

Issuance Date: August 11, 2014
Expiration Date: August 10, 2019

COMPOST FACILITY/LIMITED PURPOSE LANDFILL PERMIT
(FILE: PERMIT9a)

Washington State Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

IN COMPLIANCE WITH THE PROVISIONS OF
Chapter 70.95 RCW and Chapter 173-350 WAC

OPERATOR: Boise White Paper, LLC (Boise Paper)

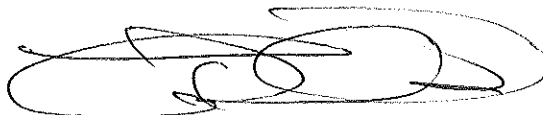
PERMITTEE: Boise White Paper, LLC
PO Box 138
31831 West Highway 12
Wallula, WA 99363

NAME OF FACILITY: BOISE WHITE PAPER, LLC

LOCATION OF OPERATION: WALLULA SITE, HWY 12

TYPE OF FACILITY: COMPOSTING FACILITY & LIMITED PURPOSE LANDFILL

Boise Paper is authorized to operate and maintain the aforementioned Composting Facility and Limited Purpose Landfill in accordance with the special and general conditions, which follow.



Garin Schrieve, P.E.
Industrial Section Manager
Waste 2 Resources Program

INTRODUCTION

Prior to issuance of this permit in 2004, the composting operation at the Boise site was administered by the Walla Walla County Health Department. The Department of Ecology (Ecology), based on the May 27, 1992 agreement with the Walla Walla County Health Department, administers the limited purpose landfill. Administration for both operations was consolidated under the Department of Ecology by agreement between the Walla Walla County Health Department and Ecology in the spring of 2004.

This permit addresses both the composting and landfill operation at the Wallula mill site. The composting operation consists of mixing primary clarifier solids from the Wallula Mill with various nitrogen sources including paunch from the neighboring Tyson Foods, and secondary treatment plant solids as described in the Composting Operations and Maintenance Plan. Compost may be finished with fly ash and/or lime from the Wallula Mill. Finished compost may be used as compost or stored in the Wallula Mill Landfill. The landfill operation consists of composted clarifier solids, demolition debris, fly ash from the hog fuel boiler, lime wastes, and wood materials. The landfill is also permitted to accept uncomposted primary clarifier residuals.

The November 19, 2004 permit modification solely addresses ownership change. Boise Cascade Corporation, the original permittee, entered into an agreement to sell, among other assets, its Wallula, Washington paper facility to Boise White Paper, L.L.C. (BWP), a Delaware limited liability company. Closing occurred on October 29, 2004. As of closing, BWP will be responsible for all future permit compliance, coverage, and liability.

The January 12, 2007 permit modification acknowledges coating material and coated broke from the label and release project as acceptable compost feedstock. The composting testing frequency was changed from quarterly to semi-annually. The metals analysis methodology was expanded to include method SW 6020 in addition to method SW 6010. The compost fecal coli-form analysis method was changed from SM 9222D to SM 9221 as SM 9221 is considered more appropriate for solids.

The July 1, 2009 reissuance of this permit makes two changes: grass clippings are added as an authorized compost operation feed stock. The anticipated source of the grass clippings is on-site mowing. The second change is a clarification of wording. The phrase, "although this option is not being utilized at this time," has been deleted from the end of the last sentence of the second paragraph of the Introduction. The statement was true when the permit was first issued but is unnecessary and could become confusing.

The July 1, 2014 reissuance of the permit acknowledges the facility ownership change which occurred on October 25, 2013 when Boise White Paper, LLC was purchased by Packaging Corporation of America (PCA). This renewal also makes changes to the allowable feedstock components identified in Condition S1. These changes are made to increase the opportunities for beneficial use of the composted material rather than landfill disposal. The new feedstocks consist of nitrogen sources and bulking agents. The two nitrogen sources are manures in general and "Bio CAT" basin wash water from Verdesian (formerly Northwest Agricultural Products). The bulking agent consists of wood chips.

