to process up to 62,700 tons per year of feedstock, as well as updating the Order to reflect current operational practices.

**Legal Authority:**

- The expansion of the facility qualifies as a modified source of air contaminants under WAC 173-400-110, filed 10/25/18 and as a modified source of toxic air pollutants under WAC 173-460-040, filed May 20, 2009.
- The facility originally qualified as a new source of air contaminants under WAC 173-400-110, filed November 28, 2012 and as a new source of toxic air pollutants under WAC 173-460-040, filed May 20, 2009.
- The emission units and activities have been reviewed under the legal authority of RCW 70.94.152 and the applicable rules and regulations adopted thereunder.

This Order supersedes Notice of Construction Approval Order No. 14AQ-C191; Order No. 14AQ-C191 is no longer in effect.

**It is Ordered** that the Permittee is subject to the following conditions:

**Approval Conditions**

**1.0 Laws and Regulations**

The proposed source shall comply with all federal standards and regulations, including:

- Title 40 Code of Federal Regulations (40 CFR) Part 60 Subpart A — General Provisions, and Part 63 Subpart A — General Provisions, where applicable.
- 40 CFR Part 60 Subpart IIII — Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR Part 63 Subpart ZZZZ — National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

## 2.0 Emissions Units and Activities

The following emission units and activities have been identified and are approved in this Order:

- 2.1 A two-stage composting process.
  - 2.1.1 The first stage (Stage 1) shall be constructed on-pad as a mass-bed turned static pile, with emissions collected and controlled by negative aeration.
  - 2.1.2 The second stage (Stage 2) shall be constructed off-pad as mass bed turned static piles.
- 2.2 Stockpiling of feedstock, with emissions controlled by finished-compost cover.
- 2.3 The following four diesel-fired engines operated as stationary-sources:

<b>Equipment Make, Model, &amp; Description</b>	<b>Engine Make</b>	<b>Engine Model</b>	<b>Engine Model Year</b>	<b>Engine Rating (bhp)</b>
Terra Select T6 Trommel Screener	Perkins	854E-E34TA	2016	100
T7 Terra Select Screener	Perkins	854E-E34TA	2016	100
T70 Terra Select Wind Sifter	JCB	ECOMA X Tier 4i	2016	73.5
Doppstadt DW 3060 Shredder	MTU	6R 1300	2011	422

- 2.4 Equipment utilizing nonroad engines<sup>1</sup> are not regulated by this Order, so long as the engines continue to qualify as nonroad engines. Examples of such equipment may include skid-steer loaders, windrow turners, and front-end loaders.

## 3.0 Allowable Emissions

The project may produce up to the following stationary-source emissions:

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<sup>1</sup> 'Nonroad engine' is defined at WAC 173-400-030(59).

<b>Pollutant</b>	<b>Composting</b>	<b>Stationary Engines</b>	<b>Unit<sup>a</sup></b>
Carbon monoxide (CO)		4.7	tpy
Nitrogen oxides (NO <sub>x</sub> )		3.0	tpy
Particulate matter (PM) <sup>b</sup>		1.2	tpy
Sulfur dioxide (SO <sub>2</sub> )		0.003	tpy
Volatile Organic Compounds (VOC)	98.4	1.1	tpy
<b>Toxic Air Pollutants (TAPs)<sup>c</sup></b>			
Ammonia	79,700		lb/yr
Diesel engine exhaust, particulate		46	lb/yr

<sup>a</sup> tpy = tons per year, lb/yr = pounds per year

<sup>b</sup> Since each of the stationary-source engines are combustion sources, it is assumed that PM = PM<sub>10</sub> = PM<sub>2.5</sub> (filterable and condensable). Particulate emissions associated with composting and haul roads was not quantified.

<sup>c</sup> TAPs with potential-to-emit in excess of their respective Small Quantity Emission Rate, as listed in WAC 173-460-150, filed May 20, 2009.

#### 4.0 **Operational Limitations<sup>1</sup>**

##### 4.1 **Production Limits**

4.1.1 Stage 1 of the composting process shall not accept more than 5,850 tons of feedstock per any 14-day period, and not more than 62,700 tons of feedstock per any 12-month period.

4.1.2 Each of the engines specified under Condition 2.3 shall be restricted to 2,000 hours of operation per any 12-month period.

