D.1 Permits & Orders

D.1.1 Boise Cascade Permit information, 000369-7, April 1, 2018

This permit maintains limited provisions only from 1614-AQ04, 2/18/2004, Dust Control Plan.

- Condition Q. - Page 64 of 98 of Permit No. 0003697 – maintains 1614-AQ04, Dust Control Plan
- Landfill and Compost - Page 10 and 40 of Statement of Basis for Permit No. 0003697

Links to complete Boise permit, statement of basis and compost permit online.

Document	Links
Ecology Boise Wallula web page	https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Industrial-facilities-permits/Boise-Wallula
Permit	https://fortress.wa.gov/ecy/industrial/UIPermit/ViewDocument.aspx?DocumentId=378
Statement of Basis	https://fortress.wa.gov/ecy/industrial/UIPermit/ViewDocument.aspx?DocumentId=379
Compost	https://fortress.wa.gov/ecy/industrial/UIPermit/ViewDocument.aspx?DocumentId=180

D.1.2.1 Tyson Foods, Order AQ13-526, 4/16/2014, specific provisions only- strikeout version

D.1.2.1.1 Tyson Foods, 2007 permit and TSD for reference only

D.1.3.1 Simplot Fugitive Dust Control Plan, March, 2018

Q. Landfill/Compost Operation

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
Q.1	Particulate fugitive dust	Minimum Operating condition	The Permittee shall comply with Landfill/Compost Dust control plan after the implementation date specified in the order establishing the dust control plan. This order is part of the SIP maintenance plan for the local air shed.	Order No. 1614-AQ04 for dust control plan requirement

R. Reciprocating Internal Combustion Engines (RICE) MACT

40 CFR 63 Subpart ZZZZ (Table 2c) applies to the following emergency engines:

- 318 HP Detroit diesel CI engine; Last rebuilt in 1986; Used to drive an emergency backup fire water pump.
- 318 HP Detroit diesel CI engine; Last rebuilt in 1998; Used to drive an emergency backup mill process water pump.
- 200 HP Ford propane SI backup generator; manufactured in April 2004; backup generator for providing electricity to the main office.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
R.1	HAPs		Change the oil and filter every 500 hours of operation or annually, whichever comes first. Inspect the air cleaner and/or spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	40 CFR 63 Subpart ZZZZ Table 2c for maintenance requirements
R.2	Operations		Minimize the engine's time spent at idle and minimize the engine's	40 CFR 63.6625(h) for minimizing

pumped to an aerated lagoon that biodegrades the waste materials before entering a quiescent zone.

In the quiescent zone a portion of the biodegradation products and other solids settle to the bottom, and the clarified secondary effluent passing out of the quiescent zone is pumped to the outfall diffuser.

Boise Trucking

Boise Wallula owns a transportation service that is responsible for delivering wood chips to and distributing products from the Mill. A maintenance terminal is located across Highway 12 from the Mill. The terminal is responsible for maintenance, dispatching, and fueling of the trucks.

De-ink Facility (Ponderosa)

The deink facility remains under the control and ownership of the Mill but is shut down indefinitely. An office area of this facility has been modified into a new Technical Development Center for the Mill. This new lab focuses on new product development and testing.

Container Plant

The container plant uses corrugated medium to produce container boxes. This is accomplished by feeding two sheets of linerboard and one sheet of fluted corrugated medium through a corrugator. The corrugator forms the fluted or wavy middle sheet of boxboard and then glues the three sheets together to produce boxboard blanks. The boxboard is later cut to various sizes and shapes to create packaging boxes.

Fiber Farm

The facility previously owned an 850-acre cottonwood fiber farm adjacent to the Mill property but separated from the Mill property by State Highway 12 and the Union Pacific Railroad right-of-way. The farm had previously been included in the Mill's emission inventory, but is no longer included due to the sale on 10/3/2007. The farm provided cottonwood chips for the production of kraft hardwood pulp in the Mill's No. 2 M&D digester pulping system.

Landfill and Composting

The facility owns and operates a 50-acre limited purpose landfill, which is adjacent to the Mill. The landfill is separated from the Mill by State Highway 12 and the Burlington Northern Railroad right-of-way. The Mill's landfill incorporates a composting operation to convert the primary clarifier solids into compost.

The waste materials in the landfill are being considered for various beneficial uses on a continuous and ongoing basis. The landfill operates under a dust control plan, which requires frequent watering of the unpaved roads during the dry months of the year or on an as needed basis.

A portion of the plant is being used to store No. 2 paper machine's bleach market pulp and another portion of the plant has been used since 2008 for a research and technical development center associated with the label and release paper machine project for W3. Emissions from the laboratory are insignificant as defined in WAC 173-401-530, 531 and 533(3)(c).

Landfill/Compost Operations

The fugitive emissions inventory from the onsite landfill and compost operations is incorporated into the permitted inventory.

Fugitive emissions estimates were updated as part of the PM10 attainment designation and provided to Ecology's Doug Schneider for use in development of the Wallula Area maintenance plan on 4/11/03. The Mill and its contractors have implemented an approved Dust Control Plan at the site.

Fiber Farm

The facility previously owned an 850-acre cottonwood fiber farm adjacent to the Mill property. The farm had previously been included in the Mill's emission inventory, but is no longer included due to the sale of the land on 10/3/2007.

Boise Wallula considers the Fiber Farm as an insignificant emission unit per WAC 173-401-532(34).

PSD Permit, Notices of Construction ("NOC"), State Orders, and Letters of Approval

Subsequent to the Mill's first Title V permit in 1996, the Mill has been issued a PSD permit, several notices of construction, state orders, and letters of approval, which are provided in Appendix A. Brief descriptions of the most significant permitting activities are listed below.

Box Plant Corrugator Project, 2010-2011

In May 2010, Boise Wallula submitted a NOC to Ecology to upgrade and modify the existing corrugator operations. On August 17, 2010, Ecology issued NOC approval order 7847 for this project. No new applicable requirements or limits were included in the approval; therefore, no new permit conditions need to be added to the Title V operating permit.

No. 3 Recovery Furnace/Hog Fuel Boiler PSD Permit, May 2002

The Mill has submitted a PSD application for the No. 3 Recovery Furnace upgrade and the hog fuel boiler upgrade and received the accompanying notices of construction and state orders.

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)	Frequency[1]	Test Method[2]
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.

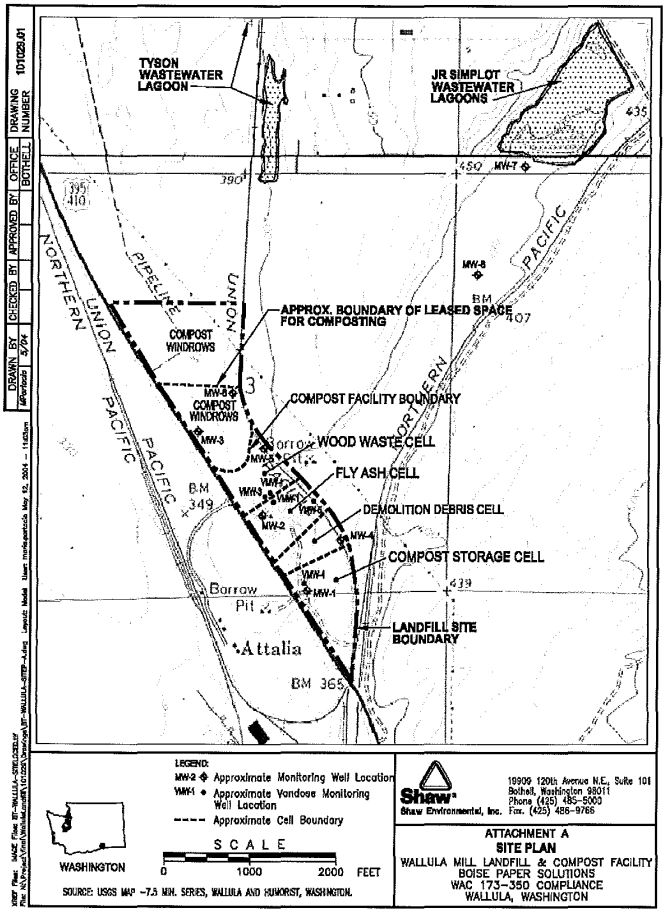
(C) Submit a detailed written report to Ecology describing the nature of the violation, corrective action taken and/or planned, steps taken or to be taken to prevent a recurrence, and any other pertinent information.