SPECIAL CONDITIONS

S1. LIMITATIONS ON SITE OR FACILITY

The permittee is authorized to operate and maintain only the following specific types of facilities at the designated site pursuant to Chapter 173-350 WAC and the terms and conditions of this permit:

COMPOSTING FACILITY located as designated on map attachment A of this permit. The facility is authorized to compost primary clarifier solids, grass clippings, coating material and coated broke, fly ash and lime from the Wallula mill, and secondary treatment plant solids from the Wallula and Port Townsend mills with paunch from Tyson Foods. Additionally approved material includes "Bio CAT" basin wash water from Verdesian (formerly Northwest Agricultural Products), wood chips in general, and manures. The facility is authorized to compost additional material upon approval from Ecology.

Clarifications:

- a. WAC 173-350-220(4)(a)(x)(B) stipulates a monitoring frequency for every 5,000 cubic yards of compost produced, unless historical data is sufficient to allow an alternative frequency. On evaluation of the existing monitoring data and the consistent nature of the waste, the Permittee will monitor compost at the frequency specified in Table A and B of this permit.
- b. WAC 173-350-320(1)(a)(i) states that waste piles that are an integral part of a composting operation are subject to composting regulations and not WAC 173-350-320 which addresses waste piles. The Permittee requested the flexibility to adjust the ratios of primary clarifier solids/secondary treatment solids in order to better manage the nitrogen content of the composting material. This permit clarifies that the periodic accumulation of primary clarifier solids is considered an integral part of the composting operation when managed in accordance with the operating standards set forth in WAC 173-350-220(4).
- c. WAC 173-350-220(3)(e) specifies design criteria for the compost pad but allows alternative pad construction that meets the same criteria. The Permittee demonstrated that lining was not necessary for the adjacent landfill. The same reasoning justifies the unlined compost operation. Ecology approved the use of native soil as the effective "pad" in the June 2004 cover letter accompanying permit renewal.

LIMITED PURPOSE LANDFILL located as designated on map attachment A of this permit. The facility is authorized to accept primary clarifier solids, coating material and coated broke, boiler ash, wood rejects, lime waste, composted soils, and demolition debris from the Wallula mill.

Variances:

- a. WAC 173-350-400(2)(b) requires a minimum 1000-foot setback of the active edge of a limited purpose landfill from any down gradient drinking wells. A potential, but currently inactive, drinking well owned by Burlington Northern Santa Fe railroad is within the minimum setback distance. The Permittee is granted a variance from the minimum setback requirement.

- b. WAC 173-350-400(3)(i) requires a minimum 100-foot setback between the active area and the property boundary. The landfill boundary is as close as 50 feet from the property boundary along the east and west sides. The Permittee is granted a variance from the minimum setback requirement.

Clarifications:

- c. WAC 173-350-400(3)(a) stipulates landfill performance standards that generally require a landfill liner. Given the arid climate, nature of the material, historical groundwater monitoring data, and proposed operational standards, the Permittee is not required to install a formal liner system.
- d. WAC 173-350-400(3)(c) requires leachate collection in a leachate holding structure. The Permittee is not required to construct a leachate collection and holding system due to the low concentration of the negligible amount of leachate anticipated.
- e. WAC 173-350-400(3)(e)(ii) specifies a final closure cover that presumptively meets performance standards. The Permittee's proposed alternative cover design includes:
- A 6-inch-thick layer of native coarse sand placed over the compacted final lift of waste overlain by
 - A 24-inch thick layer of compacted compost overlain by
 - A 6-inch-thick-layer of uncompacted compost overlain by
 - A 6-inch-thick layer of topsoil or additional uncompacted compost seeded to provide native vegetative cover
- f. WAC 173-350-400(3)(f) requires water balance and groundwater contaminant fate and transport modeling. The Permittee is allowed to use existing historical monitoring data to fulfill this requirement.
- g. WAC 173-350-500(4)(f) requires that background groundwater quality be established based on a specified number of wells evaluated over a specified time frame. Existing monitoring well data is considered to have met this requirement.
- h. WAC 173-350-500(4)(g) requires quarterly groundwater monitoring but allows for no less than semiannual monitoring. Based on evaluation of existing monitoring data, the Permittee may reduce groundwater monitoring to semiannually.