##### 4.2 **Equipment and Activity Restrictions**

4.2.1 Feedstock for composting shall be limited to the materials listed in

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<sup>1</sup> All instances of the word ‘tons’ in this section are on a wet-weight basis, i.e. they are synonymous with ‘wet-tons’.

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- 4.2.2 Appendix A, unless otherwise prohibited.
- 4.2.3 The facility is prohibited from accepting the materials listed in Appendix B as feedstock.
- 4.2.4 The stockpile shall be limited to a capacity of 2,230 tons of feedstock at all times.
- 4.2.5 The negative aeration system shall collect at least 98% of Stage 1 emissions from the composting process, as measured under Condition 8.3.
- 4.2.6 For the diesel engines listed under Condition 2.3, only ultra-low-sulfur fuel containing not greater than 15 parts per million sulfur by weight shall be utilized.

**4.3 Emission Limits**

- 4.3.1 The biofilter shall accomplish at least 75.0% destruction efficiency of all collected VOC emissions, as measured under Condition 8.3.
- 4.3.2 The biofilter shall accomplish at least 21.8% destruction efficiency of all collected NH<sub>3</sub> emissions, as measured under Condition 8.3.
- 4.3.3 Emissions from each stationary engine shall not exceed the following limits, based on the applicable emission standards of 40 CFR Part 1039:

<b>Pollutants</b>	<b>Screeners &amp; Windsifter</b>	<b>Shredder</b>	<b>Units</b>
CO	5	3.5	g/kW-hr
NMHC <sup>a</sup> + NO <sub>x</sub>	-	4	g/kW-hr
NMHC	0.19	-	g/kW-hr
NO <sub>x</sub>	0.4	-	g/kW-hr
PM	0.02	0.02	g/kW-hr

<sup>a</sup> NMHC = Non-methane hydrocarbons.

- 4.3.4 Except during startup, visible emissions from the diesel engines listed under Condition 2.3 shall not exceed 5 percent opacity, as determined by EPA Reference Method 9, 40 CFR Part 60, Appendix A.
- 4.3.5 There shall be no visible emissions from diesel engines listed under Condition 2.3 or composting operations at the property boundary, as measured by EPA Method 9 of 40 CFR Part 60, Appendix A.
- 4.3.6 The exhaust of each stationary engine shall contain no greater than 0.10 grains per dry standard<sup>1</sup> cubic foot (dscf) of exhaust gas.

<sup>1</sup> "Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760 mm (29.92 inches) of mercury.

## 5.0 **Operation & Maintenance**

### General

- 5.1 The Permittee shall follow all recommended installation, configuration, operation, and maintenance provisions supplied by the emission unit manufacturers.
- 5.2 Emission unit specific operations and maintenance (O&M) manuals shall be developed by the Permittee; manufacturer's instructions may be referenced.
  - 5.2.1 The O&M manuals shall at a minimum include:
    - 5.2.2 Normal operating parameters for the emissions units.
    - 5.2.3 A maintenance schedule for the emissions units.
    - 5.2.4 Monitoring and record keeping requirements.
    - 5.2.5 A description of the monitoring procedures.
    - 5.2.6 Actions for abnormal control system operation.
    - 5.2.7 O&M manual development shall be completed within 30 days of issuance of this Order.
    - 5.2.8 The O&M manuals shall be updated to reflect any modifications to the emission units or operating procedures.
- 5.3 The O&M manuals shall be reviewed annually to determine their adequacy.
  - 5.3.1 The date and personnel performing each review shall be documented.
  - 5.3.2 The O&M manuals shall be updated to reflect any modifications to the emission units or operating procedures.
- 5.4 Emission units shall be operated and maintained in accordance with the O&M manuals. Failure to follow the requirements of the O&M manuals, and the adequacy of the O&M manuals, will be two of the factors considered by Ecology in determining whether the source is properly operated and maintained.
- 5.5 Regular O&M records shall be kept on premises. These O&M records shall be available for inspection by Ecology, organized in a readily accessible manner, and retained for at least five years.
- 5.6 The facility shall be operated in accordance with a site specific Operation Plan, as approved by the Klickitat County Public Health Department. In the event that the Operation Plan differs from the conditions of this Order, both must be met.
- 5.7 Any complaints shall be promptly assessed by the Permittee for validity. It will be a violation of the conditions of this Order if necessary corrective action is not taken or commenced by the Permittee or the Permittee has not responded to the complaint within three days of receipt of the complaints by the Permittee. The recordkeeping requirements for the Permittee shall include a record of all complaints, the Permittee's action to investigate the validity of the complaint, what, if any, corrective action was taken in response to the complaint, and the effectiveness of the remedial action.

