

State of Washington Department of Ecology
Notice of Construction Approval Order

IN THE MATTER OF APPROVING)	Preliminary Determination
AN 091 LIMITATION FOR)	AQPID No. A0750008
WASHINGTON STATE UNIVERSITY)	
ANIMAL FEED PLANT)	

Project Summary

Washington State University (WSU), herein referred to as the Permittee, is an existing source with a animal feed plant installed in the early 1970s and located north east of the intesection of Grimes Way and Dairy Road, Pullman, Washington, in Grant County.

The Permittee is taking production limits to remove WSU from Title V per WAC 173-400-091. With the limits in this order, the Permittee is classified as a **Synthetic Minor 80** source.

The project consists of operation of the following equipment.

ID No.	Equipment Description	Control Equipment
EU1	Open Receiving Pit – Hopper truck delivery	None
EU2	Elevator	Enclosed
EU3	Twelve Silos with bin vents	None
EU4	Scalper	None
EU5	Elevator	Enclosed
EU6	Four bins to grinder	Partially enclosed
EU7	Curlee Grinder (CSE-10146-H-Z-CG4-S6)	Champion Cyclone (Model 987; Serial #831FVE)
EU8	Three bins to roller mill	Partially enclosed
EU9	Steam chest to Curlee Roller Mill (CEE-10146-H-Z-CG64-E6)	MAC Cyclone
EU10	Two bins to pellet mill	Partially enclosed
EU11	Curlee Pellet Mill (CSE-10145-H-Z-CG4-3S5)	MAC Cyclone
EU12	California Pellet Mill cooler (Model 2GA, Serial#395253) and Crumbler	MAC Cyclone
EU13	Weigh Hopper	Partially enclosed
EU14	Mixer	Partially enclosed

ID No.	Equipment Description	Control Equipment
EU15	Five Blount/York Loadout Bins	Partially enclosed
EU16	Truck Loadout	None
EU17	Toledo Bagger	Partially enclosed
EU18	Tote Loadout	Partially enclosed
EU19	Shipping with Truck	None
EU20	Parker Boiler – 2.49 MMBtu/hr natural gas	None

Legal Authority

The emissions from the proposed project have been reviewed under the legal authority of RCW 70A.15.2210 and the applicable rules and regulations adopted thereunder. The proposed project, if operated as specified, will be in accordance with applicable rules and regulations, as set forth in Chapters 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.

Therefore, it is ordered that the project, as described in the Notice of Construction (NOC) application and/or in the plans, specifications, and other information submitted to the Washington State Department of Ecology (Ecology), is approved for construction and operation provided the following conditions are satisfied:

Approval Conditions

1. Operational Limitations

a. Production/Operation Limits

- i. Animal Feed Plant processing throughput must be limited to 2,102 tons per 12 months, calculated on a rolling monthly basis.

b. Equipment/Activity Restrictions

- i. The Grinder, Roller Mill, Pellet Mill, and Pellet Mill Cooler must be controlled by their dedicated cyclones.

c. Emission Limits

- i. Visible emissions from truck loading/unloading and cyclone exhaust stacks must not exceed 10 percent opacity, as determined by 40 C.F.R. Part 60, Appendix A, Test Method 9.

2. **Operation & Maintenance**

- a. The Permittee must follow all recommended installation, configuration, operation, and maintenance provisions supplied by emission unit and component manufacturers.
- b. An operations and maintenance (O&M) manual must be developed by the Permittee to address each emission unit. The manufacturer's instructions may be referenced in the O&M manual.
 - i. The O&M manual must include the following, at a minimum:
 - A. Normal operating parameters for emissions units.
 - B. A maintenance schedule for each emissions unit.
 - C. A description of the monitoring procedures.
 - D. Monitoring and record keeping requirements.
 - E. Actions for abnormal operations of emissions units and associated control or monitoring equipment.
 - F. Additional project-specific information, as needed.
 - ii. The O&M manuals must be developed within 30 days of issuance of this Approval Order.
- c. Emission units must be operated and maintained in accordance with the O&M manual.
- d. The Permittee must assess all complaints received. The Permittee must initiate corrective action in response to a complaint within three calendar days of receipt of the complaint.
- e. Reasonable precautions must be taken to prevent fugitive dust from becoming airborne, and the facility must follow a fugitive dust control plan (FDCP) to minimize emissions. The FDCP must be kept up to date and be available to Ecology for review upon request.