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



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY
NOTICE OF CONSTRUCTION

IN THE MATTER OF APPROVING OPERATION FOR TYSON FRESH MEATS, INC.	)))	APPROVAL ORDER NO. 13AQ-E526

TO: Mr. Brad Shafer, Complex Manager
Tyson Fresh Meats, Inc.
P.O. Box 4239
Pasco, WA 99302

The Tyson Fresh Meats facility is located approximately 12 miles southeast of Pasco on U.S. Highway 12. The legal description for the general location is the NE¼, of the NE¼, of Section 34, Township 8N, and Range 31E of Willamette Meridian in Walla Walla County.

Equipment Evaluated for this approval order consists of the following:

1. ~~Decontamination Cabinets (4)~~
   - a. ~~Pasteurization (SPS)~~
   - b. ~~Post-pasteurization Acid~~
   - c. ~~Pre-evisceration Acid~~
   - d. ~~Carcass Wash Acid~~
   - e. ~~Head Wash~~
   - f. ~~Heart Wash~~
2. ~~Meat Cutting/Packing~~
3. Inedible By-product line with:
   - a. Cookers (9)
   - b. Perk Pans (No Emissions)
   - c. Grease Centrifuge (Tallow)
   - d. Strainer Screw (Solids) (No Emissions)
   - e. Dupps Presses (2)
   - f. Crax (Solids) Indoor Loadout (via Truck)
   - g. Hammermill
   - h. Inedible Rotex Screen
   - i. Crax Bin
   - J. Inedible Silo
   - k. Outdoor Shipping via rail or truck (Meat & Bone Meal) .

4. Edible By-Product Line with:
   a. Duske Dryer
   b. Rotex Screen (separates inedible Lo Pro and gel Bone)
   c. Lo Pro Loadout (Indoor via Truck)
   d. Forsberg Screen with Cyclone (Emissions accounted for in Edible Room Air)
   e. Lo Pro Storage Bins (2)
   f. Gel Bone Loadout (Outdoor via Truck)
5. Blood Processing Line with:
   a. Coagulator/ Centrifuge
   b. Blood Dryer
   c. Disintegrator (part of Blood Dryer)
   d. Blood Silo
   e. Blood Loadout (Outdoor via Truck)
   f. Raw Blood Tank
6. ~~Wastewater Flotation Rendering Line with:~~
   ~~a. Flotation Cell Tank~~
   ~~b. Centrifuges (2)~~
   ~~c. Skim Tank~~
7. Hide Processing Line with:
   a. Salter Raceway (No Emissions)
   b. Cutting Area (No Emissions)
   c. Fleshing Tank
8. ~~Utility Equipment~~
   ~~a. Air Make-up Units and Building Heaters (30) Propane or Natural Gas total 23.24 mmBTU/hr~~
   ~~b. Boilers (5)~~
      ~~i. No. 1: CB 786-500, 20.92 mmBTU/hr~~
      ~~ii. No. 2: CB 786-500, 20.02 mmBTU/hr~~
      ~~iii. No. 3: CB 786-200, 8.38 mmBTU/hr~~
      ~~iv. No. 4: Johnston 535 ACG, 31.5 mmBTU/hr~~
      ~~v. No. 5: Johnston PFTA 750 4, 30.53 mmBTU/hr~~
   ~~c. Miscellaneous Propane Heaters~~
      ~~i. Salamanders (5) total 0.66 mmBTU/hr~~
      ~~ii. Supply Room Heaters (3) total 0.325 mmBTU/hr~~
   ~~d. Diesel Driven Fire Pump, 222 hp~~
   e. Jarvis Vacuum Pump - Vane Style

9. Pollution Control Equipment including:
   a. Spray Chamber /Filter Scrubber (24,000 scfm)
   b. Packed Bed Tower Scrubber (42,000 scfm)
   c. Venturi Scrubber (14,000 scfm)
   d. Packed Bed Tower Scrubber (75,000 scfm)
   e. Venturi Scrubber (20,000 scfm)
   f. Wet Cyclone (26,000 scfm)
   g. Dry Cyclone (2,500 scfm)

10. ~~Other~~
   ~~a. Salt Loadout via Rail~~
   ~~b. 9000 Gallon Diesel Tank~~
   ~~c. 1800 Gallon Gasoline Tank~~
   ~~d. Paved Roads~~

DETERMINATIONS

In relation to the above equipment and the evaluation outlined in the Technical Support Document associated with this Order, the Department of Ecology, State of Washington, pursuant to RCW 70.94.152, WAC 173-400-110, and ~~WAC 173-460-040,~~ makes the following determinations:

1. The proposed new source of air contaminants, if operated as herein required, will be in accordance with applicable rules and regulations, as set forth in Chapter 173-400 WAC ~~and 173-460 WAC~~ and the operation thereof, at the location proposed, will not result in ambient air quality standards being exceeded.
2. The proposed modifications and changes, if operated as herein required, will provide all known, available, and reasonable methods of emission control.

THEREFORE, IT IS ORDERED that the project as described in the Notice of Construction application and more specifically detailed in plans, specifications, and other information submitted to Ecology is approved for construction and operation, provided the following conditions are satisfied:

APPROVAL CONDITIONS

1. **ADMINISTRATIVE**
   This Approval Order replaces and rescinds Approval Order Nos. 99AQ-El 16, First Amendment, 01AQER-2077, 02AQER-5074 First Amendment, and 06AQ-El 76.

2. Duske Dryer
    a. The Duske Dryer and Cyclone shall be limited to producing no more than 49,421 tons per year of finished product ~~and consumption of no more than 128 million cubic feet of natural gas per year. Natural gas consumption records for the dryer shall be maintained for the most recent 24 month period and be available to Ecology for inspection. An increase in natural gas consumption that exceeds the above level may require a Notice of Construction.~~

    b. Venturi and Wet Scrubber: Differential pressure shall be monitored across the odorous and scrubbed exhaust streams. Scrubber liquid flow shall be monitored through portable flowrate meter testing of scrubber liquid flows.
3. ~~Boilers~~
    ~~a. The 5 boilers shall use natural gas exclusively.~~
    ~~b. The total natural gas usage for all 5 boilers shall not exceed 956.3 million standard cubic feet per year.~~
    ~~c. Boiler 5 exhaust shall not exceed the following mass emission limits:~~
        ~~i. NOx: 0.035 lb/MMBtu, 1.07 lb/hr, (30 ppmv)~~
        ~~ii. CO: 0.07 lb/MMBtu, 2.14 lb/hr, (60 ppmv)~~
4. ~~Heater~~
    ~~a. Annual fuel consumption shall be limited to no more than 48.44 million cubic feet of natural gas per calendar year total for the 5.64 MMBtu heater.~~
5. ~~Decontamination Units~~
    ~~a. Only USDA approved chemical solutions with a maximum acid concentration of 5.0 weight percent shall be used in the decontamination cabinets.~~
    ~~b. Consumption of acid solutions in the pre-evisceration cabinet shall be limited to 2 gallons per minute (rated capacity).~~
    ~~c. Consumption of acid solutions in the pasteurization/acid wash cabinet shall be limited to 1.5 gallons per minute (rated capacity).~~
    ~~d. Volatile Organic Compounds (VOC) shall not exceed 0.60 pounds per hour from the pasteurization/acid wash exhaust stack.~~
6. Process emission points
    Rendering and blood drying operations will be limited by restricting finished product throughput and hours of operation as follows:
    a. The blood drying production rate (ten percent moisture product) shall not exceed 1,711 lbs/hr, or 5990 tons/yr.
    b. The edible rendering production rate (gel bone, edible Lo Pro) shall not exceed 13,200 lbs/hr, or 49,421 tons/yr.
    c. The inedible rendering production rate (crax and tallow and inedible Lo Pro) shall not exceed 7,300 lbs/hr or 22,891 tons/yr.

d. Blood drying and rendering activities at this facility shall not exceed 7,488 hrs/yr.

e. ~~Odor from Packed Bed Scrubbers 1 and 2 exhaust gases shall be controlled by using the NALCO chemical system or one of the following systems:~~

i. ~~A ten percent solution of sodium hypochlorite to oxidize odorants, maintaining a chlorine residual of greater than 25 ppmw with a 50 percent solution of sodium hydroxide (caustic) to maintain a pH of greater than eight, or~~

ii. ~~Chlorine dioxide to maintain a chlorine dioxide residual Oxidation Reduction Potential (ORP - milivolts (mv)) as follows:~~
~~Packed Bed Scrubber 1 (42,000 scfm): October-May 2: +325 mv,~~
~~June-September 2: +375 mv.~~
~~Packed Bed Scrubber 2 (75,000 scfm): October-May 2: +325 mv,~~
~~June-September 2: +375 mv.~~

f. The exhaust air stream temperature shall be maintained less than 120 °F in both packed bed scrubbers at all times.