S2. PERFORMANCE STANDARDS

The following standards of performance are the enforceable objectives of this permit. The permittee shall:

- a. Adhere to the most recently approved Plan of Operation;
- b. Operate and close the facility in a manner that does not pose a threat to human health or the environment;

- c. Comply with chapter 90.48 RCW, Water Pollution Control and implementing regulations, including chapter 173-200 WAC, Water Quality Standards for Ground Waters of the State of Washington;
- d. Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid Waste Management -- Reduction and Recycling, and/or the local hazardous waste management plan prepared in accordance with chapter 70.105 RCW, Hazardous Waste Management;
- e. Not cause any violation of emission standards or ambient air quality standards at the property boundary of any facility and comply with chapter 70.94 RCW, Washington Clean Air Act; and
- f. Comply with all other applicable local, state, and federal laws and regulations.

S3. OPERATING STANDARDS

S3.1 GENERAL OPERATING REQUIREMENTS:

The owner or operator of a composting facility/limited purpose landfill shall operate in a manner to:

- a. Control dust, nuisance odors, and other contaminants to prevent migration of air contaminants beyond property boundaries;
- b. Prevent the attraction of vectors;
- c. Ensure that only feedstocks identified in the approved plan of operation are accepted at the facility;
- d. Ensure the facility operates under the supervision and control of a properly trained individual during all hours of operation, and access to the facility is restricted when the facility is closed;
- e. Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to the approved plan of operation;
- f. Prepare and submit a copy of an annual report to the Department of Ecology and Walla Walla County Health Department by April 1st on forms supplied by the Department of Ecology. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:
 - (1) Name and address of the facility;
 - (2) Calendar year covered by the report;
 - (3a) Annual quantity and type of feedstocks received and compost produced, in tons;
 - (3b) Annual quantity and type of landfill material received in tons;
 - (4) Annual quantity of composted material sold or distributed, in tons;

- (5) Annual summary of laboratory analyses of all monitoring results for the composting and landfill operations
- g. Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges, which may cause or lead to the release of waste to the environment or a threat to human health. Inspections shall be conducted monthly. An inspection log or summary shall be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records shall be available to the Ecology and the Walla Walla County Health Department upon request.
- h. Ecology may require testing of additional metal or contaminants, and/or modify the frequency of testing. In the event additional testing is required, the department will notify the facility owner a minimum of ninety (90) days prior to requiring the testing.

S3.2 COMPOSTING REQUIREMENTS:

- a. Implement and document pathogen reduction activities when feedstocks are composted. Documentation shall include compost pile temperature and notation of turning as appropriate, based on the composting method used. Pathogen reduction activities shall at a minimum include the following:
 - (1) In vessel composting - the temperature of the active compost pile shall be maintained at 55° Celsius (131° Fahrenheit) or higher for three days; or
 - (2) Aerated static pile - the temperature of the active compost pile shall be maintained at 55° Celsius (131° Fahrenheit) or higher for three days; or
 - (3) Windrow composting – the temperature of the active compost piles shall be maintained at 55° Celsius (131° Fahrenheit) or higher for 15 days or longer. During the period when compost is maintained at 55° Celsius (131° Fahrenheit) or higher, there shall be a minimum of five turnings of the windrow.
- b. Monitor the composting process according to the approved plan of operation submitted during the permitting modification process. Monitoring shall include inspection of incoming loads of feedstocks and pathogen reduction requirements.
- c. Analyze composted material as specified in Tables A and B of this Permit. Finished compost must also be tested at the same frequency for biological stability using TMECC method 5.08-E.