Stockpiling

- 5.8 Except as provided in Condition 5.9, all feedstock received at the site shall be mixed and placed on the day of arrival, and immediately upon tipping.
- 5.9 Wood waste and yard debris, with less than ten percent food waste, may be stockpiled onsite, so long as the stockpile does not emit significant odors.
- 5.10 A cover of unscreened finished compost shall be applied to the stockpile at the end of each day, where needed, to maintain a cover thickness of at least 12 inches.

Stage 1

- 5.11 High carbon containing feedstock shall be mixed with high nitrogen containing feedstock in proper proportion, with a carbon-to-nitrogen ratio of 25:1-30:1, prior to compost bed placement.
- 5.12 The compost bed moisture content shall be kept between 55 and 65 percent.
- 5.13 After compost bed placement, the pile shall initially be covered with at least 12 inches of unscreened finished compost. No reapplication of the cover is needed after pile turning events.
- 5.14 During Stage 1 of the process, constant negative aeration shall be utilized to control pile emissions.
  - 5.14.1 Emissions captured from Stage 1 shall be routed to a biofilter for control.
  - 5.14.2 Each biofilter shall be operated and maintained to assure the destruction efficiencies specified under Conditions 4.3.1 and 4.3.2.
  - 5.14.3 Negative aeration is not required during turning of the bed.
- 5.15 Feedstock shall undergo the Stage 1 of the process for at least 14-days.

Composting – Stage 2

- 5.16 After material has passed the process to further reduce pathogens (PFRP) and has reached a stable level (testing performed using Solvita lab test reaching minimum level of five for ammonia, or minimum of six for carbon dioxide), it may be placed in an off-pad Stage 2 mass bed for further curing and maturing.
- 5.17 Screened compost pile base shall not exceed 30 feet in width.

Odors

- 5.18 The Permittee shall prevent off-site odors. Odors shall be prevented by maximizing aerobic composting and operating according to the approved Operation Plan.
- 5.19 In the event that odor is detected beyond the property boundary following remedial action, Ecology may order the Permittee to take prescribed measures to control odor. These measures may include, but are not limited to:
  - 5.19.1 Operational changes to minimize odor.
  - 5.19.2 Reduction of the quantity or types of material composted or stored onsite.

- 5.19.3 Enclosure of feedstock, mixing, or composting operations.
- 5.19.4 Elimination of the stockpiling allowed by Condition 5.9 when materials contain food waste.
- 5.20 If a feedstock proves to be a significant source of off-site odors, that feedstock shall no longer be allowed.
- 5.21 If a compost bed continues to emit off-site odors, despite efforts to control them, the compost bed shall be hauled away for disposal as soon as possible, except that the compost bed shall not be disturbed during temperature inversion or periods of calm winds.
- 5.22 In the event that an odor complaint is received, the Permittee shall comply with Condition 5.7.

*Fugitive Dust*

- 5.23 Grinding, mixing, and turning shall be done with adequate moisture to prevent visible emissions and at wind speeds such that material isn't blown across the site.
- 5.24 The Permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the facility to minimize emissions.
- 5.25 Fugitive dust shall be managed in accordance with a site specific Fugitive Dust Control Plan (FDCP).
  - 5.25.1 The FDCP shall be kept up-to-date.
  - 5.25.2 The FDCP shall be kept on-site and made available upon request.
- 5.26 All areas on which travel by vehicles routinely occurs shall be covered with crushed stone or paved and shall be regularly controlled with water and/or chemical dust suppressants.
- 5.27 Track out shall be minimized for all vehicles leaving the site. This may include tire washing, road sweeping, road washing, or other methods, as needed.