7. All Emission points

a. The particulate matter (PM_{10}) from all exhaust stacks on site shall be less than or equal to 0.010 grains of PMm per dry standard cubic foot.

b. Visible emissions shall be no more than ten percent (10%) opacity as measured by 40 CFR 60 Appendix A, Method 9 from any process emission point at the facility.

8. Source Testing Requirements

a. Compliance with Condition 7.a. for the Packed Bed Scrubbers 1 and 2, shall be demonstrated by source testing Scrubber exhaust front and back half in accordance with Condition 9 (PM_{10} per Title 40 CFR 60, Appendix A, Method 5 with 40 CFR 51, Appendix M, Method 202), within 90 days after issuance of this Order. After initial testing, source testing of the Packed Bed Scrubbers 1 and 2 will be required every 5 years.

9. COMPLIANCE TESTING

Source testing under Washington Administration Code (WAC) 173-400-105(4) may be required at Ecology's discretion to verify emission limits are met as listed in the above Approval Conditions.

a. Performance testing shall utilize the following test methods unless an alternative method is requested by the permittee and approved by Ecology in writing:

i. Visual determination of the opacity emissions from stationary sources per Title 40 Code of Federal Regulations, Part 60, Appendix A, Method 9. (referenced as Method 9)

ii. ~~PM per Title 40 CFR 60, Appendix A, Method 5.~~

iii. PM_{10} per 40 CFR 60, Appendix A, Method 5 with 40 CFR 51, Appendix M, Method 202

iv. ~~NOx per 40 CFR 60, Appendix A, Method 7E~~

v. ~~CO per 40 CFR 60, Appendix A, Method 10~~
vi. ~~Plant surveys for the presence of opacity from control devices shall be performed using the techniques and procedures in 40 CFR 60, Appendix A, Method 22.~~

b. Testing Logistics - The permittee shall provide testable emission points, sampling ports, safe access to sampling points and ports, and utilities for sampling and testing.
c. Number of Test Runs - Performance or compliance testing of each piece of pollution control equipment shall consist of three separate runs of at least 60-minutes each.
d. Throughput during Testing - During testing, the process shall be operated at a minimum of ninety percent (90%) of rated capacity for equipment with less than 12 months operating history, or 90 to 110% of the maximum process rate recorded during the preceding 12 month period for equipment operated for 12 months or more. Operation of the process during testing outside of the specified range may be proposed, but may result in an operational restriction that will be amended to this Approval Order.
e. Submittal of Performance Test Plan - A written test protocol that includes a description of the equipment to be tested, the process and control device operating information to be collected during the test, and the sampling and analytical method(s) proposed, shall be submitted to Ecology at least 30 calendar days prior to the start of any performance test.
f. Notification of Inability to Conduct Performance Test - If the permittee is unable to conduct any performance test as scheduled, Ecology shall be notified at least 24-hours before the test at the address under "Reporting", Condition 13, or via telephone at 509-329-3400.
g. Plant Operator during Testing - The plant process equipment shall be operated and controlled by normal plant operators during the period when the performance testers are on-site to conduct testing and during actual testing.
h. Performance or Compliance Testing Results - The results of all initial performance testing and all other periodic performance testing shall be sent to the address at APPROVAL CONDITION 13. One copy of the completed test report shall be submitted no later than 60-days after the last day of the testing.

10. MONITORING REQUIREMENTS

a. The following parameter instrumentation shall be maintained for accuracy on the specified air pollution control equipment:
   i. Packed Bed Scrubbers 1 and 2: Liquor flows (recirculation, blowdown), differential pressure, liquor temperature.
   ii. ~~Packed Bed Scrubbers 1 and 2: pH when using sodium hypochlorite, and oxidation reduction potential (ORP) when using the NALCO chemical system, sodium hypochlorite or chloride dioxide.~~
   iii. Venturi Scrubbers 1 and 2: Liquor flows (recirculation, blowdown), and differential pressure.

iv. Spray Chamber Scrubber: Liquid flows (recirculation, blowdown), and differential pressure.
v. Duske Dryer Wet Cyclone: Liquor flows (recirculation, blowdown), and differential pressure.

~~b. Periodic combustion analysis of the boilers 1-5 to maintain operational efficiency shall be performed.~~

11. RECORDKEEPING REQUIREMENTS

Specific records shall be kept on-site by Tyson Fresh Meats 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. The records to be kept shall include the following:

a. ~~For boiler 5, recordkeeping frequency as contained in 40 CFR 60.48c(g) has been reduced from daily to monthly because the boiler uses natural gas only. The amount of fuel used each month shall be recorded and retained by the operator for a period of at least two years as required in 60.48c(i).~~
b. ~~For the boilers 1-5: Nitrogen oxide and carbon monoxide combustion analysis measurements, and operations rate in percentage during measurement, shall be recorded and submitted whenever Ecology requests it.~~
c. Hourly and Annual production records to verify that operating rates remain at or below the restrictions contained in the Approval Conditions listed in this Approval Order.
d. Air pollution control equipment operating parameters shall be recorded, including differential pressure and scrubber liquor flow rates as applicable for all air pollution control equipment contained in this approval order. These parameters shall be recorded at least twice per shift during plant operations.
e. Packed bed scrubber liquor parameters for both Packed Bed Scrubber 1 and 2 shall be continuously monitored. The scrubber liquor shall be monitored by temperature gauge, ~~and the following parameters:~~
    ~~i. Oxidation reduction potential (ORP) when using the NALCO chemical system,~~
    ~~ii. Hydrogen ion activity (pH) probe, and ORP when using sodium hypochlorite,~~
    ~~iii. ORP when oxidizing with chlorine dioxide~~.
f. Nature and details of any upset condition or other situation (date/time, duration, cause, etc.) that results in the facility being operated while the air pollution control equipment or any other equipment was not functioning properly, including upsets in scrubber liquor parameters.
g. All performance and emission testing results and reports.
h. O&M manual and maintenance records.

~~12. OPERATION AND MAINTENANCE MANUALS~~

~~A site-specific O&M manual for the Duske Dryer and Cyclone, the boilers, the large heater, the decontamination cabinets, pollution control equipment and all other non-fugitive process emission points covered in this Order, shall be developed and followed. The manual shall be reviewed no less frequently than annually, and updated as necessary.~~

~~Manufacturers' operating instructions and design specifications for process equipment may be referenced.~~

~~The O&M manual shall be updated to reflect any modifications of the equipment or operating or maintenance or monitoring procedures. Emissions that result from failure to follow the operating procedures contained in the O&M manual or manufacturer's operating instructions may be considered proof that the equipment was not properly installed, operated, and/or maintained. The O&M manual shall at a minimum include:~~

~~a. Normal equipment operating parameters and design specifications.~~
~~b. Maintenance schedules.~~
~~c. Monitoring procedures and schedules.~~

13. SUBMITTALS

All notifications, reports, and other submittals shall be sent to:

Washington State Department of Ecology
Air Quality Program
4601 N. Momoe Street
Spokane, WA 99205-1295

14. REPORTING

The following information will be submitted to the AQP at the address in Condition 13 above by January 30 of each calendar year.

a. Annual summary of air contaminant emissions, hourly and annual production rates, boiler fuel consumption, and annual total hours of operation.
b. The results of any emission testing shall be sent to the above address no later than 60 days following such testing.