Table A – COMPOSTING Metals Monitoring Requirements

Metal	Limit (mg/kg dry weight)	Frequency¹	Test Method²
Arsenic	<= 20 ppm	Semi-annually	SW 6010 or SW 6020
Cadmium	<= 10 ppm	Semi-annually	SW 6010 or SW 6020
Copper	<= 750 ppm	Semi-annually	SW 6010 or SW 6020
Lead	<= 150 ppm	Semi-annually	SW 6010 or SW 6020

Metal	Limit (mg/kg dry weight)	Frequency ¹	Test Method ²
Mercury	< = 8 ppm	Semi-annually	SW 7470
Molybdenum	< = 9 ppm	Semi-annually	SW 6010 or SW 6020
Nickel	< = 210 ppm	Semi-annually	SW 6010 or SW 6020
Selenium	< = 18 ppm	Semi-annually	SW 6010 or SW 6020
Zinc	< = 1400 ppm	Semi-annually	SW 6010 or SW 6020

Table B – COMPOSTING Additional Testing Parameters

Parameter	Limit	Frequency ¹	Test Method ²
Physical Contaminant (Manufactured Inerts)	< 1 percent by weight total, not to exceed .25% film plastic by weight ³ .	Semi-annually	TMECC 3.08
Sharps	0	Semi-annually	TMECC 3.06
PH	5 - 10 (range)	Semi-annually	SW 9045C
Salmonella Or Fecal Coliform	< 3 Most Probable Number per 4 grams of total solids (dry weight). < 1,000 MPN per gram of total solids (dry weight)	Semi-annually	TMECC 7.02 SM 9221
Dioxin TEQ	NA	Semi-annually	EPA Method 1613

Note 1. The permittee may request a reduction in compost monitoring from quarterly to a semi-annual basis after four quarters of testing have been done which adequately characterizes the potential feedstocks. Ecology may reinstate quarterly testing if the nature or type of feedstock changes.

Note 2. The Permittee may request an alternative test method.

Note 3. If film plastics are between 0.1%-0.25% by weight, restrictions on use and labeling as required by WAC 173-350-220(4)(f)(iii)(D)(I) must be met.

- d. Ensure process parameters and management procedures promote an aerobic composting process.
- e. Composted materials that fail to meet the standards in WAC 173-350-220 (10), shall be managed as solid waste under chapter 70.95 RCW.
- f. Maintain daily operating records of the following:
 - (1) Temperatures and compost pile turnings.
 - (2) Additional process monitoring data as prescribed in the plan of operation.
 - (3) Results of laboratory analyses for composted materials.
 - (4) Facility inspection reports shall be maintained in the operating record.

- (5) Significant deviations from the plan of operation shall be noted in the operating record.

Records shall be kept for a minimum of five years and shall be available upon request by Ecology or the Walla Walla County Health Department.

S3.3 LIMITED PURPOSE LANDFILL REQUIREMENTS:

- a. Monitor groundwater monitoring wells 1 through 8 as specified in Table C of this Permit.
- b. Volume of liquids collected in vadose monitoring wells 1 through 5 should be measured on a semi-annual basis.