**6.0 Monitoring & Recordkeeping**

To enable Ecology and the Permittee to observe that the equipment is operating properly, monitoring and recordkeeping requirements shall include, but not be limited to, the following:

- 6.1 The negative aeration system shall be monitored on a daily basis to assure emission capture according to Condition 4.2.5 is maintained.
- 6.2 The Permittee shall keep the following daily records:
  - 6.2.1 The quantity (weight) and type of each feedstock received for composting.
  - 6.2.2 When each feedstock was received.
  - 6.2.3 The location and length of time feedstock was stored prior to commencement of composting.



- 6.3 The Permittee shall develop a plan to monitor negative aeration system parameters.
  - 6.3.1 Parameters shall include at least biofilter moisture, temperature, and pH, as well as the pressure drop across fans leading to the biofilters.
  - 6.3.2 Records of parameter monitoring shall be maintained.
  - 6.3.3 The plan shall be developed within three months of issuance of this Order.
- 6.4 For stockpiling and composting:
  - 6.4.1 Temperature for the stockpile and each compost bed shall be measured and recorded in accordance with the Operations Plan.
  - 6.4.2 All Solvita Jar-Test laboratory test results shall be kept.
  - 6.4.3 Records of the feedstock accepted each month.
  - 6.4.4 Records of the feedstock accepted for the most recent 12-month period, calculated on a rolling monthly basis.
- 6.5 The biofilters shall be inspected on a weekly basis to assure: adequate media presence in each filter; adequate filter media moisture; and absence of air channeling in each filter. The Permittee shall keep records of the personnel performing inspections, the results of each inspection, and any maintenance performed as a result of an inspection.
- 6.6 Operation Plans approved by the Klickitat County Public Health Department.
- 6.7 For the diesel engines specified under Condition 2.3:
  - 6.7.1 If an engine is equipped with a diesel particulate filter to comply with the emission standards listed under Condition 4.3.3, the diesel particulate filter shall be installed with a backpressure monitor that notifies the operator when the high backpressure limit of the engine is approached.
  - 6.7.2 The Permittee shall keep records of any corrective action taken after a backpressure monitor has notified the operator that the high backpressure limit of the engine is approached.
  - 6.7.3 The Permittee shall keep records of the amount and type of fuel used.
  - 6.7.4 The Permittee shall keep records of annual engine usage calculated on a rolling 12-month basis.
- 6.8 For all air-quality related complaints, the following records shall be kept:
  - 6.8.1 A written record of the complaint received by the Permittee or forwarded to the Permittee.
  - 6.8.2 The Permittee's action to investigate the validity of the complaint, what (if any) corrective action was taken in response to the complaint, and the effectiveness of the remedial action.

- 6.9 Records shall be kept on-site by the Permittee and made available for inspection by Ecology upon request. The records shall be organized in a readily accessible manner and cover a minimum of the most recent 60-month period.

## 7.0 Reporting

The Permittee shall notify Ecology's Air Quality Program of:

- 7.1 All complaints. Notification shall occur no later than the close of the business day following receipt of the complaint.
- 7.2 Any composting-related fires, including those that may occur in the stockpile or in one of the biofilters. Notification shall occur no later than the close of the business day following the start of the fire.
- 7.3 Any instance of negative aeration system failure lasting more than 24-hours. Notification shall occur no later the close of the business day when 24-hours of nonoperation was exceeded.
- 7.4 Any instances where prohibited feedstock materials are accepted, they must be reported to Ecology within three days of acceptance.

## 8.0 Testing

- 8.1 No initial or periodic source testing is required by this Order.
- 8.2 When complaint investigation, visible emissions observations, or other information obtained by Ecology indicates the need to measure emissions, Ecology may require the Permittee to conduct material analysis or air emission testing (source testing). This testing requirement is in addition to any testing required by Ecology under WAC 173-400-105.
- 8.3 If source testing of compost activities is performed:
  - 8.3.1 Surface emissions shall be measured as specified in Section 8 of Attachment A to South Coast Air Quality Management District (SCAQMD) Rule 1133.3, adopted July 8, 2011.
  - 8.3.2 SCAQMD Method 25.3 shall be used to determine the total VOC (or total non-methane non-ethane organic compounds) content of the compost emissions.
  - 8.3.3 SCAQMD Method 207.1 shall be used to determine the NH<sub>3</sub> content of the compost emissions.
  - 8.3.4 The test shall quantify and account for pile venting, i.e. instances of increased pile emissions associated with unequal gas channeling or temperature profiles within the pile.
- 8.4 If source testing of engines is performed, Ecology will specify the required number of runs and the testing procedures, methods, duty cycles to be utilized.