~~**15. GENERAL CONDITIONS**~~

~~a. **Visible Emissions** – No visible emissions shall be allowed beyond the property line, as determined by opacity readings.~~

b. Commencing/Discontinuing Construction and/or Operations: This approval shall become void if the construction or operation of this facility is discontinued for a period of eighteen (18) months, unless prior written notification is received by Ecology at the address in Condition 13 above.
c. Compliance Assurance Access: Access to the source by representatives of Ecology or the EPA shall be permitted upon request. Failure to allow such access is grounds for enforcement action under the federal Clean Air Act or the Washington State Clean Air Act, and may result in revocation of this Approval Order.
d. Availability of Order and O&M Manual: Legible copies of this Order and the O&M manual shall be available to employees in direct operation of facility equipment, and be available for review upon request by Ecology.
e. **Equipment Operation:** Operation of facility equipment shall be conducted in compliance with all data and specifications submitted as part of the NOC application and in accordance with the O&M manual, unless otherwise approved in writing by Ecology.
f. **Modifications:** Any modification to the project, contrary to information in the NOC application, shall be reported to Ecology at least 60 days before such modification. Such modification may require a new or amended NOC Approval Order.
g. Activities Inconsistent with the NOC Application and this Approval Order: Any activity undertaken by the permittee or others, in a manner that is inconsistent with the NOC application and this determination, shall be subject to Ecology enforcement under applicable regulations.
h. **Obligations under Other Laws or Regulations:** Nothing in this Approval Order shall be construed to relieve the permittee of its obligations under any local, state or federal laws or regulations.
i. **Fees:** Per WAC 173-400-116, this Preliminary Determination and related regulatory requirements have a fee associated for review and issuance.

All plans, specifications, and other information submitted to the Department of Ecology relative to this project and further documents and any authorizations or approvals or denials in relation thereto shall be kept at the Eastern Regional Office of the Department of Ecology in the "Air Quality Controlled Sources" files, and by such action shall be incorporated herein and made a part thereof.

Nothing in this approval shall be construed as obviating compliance with any requirement of law other than those imposed pursuant to the Washington Clean Air Act and rules and regulations thereunder.

A one-month testing and break-in period is allowed, after any part or portion of this project becomes operational, to make any changes or adjustments required to comply with applicable rules and regulations pertaining to air quality and conditions of operation imposed herein. Thereafter, any violation of such rules and regulations or of the terms of this approval shall be subject to the sanctions provided in Chapter 70.94RCW.

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

a. Violation of any terms or conditions of this authorization;

b. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant fact.

The provisions of this authorization are severable and, if any provision of this authorization, or application of any provisions of their circumstances, and the reminder of this authorization, shall not be affected thereby.

You have a right to appeal this Approval Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Approval 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 the following within 30 days of the date of receipt of this Approval Order:

- File your appeal and a copy of this Approval 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 Approval 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.

Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel RD SW STE 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box40903 Olympia, WA 98504-0903

DATED at Spokane, Washington this 16th day of April, 2014.

PREPARED BY:

Jenny Filipy
Air Quality Program
Department of Ecology

REVIEWED BY:

Robert Koster, P.E.
Air Quality Program
Department of Ecology

APPROVED BY:

Karen K. Wood, Manager
Air Quality Program
Department of Ecology

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF APPROVING A NEW CONTAMINANT SOURCE FOR TYSON FRESH MEATS, INC.	)))	First Amendment of APPROVAL ORDER No. 02AQER-5074

TO: Ray McGaugh, Plant Manager
Tyson Fresh Meats, Inc.
P.O. Box 4239
Pasco, WA 99302

Tyson Fresh Meats, Inc. (Tyson) owns and operates a cattle slaughtering and rendering plant near Pasco, WA. The legal description of the facility location is the NE ¼ of the NE ¼ of Section 34, Township 8 N, Range 31 E, Willamette Meridian.

1. BACKGROUND

The Department of Ecology Air Quality Program (AQP) issued Approval ORDER No. 02AQER-5074 to IBP, inc. (a division of Tyson) on December 6, 2002. Tyson had requested voluntary emission limitations to keep IBP, inc. below particulate matter emission rates that would require an Air Operating Permit (70 tons PM_{10} per year in the Wallula serious nonattainment area), to update Air Quality Program (AQP) Orders regulating the rendering plant process equipment, and to evaluate and incorporate process and pollution control equipment installed without AQP approval. A copy of Approval ORDER 02AQER-5074 is included as Attachment One of the Technical Support Document accompanying this Approval Order.

In 2005 the Wallula area was redesignated to the status of an area that meets the National Ambient Air Quality Standards (NAAQS) for PM_{10}.

On March 15, 2007, Tyson submitted a notice of construction (NOC) application to the AQP to increase hourly slaughter rates, add two new cookers (cookers 8 and 9), and to provide Tyson flexibility to select the most effective scrubbing liquor oxidant chemicals. Production rate changes proposed in the application are exclusively hourly: Tyson will continue to operate within the annual production limitations of Approval ORDER 02AQER-5074 which continues as approval conditions of this Amendment.

2. FINDINGS

a. LAWS AND REGULATIONS

The proposal by Tyson to modify and operate its beef processing facility shall comply with all requirements of the following:

i. Chapter 70.94 Revised Code of Washington, **Washington Clean Air Act**

ii. Chapter 173-400 Washington Administrative Code (WAC), **General Regulations for Air Pollution Sources**

iii. Chapter 173-460 WAC, **Controls for New Sources of Toxic Air Pollutants**

Specifically, the Tyson proposal to add two new inedible cookers, to increase the short term production rates, and to allow flexibility in scrubber oxidant selection is regulated under:

iv. WAC 173-400-110, **New Source Review.**

v. WAC 173-400-114, **Requirements for replacement or substantial alteration of emission control technology at an existing stationary source.**

vi. WAC 173-460-040, **New Source Review (Toxics)**

b. EMISSIONS

The pollutant of highest concern at this facility is PM_{10}, in part because the area surrounding the facility did not meet the NAAQS for PM_{10} in the past. This project will increase PM_{10} on an hourly basis. The increase requested in mass of blood processed per hour is seven percent. The increase requested for inedible materials (crax) production is 20 percent higher than the hourly limit in Approval ORDER 02AQER-5074. The increased short term production rates correspond to PM_{10} increases less than one pound per hour. Annual emission rates (potential) remain unchanged.

C. CONTROL TECHNOLOGY

i. **Best Available Control Technology (BACT)**

The control equipment determined to be BACT in ORDER 02AQER-5074 will remain just as effective after this project. The BACT determinations in the findings of that Order (Attachment One, TSD) are contained in requirements of this Order with the exception that conditions are added to this Order so Tyson may choose the most effective packed bed scrubber oxidant.

ii. **Best Available Control Technology for Toxics (T-BACT)**

Toxic air pollutants (TAPs) at levels of regulatory concern have not been identified or quantified for the processes regulated under this Order of Approval. TAPs at slaughtering and rendering plants will likely be a portion of the exhausts that also tend to be odorous. These may includes traces of amino and other organic acids, organic sulfur compounds, and other compounds. The chlorine or chlorine dioxide oxidant treatment of the polishing scrubbers liquors is expected to reduce or eliminate any TAPs and is considered T-BACT for the process equipment. TAPs are also emitted by combustion equipment. The combustion equipment at this facility is regulated under separate Order.

3. DETERMINATIONS

In relation to the above, the Department of Ecology, State of Washington, pursuant to RCW 70.94.152, RCW 70.94.153, and WAC 173-400-110, makes the following determinations:

a. The proposed project if constructed and operated as herein required will be in accordance with applicable rules and regulations as set forth in Chapters 173-400 WAC and 173-460 WAC, and facility operation will not result in violations to ambient air quality standards.

b. The proposed project if constructed and operated as required will provide all known, available, and reasonable methods of emission control, i.e., best available control technology (BACT).

THEREFORE, IT IS ORDERED that the project as described in said Notice of Construction and more specifically detailed in plans, specifications and other information submitted to the Department of Ecology in reference thereto, is approved for construction, installation and operation, provided the following conditions are met:

II. APPROVAL CONDITIONS:

1. **ADMINISTRATIVE CONDITION:** This Amended Approval Order replaces and rescinds Approval ORDER No. 02AQER-5074.

2. **OPERATING LIMITATIONS**

2.1. Rendering and blood drying operations will be limited by restricting finished product throughput and hours of operation as follows:

2.2. The blood drying production rate (ten percent moisture product) shall not exceed 1,711 lbs/hr, or 5990 tons/yr.

2.3. The edible rendering production rate (gel bone, edible Lo Pro) shall not exceed 13,200 lbs/hr, or 49, 421 tons/yr.

2.4. The inedible rendering production rate (crax and tallow and inedible Lo Pro) shall not exceed 7,300 lbs/hr or 22,891 tons/yr.