Table C – Groundwater Monitoring Requirements

Parameter	Limit (mg/kg dry weight)	Frequency	Test Method ¹
Temperature	NA	Semi-annually	SM 2550
Conductivity	NA	Semi-annually	SM 2510
PH	NA	Semi-annually	SM 4500
Static Water Level	NA	Semi-annually	As described in Sampling and Analysis Plan
Alkalinity (as CaCO ₃)	NA	Semi-annually	SW 310.1
Bicarbonate (as CaCO ₃)	NA	Semi-annually	SW 310.1
Calcium (Ca)	NA	Semi-annually	SW 6010 or SW 6020
Chloride (Cl)	NA	Semi-annually	SW 300.0
Iron (Fe)	NA	Semi-annually	SW 6010 or SW 6020
Magnesium (Mg)	NA	Semi-annually	SW 6010 or SW 6020
Manganese (Mn)	NA	Semi-annually	SW 6010 or SW 6020
Nitrate (NO ₃)	NA	Semi-annually	SW 300.0
Sodium (Na)	NA	Semi-annually	SW 6010 or SW 6020
Sulfate (SO ₄)	NA	Semi-annually	SW 300.0
Ammonia (NH ₃ -N)	NA	Semi-annually	SW 350.1
Total Organic Carbon (TOC)	NA	Semi-annually	SM 5310-C
Total Dissolved Solids (TDS)	NA	Semi-annually	SM 2540-C

Note 1: The Permittee may request an alternative test method.

S4. REGULATORY INSPECTIONS

- a. Any duly authorized officer, employee, or representative of Ecology may, upon the presentation of credentials and such other documents as may be required by law, enter and inspect any property, premises or place on or related to the Composting Facility at any reasonable time for the purpose of determining compliance with this permit and solid

waste statutes and regulations, to inspect or copy any records that must be kept under the terms and conditions of this permit, or for obtaining samples of groundwater, surface water, leachate, or gaseous emissions.

- b. This permit shall be subject to suspension at any time Ecology determines that the composting facility located on the site is being operated in violation of Chapter 70.95 RCW; Chapter 173-350 WAC; local laws and regulations, or the conditions set forth in this permit.

S5. COMPLIANCE SCHEDULE

- a. This permit may be amended by letter from Ecology at any time prior to its expiration date should circumstances or conditions arise which require immediate compliance for the protection of the public health, welfare, or safety.

GENERAL CONDITIONS

- G1. There shall be no open burning without the concurrent written permission of the Jurisdictional Fire District and the Washington State Department of Ecology.
- G2. Storage of composted material and feedstocks shall be controlled so as not to create a nuisance, allow vermin inhabitation, create a safety hazard, create malodors, create water pollution, allow insect infestation, or otherwise adversely affect the public health.
- G3. Light materials shall be contained to prevent blowing.
- G4. Arrangements shall be made with the jurisdictional fire district to immediately acquire their services when needed. Adequate on-site fire protection shall be provided as determined by the fire district or other appropriate fire control agency.
- G5. The permittee shall insure that adequate reserve operational equipment shall be available to maintain and meet the conditions of this permit.
- G6. The permittee shall institute an adequate maintenance program for all site and facility related equipment to insure the conditions of this permit are continuously and efficiently met.
- G7. The permittee shall provide direct communications between employees working at the composting facility site, and management offices on-site and off-site to handle emergencies.
- G8. The permittee shall notify Ecology whenever any change or alteration of the permitted site and facility is contemplated. This permit may be amended by letter from the Health Officer, or his authorized designee, prior to its intended date of expiration in order to accommodate necessary changes.
- G9. Ecology may establish specific monitoring requirements beyond those identified in this permit by letter from the Department.
- G10. In the event the permittee is unable to comply with any of the conditions of this permit due to any cause, the permittee shall:
 - (A) Immediately take action to stop, contain and clean up any unauthorized discharges or spills and correct the problem.

- (B) Immediately notify Ecology of the failure to comply.
 - (C) Submit a detailed written report to Ecology describing the nature of the violation, corrective action taken and/or planned, steps taken or to be taken to prevent a recurrence, and any other pertinent information.
- G11. If any part, section, sentence, or paragraph of this permit should be suspended by appropriate action of Ecology, or found to be invalid by court decision, the remainder of this permit shall not be affected thereby.
- G12. Nothing in this permit shall be construed as excusing the permittee from compliance with any applicable federal, state or local statutes, ordinances, or regulations.
- G13. All persons involved with managing the day-to-day operation of the site shall be familiar with the provisions of this permit and the plan of operation.

Attachment A – Map of Facility