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- 8.5 A test plan shall be submitted to Ecology at least 60 days prior to any testing. The test plan shall include a testing protocol for Ecology approval; the protocol shall include the following information:
- 8.5.1 Identification of the process or unit to be tested.
  - 8.5.2 The operating parameters to be monitored during the test.
  - 8.5.3 As applicable, a description of the emission unit including the: manufacturer; model number; serial number; design capacity; and the location of the sample ports or test locations.
  - 8.5.4 The time and date of the proposed test.
  - 8.5.5 Identification and qualifications of the test personnel.
  - 8.5.6 A description of the test methods and procedures to be used.
  - 8.5.7 Alternate test methods and procedures may be proposed by the Permittee for Ecology review; a justification for the change shall be included. Proposed alternates shall not be utilized unless an approval is issued by Ecology, in writing, prior to the test.
- 8.6 Test reports shall be submitted to Ecology within 30 days of completion of the test event. Reports shall include, at a minimum, the following information:
- 8.6.1 The information described under Conditions 8.4 and 8.5.
  - 8.6.2 Field and analytical laboratory data.
  - 8.6.3 Quality assurance/quality control procedures and documentation.
  - 8.6.4 Analyzer data, recorded at least once every minute during the test.
  - 8.6.5 As applicable, engine: run time and horsepower output for each test run for each load; and fuel meter data.
  - 8.6.6 A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit, where applicable.
  - 8.6.7 As applicable, a summary of: control system and equipment operating conditions; and operating parameters for any engines tested.
  - 8.6.8 Copies of field data and example calculations.
  - 8.6.9 Chain of custody information.
  - 8.6.10 Calibration documentation.
  - 8.6.11 Discussion of any abnormalities associated with the results.
  - 8.6.12 A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
  - 8.6.13 Emission calculations.
- 8.7 Where needed, adequate sampling ports, safe sampling platforms and access to platforms, and utilities for sampling and testing shall be provided by the Permittee according to 40 CFR §60.8.

## 9.0 General Conditions

- 9.1 **Availability of Order** - Legible copies of this Order, the FDCP, and the O&M manuals shall be on-site in a location known by and available to employees in direct operation of the described equipment and available to Ecology upon request.
- 9.2 **Equipment Operation** - Operation of the facility shall be conducted in compliance with all data and specifications submitted as part of the NOC application process and in accordance with the O&M manuals, unless otherwise approved in writing by Ecology.
- 9.3 **Activities Inconsistent with this Order** - Any activity undertaken by the Permittee, or others, in a manner which is inconsistent with the data and specifications submitted as part of the NOC application or this Order, shall be subject to Ecology enforcement under applicable regulations.
- 9.4 **Compliance Assurance Access** - Access to the source by the United States Environmental Protection Agency or the Department of Ecology shall be permitted upon request for the purposes of compliance assurance inspections. Failure to allow access is grounds for revocation of this Order.
- 9.5 **Recordkeeping** - Records of all data shall be maintained in a readily retrievable manner for a period of five years and be made available on site to authorized representatives of Ecology upon request.
- 9.6 **Discontinuing Construction** - This Order shall become invalid if construction is not commenced within 18 months after the receipt of final approval, if construction is discontinued for a period of 18 months or more, or if construction is not complete within a reasonable time. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.
- 9.7 **Discontinuing Operation** - It shall be grounds for rescission of this approval if physical operation is discontinued for a period of 18 months or more. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.
- 9.8 **Registration** - Periodic emissions inventory and other information may be requested by Ecology. Information will be submitted within 30 days of receiving the request, unless otherwise specified. All fees will be paid by the date specified.
- 9.9 **Testing** - When complaint investigation, visible emissions observations, or other information obtained by Ecology indicates the need to measure emissions, Ecology may require the Permittee to conduct material analysis or air emission testing. This testing requirement is in addition to any testing required by Ecology under WAC 173-400-105.
- 9.10 **Odor** - Odor from the project shall not be detectable beyond the facility property line. Such violations shall be subject to any or all of the remedies provided in RCW 70.94 for violations of an Ecology Order. In the event odor from the project is detected beyond the property line more than one time, Ecology may order the Permittee to take additional specific measures to control odor.