2.5. Blood drying and rendering activities at this facility shall not exceed 7,488 hrs/yr.

3. **EMISSION LIMITS**

3.1. The **particulate matter (PM_{10})** concentration in the exhaust from Packed Bed Scrubber 1 (42,000 scfm), Packed Bed Scrubber 2 (75,000 scfm), Smog Hog, and Wet Cyclone exhaust stack shall be less than or equal to **0.010 grains of PM_{10} per dry standard cubic foot.**

3.2. **Visible emissions shall be no more than ten percent opacity** as measured by 40 CFR 60 Appendix A, Method 9 from any process emission point at the facility. Visible emissions from fugitive dust sources shall not leave the property boundaries.

3.3. **Odor** from Packed Bed Scrubbers 1 and 2 exhaust gases shall be controlled by using a water based liquor utilizing one of the following:

3.3.1 A ten percent solution of sodium hypochlorite to oxidize odorants, maintaining a chlorine residual of greater than 25 ppmw with a 50 percent solution of sodium hydroxide (caustic) to maintain a pH of greater than eight, or

3.3.2 Chlorine dioxide to maintain an chlorine dioxide residual Oxidation Reduction Potential (ORP – milivolts (mv)) as follows:

Packed Bed Scrubber 1 (42,000 scfm): October-May $\geq$ +325 mv,
June-September $\geq$ +375 mv.

Packed Bed Scrubber 2 (75,000 scfm): October-May $\geq$ +325 mv,
June-September $\geq$ +375 mv.

3.3.2.1 The instrumentation and methodology for monitoring the chlorine dioxide residual ORP shall be incorporated into the facility operations and maintenance manual within 180 days of issuance of this approval.

3.3.3 The exhaust air stream temperature shall be maintained less than 120° F in both packed bed scrubbers at all times.

4. GENERAL PERFORMANCE TESTING REQUIREMENTS

4.1. **Performance Testing** - No scheduled periodic testing is required by this Approval Order. Testing may be required by Ecology in accordance with WAC 173-400-105(4) and shall be performed using the Reference Test Methods in 40 CFR 60 or 63 or alternatives approved in writing by Ecology.

4.2. **Throughput during Testing** - During testing, the emitting activities being evaluated shall be operated at 90-110 percent of the maximum production rate recorded during the preceding 12 month period unless alternate production rates are approved by Ecology in writing.

4.3. **Performance Test Plan Submittal** - A test plan that includes a description of the equipment to be tested, the test methods to be used, the production or process rates, and the operating parameters to be monitored during testing shall be submitted for Ecology's approval at least 30 days prior to any performance testing.

4.4. **Testing Logistics** - The permittee shall provide sampling ports, safe sampling platforms, safe access to sampling platforms and utilities for sampling and testing.

5. O&M MANUAL

A site-specific O&M manual shall be developed and followed for the non-fugitive process emission points contained in this approval order. The O&M manual shall include information on all air pollution controls, monitoring equipment, and any other equipment that has the potential to affect emissions to the atmosphere. Manufacturer's specifications and operating instructions may be included in the O&M manual. The O&M manual shall be updated to reflect any modifications of the facility or its operating procedures. The O&M manual shall at a minimum include:

5.1. Normal operating parameters for the process and air pollution control equipment, including the most recent operating parameters identified during performance testing demonstrating compliance with the conditions of this Approval Order. Baseline parameters for air pollution control equipment shall include, at a minimum, specific conditions (set points) for the parameters monitored in accordance with Approval Condition

5.2. A maintenance schedule for process and air pollution control equipment.

5.3. Recordkeeping requirements for process and air pollution control equipment as contained in Approval Condition 6, **MONITORING** and Condition 7, **RECORDKEEPING**.

5.4. A description of the monitoring instrumentation.

5.5. Quality assurance procedures for maintaining accuracy of the monitoring equipment.

Tyson shall provide written notification to Ecology of O&M manual completion within 180 days after modification of the equipment identified in this approval Order.

6. MONITORING

6.1. The following parameter instrumentation shall be installed and maintained for accuracy on the specified air pollution control equipment:

- 6.1.1 Packed Bed Scrubbers 1 and 2: Liquor flows (recirculation, blowdown), differential pressure, liquor temperature
- 6.1.2 Packed Bed Scrubbers 1 and 2: ORP when using chlorine dioxide oxidant, pH and chlorine residual when using sodium hypochlorite.
- 6.1.3 Venturi scrubbers 1 and 2: Liquor flows (recirculation, blowdown), and differential pressure.
- 6.1.4 Spray Chamber Scrubber: Liquor flows (recirculation, blowdown), and differential pressure.
- 6.1.5 Smog Hog ESP: Differential Pressure, and voltage indication
- 6.1.6 Duske Dryer Wet Cyclone: Liquor flows (recirculation, blowdown), and differential pressure.

All monitoring equipment shall be described in the Operations and Maintenance (O&M) manual.

7. RECORDKEEPING

Specific records shall be kept on-site and made available for inspection by Ecology upon request. The records shall be readily accessible, compiled in an organized manner and cover a minimum of the most recent 60 months. The records to be kept shall include the following:

7.1. **Hourly and Annual production records** to verify that operating rates remain at or below the restrictions contained in Approval Condition 2 of this approval order.

7.2. **Air pollution control equipment operating parameters** shall be recorded, including differential pressure and scrubber liquor flow rates as applicable for all air pollution control equipment contained in this approval order. These parameters shall be recorded at least twice per shift during plant operations.

7.3. **Packed bed scrubber liquor parameters** for both Packed Bed Scrubber 1 and 2 shall be continuously monitored. The scrubber liquor shall be monitored by a temperature gauge, hydrogen ion activity (pH) probe, and oxidation reduction potential (ORP) probe when using sodium hypochlorite, temperature and ORP when oxidizing with chlorine dioxide.

7.4. **Nature and details of any upset condition or other situation** (date/time, duration, cause, etc.) that results in the facility being operated while the air pollution control equipment was not functioning properly, including upsets in scrubber liquor parameters.

7.5. All **performance testing results and reports.**

7.6. **O&M manual and maintenance records.**

8. REPORTING

All reports and notifications shall be sent within 30 days following the end of the calendar year unless otherwise noted below to:

Air Quality Program
Washington State Department of Ecology
4601 N. Monroe
Spokane, WA 99205-1295

8.1. **Hourly and Annual production rates** as required in Approval Condition 7.1.

8.2. **Annual emission inventory** as required by the Ecology Air Quality Program Registration Program. Note: The information requested under Approval Condition 8.1 and 8.2 may be combined and submitted in a single report.

8.3. The results of any **performance testing** shall be sent to the above address no later than 45 days following such testing.

9. GENERAL CONDITIONS

9.1. **Visible Emissions** - No visible emissions shall be allowed beyond the property line.

9.2. **Discontinuing Operations** - This approval shall become void if operation of the facility is discontinued for a period of eighteen (18) months.

9.3. **Compliance Assurance Access** - Access to the source by EPA or Ecology shall be allowed for the purposes of compliance assurance inspections. Failure to allow access is grounds for revocation of this Approval Order approving the NOC application.

9.4. **Availability of Approval Order and O&M Manual** - Legible copies of this Approval Order approving the NOC applications and the O&M manual shall be available to employees in direct operation of the facility and its associated air pollution controls and be available for review upon request by Ecology.

9.5. **Equipment Operation** - Operation of the facility and its associated air pollution controls shall be conducted in compliance with all data and specifications submitted as part of the NOC application(s) and in accordance with the O&M manual, unless otherwise approved in writing by Ecology. Emissions that result from failure to follow the requirements of the O&M manual or manufacturer's instructions will be considered proof that the facility was not properly operated and/or maintained.

9.6. **Obligations under Other Laws or Regulations** - Nothing in this Approval Order shall be construed to relieve Tyson of its obligations under any local, state or federal laws or regulations.

9.7. **Fees** - Per WAC 173-400-116, this Approval Order and related regulatory requirements have a fee associated for review and issuance. This Approval Order is effective upon Ecology's receipt of required fees.

All plans, specifications, and other information submitted to the Department of Ecology relative to this project and further documents and any further authorizations or approvals or denials in relation thereto shall be kept at the Eastern Regional Office of the Department of Ecology in the "Air Quality Controlled Source" files and by such action shall be incorporated herein and made a part hereof.

Nothing in this approval shall be construed as obviating compliance with any requirement of law other than those imposed pursuant to the Washington Clean Air Act and the rules and regulations thereunder.

A three-month testing and break-in period is allowed, after any part or portion of this project becomes operational, to make any changes or adjustments required to comply with applicable rules and regulations pertaining to air quality and conditions of operation imposed herein. Thereafter, any violation of such rules and regulations or of the terms of this approval shall be subject to the sanctions provided in Chapter 70.94 RCW.

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

1. Violation of any terms or conditions of this authorization;
2. 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 provisions of this authorization to any circumstance, is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.

You have a right to appeal this permit. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours
- Serve your appeal on the Department of Ecology within 30 days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of (1) the permit you are appealing and (2) the application for the permit.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey, WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals Coordinator
300 Desmond Dr SE
Lacey, WA 98503

3. And send a copy of your appeal to:

Department of Ecology
Air Quality Program
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295

For additional information visit the Environmental Hearings Office Website:
http://www.eho.wa.gov
To find laws and agency rules visit the Washington State Legislature Website:
http://www1.leg.wa.gov/CodeReviser

DATED at Spokane, Washington, this 27th day of July, 2007.

ROBERT W. KOSTER STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

Robert Koster, P.E.
Senior Engineer
Regional Air Quality Program
Department of Ecology
State of Washington

EXPIRES: 02/08/ 20

APPROVED BY:

Karen K. Wood
Section Manager
Regional Air Quality Program
Department of Ecology
State of Washington

TECHNICAL SUPPORT DOCUMENT

FOR THE 2007 EXPANSION AT TYSON FRESH MEATS, INC. PASCO, WASHINGTON RENDERING PLANT

1.0 EXECUTIVE SUMMARY

Tyson Fresh Meats, Inc. (Tyson) owns and operates a beef slaughtering and rendering facility near Pasco, WA. In December of 2002, Ecology issued an approval order for the facility to implement restrictions to keep the Tyson below the potential to emit that would require a "major source" permit in what was then a 'serious non-attainment' area for PM10. Since the voluntary limits were incorporated into the 2002 approval order, the area has been redesignated as attainment.

In March of 2007, Tyson applied to Ecology to increase hourly slaughter rates. The higher hourly production rates require the addition of two new cookers in the inedible cooking system (7 on the 2002 order, 2 to be added in 2007). The other change requiring revision to the 2002 order is increased blood drying, and a proposed change to the odor oxidant the plant uses in its packed bed polishing scrubbers.

Approval conditions of the 2002 Approval Order (02AQER-5074) are amended to accommodate the increase in hourly production rates. The scrubber oxidant requirements of the order have also been adjusted to allow Tyson to use the most effective chemical, but with restrictions to ensure effective odor control at the rendering portion of this facility. No change in annual production rates was requested or granted in this amendment.

2.0 INTRODUCTION

2.1 The Permitting Process

New source review (NSR) requirements are established in the Washington Clean Air Act (RCW 70.94) and in the Washington Administrative Code (WAC) at WAC 173-400 for criteria pollutants and WAC 173-460 for Toxic Air Pollutants (TAP). The objective of the NSR program is to prevent or limit degradation of air quality due to the construction or modification of air pollution sources. WAC 173-460 provides criteria to evaluate the health risk associated with modifications or new construction.

Both criteria pollutant and TAP rules require that an applicant utilize the best available control technology (BACT and toxics BACT or T-BACT). After BACT and T-BACT are incorporated into the proposal, remaining impacts are evaluated to determine if the project is approvable.

2.2 The Project

2.2.1 The Site

Tyson Fresh Meats, Inc. owns and operates a beef slaughtering and rendering facility near Pasco, Washington. The facility is in a rural location, surrounded primarily by agricultural activity. The legal description of the property is the NE ¼ of the NE ¼ of Section 34, Township 8 N, Range 31 E, Willamette Meridian, in Walla Walla County. Air quality permitting was performed under local jurisdiction until January of 1994 when Washington Department of Ecology (Ecology) was given authority in Walla Walla County. Until 2004 when the area was redesignated, the area this facility is located was considered to be non-attainment for the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM10). In 2002, the permit issued to Tyson by Ecology (02AQER-5074) was to implement limits requested by Tyson on facility emissions so that the facility could avoid 'major source' status. Major sources in non-attainment areas are those with the potential to emit greater than 70 tons per year of the pollutant for which the area is non-attainment.

2.2.2 The Proposed Project

On March 15, 2007, Tyson submitted an application to amend approval order 02AQER-5074 to increase hourly production limits and allow for different oxidant chemicals to be used in the odor scrubbers. The application indicates that there will be no increase in annual production. Short-term emission increases associated with the proposal will occur throughout the facility in edible and inedible rendering, blood processing, and product shipping and handling. 02AQER-5074 evaluated most of the equipment at the facility at its maximum emission rates (potential to emit), limiting this amendment review to the addition of two inedible cookers, the increased blood drying, and the change in polishing scrubber chemicals. A copy of approval order 02AQER-5074 is attached (Attachment 1).

The equipment listed in Table 1 of the findings of 02AQER-5074 changes only by the addition of two (from 7 to 9) inedible cookers. BACT determinations made during the evaluation 02AQER-5074 remain unchanged from those outlined in Table 2 of the findings of 02AQER-5074.

2.2.3 Specifics

The increased emissions associated with this proposal are exclusively hourly (no change was requested in the annual limits of 02AQER-5074). Because evaluations done to develop 02AQER-5074 were incorporated as limits equivalent to the equipment capacity for the most part, emission increases subject to NSR in this permit action are very small: the largest point of increased emissions is the inedible product silo airlock which was estimated to increase by 0.05 lb/hr, remaining the same on annual basis.

To increase cooking, additional steam is required. Boilers and heaters at this facility are on separate Approval Order (06AQ-E176, 01AQER-2077) and have been permitted at capacity. Spreadsheets showing annual potential to emit for the equipment regulated by Ecology at this facility are attached to this Technical Support Document (TSD

Attachment 2). The spreadsheets include equipment regulated under separate Order as well as equipment or activities exempt from regulation. A list of equipment and process flow schemes that were evaluated to develop this amendment is included as TSD Attachment 3.

Odor control can be a problem at rendering facilities. The Tyson facility collects air streams where odors are expected, precleans them if necessary, and polishes the exhaust through a pair of packed bed scrubbers. The packed bed scrubber liquors are amended with a chemical or chemicals to oxidize the compounds (organic acids, amines, sulfur compounds) that are the source of objectionable odors. Tyson has used sodium hypochlorite as the oxidant with sodium hydroxide to maintain the pH in the range that hypochlorite is effective as an oxidant (8 or greater). This amendment was requested to allow the use of chlorine dioxide (ClO_2) as the oxidant in the packed bed scrubbers. ClO_2 is an effective oxidant over a larger range of solution pH (eliminates the need for sodium hydroxide) and has greater oxidation potential, allowing for lower dosing for the same odor reduction. Tyson has proposed to monitor the ClO_2 dosing using Oxidation Reduction Potential (ORP) instrumentation. Tyson has further proposed the ORP instrument readings by season for the two scrubbers. Ecology agrees that Tyson will control odors as effectively using ClO_2 as hypochlorite, but found insufficient information to agree with the requested ClO_2 dosing. The manufacturer of the ClO_2 generation equipment provided ranges of suitable ORP readings which Ecology has introduced as limits in this Order. The cold season ORP values requested by Tyson (not included in the Order) appear lower than the ORP of average tap water. Without documentation, Ecology could not agree to the cold season ORP values requested. Attachment 4 of this TSD is a copy of Ecology's communications with Tyson during development of this amendment.

2.3 NSPS and NESHAPs Applicability

There are no New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAPS) applicable to the slaughtering or rendering processes at this facility.

3.0 IMPACTS

There is no change to the impacts evaluated for 02AQER-5074. Increases in short term emissions were taken into account by evaluating most equipment at capacity in the 2002 permitting effort. The rendering plant exceeded no TAPs levels of concern and will not cause or contribute to violations of air quality standards for criteria pollutants. The requested increases are exclusively hourly, with annual rates remaining at the levels evaluated in 02AQER-5074.