- 9.11 **Outdoor Burning** - No outdoor burning shall be performed on-site.
- 9.12 **Obligations Under Other Laws or Regulations** - Nothing in this Order shall be construed so as to relieve the Permittee of its obligations under any state, local, or federal laws or regulations.
- 9.13 **Maintaining Compliance** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.

Authorization may be modified, suspended or revoked in whole or part for cause, including, but not limited to, the following:

- I. Violation of any terms or conditions of this authorization.
- II. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.

The provisions of this authorization are severable and, if any provision of this authorization or application of any provision to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this authorization, shall not be affected thereby.

## **YOUR RIGHT TO APPEAL**

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

**ADDRESS AND LOCATION INFORMATION**

<b>Street Addresses</b>	<b>Mailing Addresses</b>
<p><b>Department of Ecology</b> Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503</p> <p><b>Pollution Control Hearings Board</b> 1111 Israel RD SW STE 301 Tumwater, WA 98501</p>	<p><b>Department of Ecology</b> Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608</p> <p><b>Pollution Control Hearings Board</b> PO Box 40903 Olympia, WA 98504-0903</p>

DATED on this \_\_\_\_<sup>th</sup> Day of \_\_\_\_, 2019.

**Prepared by:**

\_\_\_\_\_  
Ryan Vicente, PE  
Air Quality Program  
Department of Ecology  
State of Washington

**Approved by:**

\_\_\_\_\_  
Sanjay Barik, Section Manager  
Central Regional Office  
Department of Ecology  
State of Washington

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## Appendix A

The following materials may be accepted as feedstock for the compost process:

- **Agricultural wastes** consisting of wastes on farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, manure from herbivores and non-herbivores, animal bedding, and carcasses of dead animals.
- **Crop residues** consisting of vegetative material leftover from the harvesting of crops, including leftover or whole fruits or vegetables, crop leaves, and stems. Crop residue does not include food processing waste.
- **Food processing waste** consisting of source-separated organic material that is generated by a food processing facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington State Department of Agriculture, or other applicable regulatory agency. Food processing wastes may include, but are not limited to, sludge from food processing water treatment plants, culls, DAF (dissolved air flotation from a food processing facility), pomace, and paunch manure, not intended for animal or human consumption.
- **Liquid waste** consisting of brewery liquid waste (spent yeast and hops), and fruit pulp waste.
- **Manure and bedding** consisting of manure (feces) and bedding from herbivorous animals such as horses, cows, sheep, and goats.
- **Pre-consumer animal-based wastes** consisting of source separated organic materials from animals such as meat, fat, dairy, or eggs that are a result of food preparation for human consumption or are products that did not reach the intended consumer. Pre-consumer animal-based wastes are typically collected from food processing facilities and grocery stores.
- **Pre-consumer vegetative waste** consisting of source separated organic materials from vegetables, such as pits, peels, and pomace from human food preparation, or vegetable products that did not reach the consumer. Pre-consumer vegetative wastes are typically collected from food processing facilities and grocery stores.
- **Post-consumer food waste** consisting of source separated organic materials originally intended for human consumption including, but not limited to, vegetables, fruits, grains, meats, and dairy products resulting from serving food. Post-consumer food waste is typically collected from cafeterias, homes, and restaurants.
- **Wood waste** consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees, and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard waste, but does not include wood pieces or particles containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.
- **Yard debris** consisting of plant material commonly created in the course of maintaining yards and gardens and through horticulture, gardening, landscaping, or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, and vegetable garden debris.



## **Appendix B**

The following materials shall not be accepted as feedstock for the compost process:

- Painted or treated wood products.
- Chemically contaminated soils.
- Municipal solid waste.
- Drywall (gypsum board), or paper/cardboard recycled thereof.
- Building demolition debris.
- Insulation.
- Roofing materials including wood shingles.
- Any feedstock demonstrated to cause significant odor.
- Any feedstock not allowed listed in

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- Appendix A.