4.0 CONCLUSION

The applicant will continue to use BACT and T-BACT for the emissions from the rendering activities at this facility. The rendering plant will have no significant adverse

impact on the air quality of the area. Emissions of TAPs from the rendering plant will remain below levels of regulatory concern.

The Washington State Department of Ecology finds that the applicant, Tyson Fresh Meats, Inc. has satisfied all the requirements to be issued Amendment 1 to Approval Order No. 02AQER-5074.

For additional information, please contact:

Robert Koster, P.E.
Washington State Department of Ecology
Air Quality Program
4601 N. Monroe Street
Spokane, Washington 99205

APPENDIX B

FUGITIVE DUST CONTROL PLAN

SIMPLOT FEEDERS LIMITED PARTNERSHIP

March 2018

INTRODUCTION

Washington Administrative Code (WAC) 173-400-040 requires air pollution sources to take “reasonable precautions” to prevent the release of fugitive emissions. This Fugitive Dust Control Plan follows Department of Ecology’s Fugitive Dust Control Guidelines for Beef Cattle Feedlots and Best Management Practices. Those guidelines clarify what constitutes “reasonable precautions” to minimize emissions of fugitive dust from feedlots. The primary mechanism for doing this is to identify best management practices (BMPs) for fugitive dust control and implement these practices according to flexible, site-specific fugitive dust control plans.

LOCATION

Simplot Feeders is a Confined Animal Feeding Operations (CAFO) located in Walla Walla County, approximately 3.5 miles north of Wallula, Washington. The feedlot was constructed in 1970 and has been in operation since that time. Simplot Feeders purchased the operation in October, 1992. The feedlot and ancillary facilities are found principally on 705 acres within the E ½ of Section 34 and all of Section 35, less a portion of the SE ¼ thereof, within Township 8N. Range 31 E.W. M.

Figure 1: Facility Location

OPERATIONAL CAPACITY

The facility is composed of open air fenced pens which are constructed on dirt and covered with manure to maintain moisture while providing a base for animals. Total pen area is approximately 325 acres or ~177 square feet per animal. The facility has an 80,000 head capacity. Roadways are constructed with pit run gravel. The facility also includes feed preparation and handling equipment and operation areas to support the feeding of up to 80,000 head of cattle. Feedlot conditions are affected by many variables including, but not limited to weather and operations.

WATER AVIALABILITY

Simplot Feeders has a water right issued by the state of Washington that provides a maximum diversion of 1,500 gallons per minute and a volume restriction of 525 million gallons per year. This is the water right that provides the water for the implementation of the BMP's contained in our plan. This water is available to the feedlot operations from approximately April 1st to October 15th

SITE SPECIFIC FEATURES

There are a number of factors which are taken into consideration for the implementation of BMP's at our cattle feedlot operation:

- Simplot Feeders balances water application in relationship to animal health, which is affected by moisture and ambient air temperature.
- Water application requires balancing effective dust control with control of odors and fly management program.
- Water application must be managed in conjunction with maintaining appropriate floor and mound conditions for cattle.
- Water application at the Simplot Feeders site is complicated by wind conditions, pen size, and the necessity to ensure that the feed bunk area is protected from excessive moisture applications.
- Pens are sized to provide optimum livestock performance while minimizing fugitive dust.
- Water quality concerns created by runoff must be taken into consideration when using water for emission control.
- The sprinkler system's water distribution is affected by operational limitations. These include but are not limited to water pressure and system capacity.
- Feedlot terrain complicates the operation of some BMP's. The feedlot is located in an area where the landscape is rough and uneven. These physical factors affect water application rates and distribution uniformity. With the uneven pen surface, it is difficult to maintain minimal depth of loose manure.

BEST MANAGEMENT PRACTICES

BMPs are implemented as needed throughout the year pursuant to the Operational Plan described below including a daily adaptive management process.

PEN MAINTENANCE

Simplot Feeders performs manure removal and pen floor maintenance on a continuous basis throughout the year, and excess manure is removed from the pens as weather and moisture conditions permit. Simplot Feeders use tractors with box scrapers for shaping and grooming the mounds and pen floor. As needed, excess manure is removed to maintain minimal loose manure. At times, cattle carve out wallows in the pen floor. When these occur, they are filled with soil and covered with manure. Feedlot management and personnel monitor pen conditions on a continuous basis. They look for excess manure, wallows, dry areas, and overly wet conditions.

Wood chips may be used as needed in cattle alleys to help minimize fugitive dust emissions.

CROSS FENCING

Simplot may use cross fencing in pens that are determined to have the potential to generate fugitive dust emissions that cannot be reasonably minimized through the implementation of other BMPs. The pen will be split with temporary fencing to increase animal density. This increases moisture contribution to the pen from manure and urine.

SPRINKLER SYSTEM

Simplot Feeders' Plan includes a computer controlled sprinkler system that applies water to the pen surface to maintain enough moisture to proactively minimize dust from becoming airborne. The system includes full and part circle sprinklers and allows individual sprinkler run times to be adjusted to optimize water application and minimize fugitive dust emissions. Run time for each sprinkler is set based on daily observations of pen conditions and current and predicted weather conditions.

In case of sprinkler system mechanical breakdowns the facility will take the following action as necessary to mitigate the breakdown.

- Increase water truck application
- Run on manual if possible
- Bypass portion of the system with failure and continue operation if possible
- Repair as soon as possible
- Keep a list of parts needed for most common repairs and maintain a reasonable inventory of those parts

Periodically, the Feedlot manager will perform an evaluation of the sprinkler system to determine if the effectiveness of the system can be cost effectively improved. With the aid of dust monitoring reports, daily sprinkler logs, and daily observation notes, feedlot management will determine if the sprinkler systems needs any modifications. The modification may include:

- Use of higher emitting sprinklers in larger pens
- Relocation of sprinklers that are ineffective due to wind direction
- Sprinkle empty pens at a reduced rate
- Use pressure regulators where appropriate to balance pressure at the sprinkler end throughout the system.
- Replacement of all or part of the system to improve coverage and/or reliability.

The system is started approximately April 1, and will be put into service prior to conditions that create the formation of fugitive dust. Sprinkler operation continues until approximately October 15.

The system is shut down for the cold winter months due to the potential for freezing and due to unavailability of water. During those months other BMPs will be implemented as needed.

WATER TRUCKS

Simplot Feeders' Plan includes the utilization of water trucks to control roadway and pen dust. The roadways are constructed with pit run gravel providing an effective road base. Water trucks traveling less than 15 miles an hour will apply water to roadways using a splash plate or spray bar to distribute the water. Most of the water trucks have a capacity of 4000 gallons and average a load every 30 minutes barring any unforeseen difficulties. Roadways, dry areas in pens and feed loading areas are watered according to conditions and usage determined by feedlot management visual observations made throughout the day. Whenever weather and operational conditions are such that fugitive dust emissions are likely to be generated, at least one truck starts watering 1-2 hours before feeding operations begin in the morning.

The feedlot runs multiple water trucks as needed to control fugitive dust emissions The number and use of trucks in service on a daily basis is determined by the BMP responsible person at the beginning of each week and each day when conditions have changed. The number of water trucks to be used will depend on visual observations, daily monitoring reports, and current and forecasted weather conditions. Water trucks are available year round when needed to minimize fugitive dust emissions from the feedlot operations. Water trucks may be equipped with a water cannon which can be used to wet dry areas in pens and alleys that the sprinklers do not reach.

Water application by water trucks is recorded on a daily water truck log.

ROAD TREATMENT

Simplot Feeders may use dust control treatments such as magnesium chloride in high traffic areas when the feedlot managers determines that the use is more beneficial than increased water truck usage.

FEED LOADING BMP's

Simplot Feeders Fugitive Dust Control Plan includes several Best Management Practices implemented to aid in control of fugitive emissions from the feed loading process.

- High moisture rations to eliminate dust from trucks while feeding.
- Adding high moisture feeds first in loading sequence to help minimize dust when mixing dryer feeds.
- Wind break structures are located in feed loading area to help minimize drift.
- Loader operators keep buckets as low as possible while loading trucks and also restrict movement of feed in loading area to reduce fugitive dust emissions.
- Use mineral mixes formulated to help reduce fugitive dust during loading and mixing.
- During excessive winds loader operators will keep buckets in a low position except when loading trucks.

- Water trucks may be used in feed processing and truck loading areas to proactively minimize fugitive dust emissions that are not effectively minimized by the above listed measures.

MANURE MANAGEMENT

Manure management historically has not been a source of fugitive dust as Simplot Feeders. If fugitive dust is noted from this operation, Simplot will evaluate and take action to proactively minimize fugitive dust emissions from the handling and storage of manure.

OPERATIONAL PLAN and ADAPTIVE MANAGEMENT PLAN

In order to provide for proactive minimization of fugitive dust emissions, Simplot will implement the following operational and adaptive management plan. Simplot will designate a responsible person as the BMP RP on the Daily Adaptive Managemnet plan (Appendix D).

Daily Adaptive Management. At the beginning of each day the BMP RP will make a plan for BMP application for that day based upon the following considerations:

-Dust monitoring reports from the last night and previous days
-Visual observation of the feedlot
-Current and forecast weather conditions including but not limited to temperature, precipitation, and wind
-Pen floor moisture and general condition of pens determined by physical checking of the site

Based upon these factors and any other relevant conditions, the BMP RP will make a plan for application of BMPs. If any pens are noted as potentially dusty, then the BMP RP physically checks the pens to determine the nature of the problem, and the best course of action to address it. For instance, the pens may need additional sprinkler time or have an area that needs to be covered by a water truck. If a pen has an area that is muddy and an area that is dry then it may need to have scrapers come in and spread the wet material out over the dry area.

The plan will identify how each BMP will be implemented over the following 24 hours to proactively minimize fugitive dust emissions from all feedlot operations. This plan shall be recorded in The Sprinkler Log and Adaptive Management Report (Appendix D), although if there is no change in the plan a notation referencing no change is sufficient. Throughout the day the BMP RP will continue to monitor conditions and adjust this plan as needed.

Before the end of his or her shift, the BMP RP shall review feedlot conditions and identify any pen conditions and weather developments that may result in

the formation of fugitive dust emissions at the feedlot through the night. The BMP RP will make arrangements for BMP application over the night if necessary. The BMPs RP will then sign off on the daily BMP plan and Sprinkler Log and Adaptive Management Report (Appendix D) at the end of the shift with a determination that fugitive emissions have been controlled for the day and appropriate steps have been taken to prepare for the night as needed.

Night shift security personnel will conduct evening observations and may apply BMPs if safe to do so to correct observed dust problems. The night security personnel submit the dust monitoring sheets to the feedlot management. See Appendix B. The night security personnel are also authorized to use water trucks to address any area that they determine need immediate attention and also operate the sprinkler system on manual if needed as long as it can be done in a safe manner. Management is on call so that the night security personnel may notify if there are any system malfunctions that need immediate attention in order to minimize fugitive dust emissions.

Observations and BMP applications will be recorded in the Daily Dust Monitoring Report (Appendix B). Night observations will include the feedlot pens as well as the feed prep area.

The next morning the BMP RP will review the night shift observations and BMP applications from the previous evening. If emissions were observed over the night that meet the 24 hour notification criteria, the then the BMP RP will notify Ecology before the end of their shift as described below.

TRAINING

Simplot Feeders will provide training annually for employees with specific responsibilities for implementing BMP's in the FDCP. The training will cover the FDCP BMP's, general dust awareness, monitoring, reporting, and recordkeeping requirements. This training will be provided to maintenance supervisors, night watchmen, water truck drivers, loader operators at the feed prep area and other feedlot employees involved with implementing the FDCP BMP's.

MONITORING, RECORD KEEPING, AND NOTICE TO ECOLOGY

Simplot Feeders keeps the following records related to the Fugitive Dust Control Plan:

Daily Dust Monitoring Report (Appendix B)
Daily Sprinkler Run Graph (Appendix C)
Sprinkler Adjustment Log and Adaptive Management Report (Appendix D)
Water Truck Logs (Appendix E)

Notations of adaptive management actions in the Sprinkler Adjustment Log and Adaptive Management Report (Appendix D) should be described whenever there is a change. When there is no change in the plan because conditions have generally remained the same as the previous day a simple reference to no change in the daily AMP is sufficient.

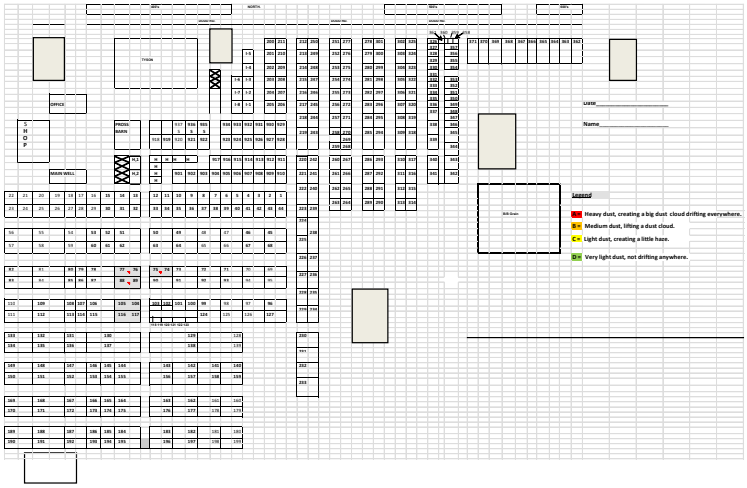
Simplot will notify Ecology within 24 hours of operational concerns and non-typical conditions that may affect the ability to minimize fugitive dust.

CONTACT PERSON

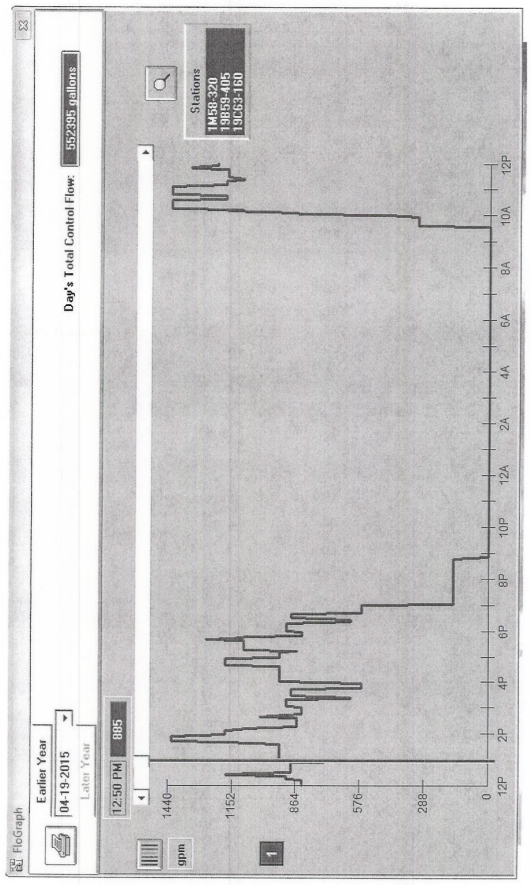
Matt Driscoll
Feedlot Manager
Simplot Feeders Limited Partnership
PO Box 1306
IBP/Dodd Road
Pasco, Washington 99301
Phone – 509/547-8864
Fax – 509/547-8866

Appendix A: Facility Layout

Appendix B: Daily Dust Monitoring Report



Appendix C: Daily Sprinkler Run Graph



Appendix D: Sprinkler Adjustment Log and Adaptive Management Report

Responsible Person:_____

Date: _____ _____ Time: _____

Sprinkler Adjustments

Area R	Station												
	Time												
Area R	Station												
	Time												
Area P	Station												
	Time												
Area P	Station												
	Time												
Area M	Station												
	Time												
Area M	Station												
	Time												
Area D	Station												
	Time												
Area D	Station												
	Time												
Area C	Station												
	Time												
Area C	Station												
	Time												
Area B	Station												
	Time												
Area B	Station												
	Time												

Sprinkler Notes: _____

Pump Notes:

Pen Observation Notes:

No. of Water Trucks:

Notes:

Weather:

Temp.

Precipitation Last 24 Hrs. Y N

Appendix E: Water Truck Logs