3. **Monitoring & Recordkeeping**

- a. The O&M manual and fugitive dust control program (FDCP) must be reviewed annually.
 - i. The date of each review and the person performing each review must be documented.
 - ii. The O&M manual and FDCP must be updated to reflect any modifications to emission units or operating procedures.
- b. O&M records must be kept on premises in hard copy or electronically.
- c. For all air-quality related complaints, the following records must be kept:

- i. A written record of the complaint received by the Permittee or forwarded to the Permittee.
- ii. The Permittee's action to investigate the validity of the complaint, any corrective action that was taken in response to the complaint, and the effectiveness of the remedial action.
- d. The date, time, duration, and cause of any periods where control technology equipment is out of service must be documented and maintained.
- e. All data required by this NOC Approval Order must be maintained in a readily retrievable manner for a period of five years and must be made available to authorized representatives of Ecology upon request.
- f. The Permittee must complete any additional monitoring or recordkeeping necessary to determine compliance with the requirements of this NOC Approval Order, as determined by Ecology.
- g. Total tons of feed throughput must be compiled monthly, on a rolling 12-month basis.

4. Reporting

- a. All notifications, plans, reports, and other submittals must be submitted to:

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

Reports may be submitted electronically to emissions.inventory@ecy.wa.gov
OR AS DIRECTED.
- b. The Permittee must notify Ecology within one business day of receipt of any complaint.
- c. The Permittee must submit results of all required monitoring to Ecology on a annual basis. Results must be submitted to Ecology by January 30.
 - i. Previous calendar year feed throughput in tons.
- d. The Permittee must notify Ecology within thirty days, if operation has been discontinued for more than 18 months.

5. General Conditions

- a. **Activities Inconsistent with this Order** - Any activity undertaken by the Permittee, or others, in a manner that is inconsistent with the data and specifications submitted as part of the NOC application or this NOC Approval Order, will be subject to Ecology enforcement under applicable regulations.

- b. **Availability of Order** - Legible copies of this NOC Approval Order and any O&M manual(s) must be available to employees in direct operation of the equipment described in the NOC application and must be available for review upon request by Ecology.
- c. **Compliance Assurance Access** - Access to the source by representatives of Ecology or the United States Environmental Protection Agency (EPA) must be permitted upon request. Failure to allow 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 NOC Approval Order.
- d. **Discontinuing Construction or Operation** – This NOC Approval Order will become invalid if construction of the equipment described in the NOC application and this NOC Approval Order does not commence within 18 months after receipt of this NOC Approval Order.

If construction or operation is discontinued for 18 months or longer on a portion or all of the equipment described in the NOC application and this NOC Approval Order, the portion of the NOC Approval Order regulating the inactive equipment will become invalid. Ecology may extend the 18-month period upon request by the Permittee and a satisfactory showing that an extension is justified.

- e. **Equipment Operation** - Operation of the facility must be conducted in compliance with all data and specifications submitted as part of the NOC application and in accordance with O&M manuals, unless otherwise approved in writing by Ecology.
- f. **Registration** - Periodic emissions inventory and other information may be requested by Ecology. The requested information must be submitted within 30 days of receiving the request, unless otherwise specified. All fees must be paid by the date specified.
- g. **Testing** - When complaint investigations, visible emissions observations, or other information obtained by Ecology indicates the need to quantify emissions, Ecology may require the Permittee to conduct material analysis or air emission testing. This testing requirement is in addition to any testing required by Ecology in this Order or under WAC 173-400-105.
- h. **Violation Duration** - If the Permittee violates an approval condition in this NOC Approval Order, the violation is presumed to commence at the time of the testing, recordkeeping, or monitoring which indicates noncompliance. The violation is presumed to continue until the time of retesting, recordkeeping, or monitoring which indicates compliance. A violation of an approval condition includes, but is not limited to, failure of air pollution control equipment, failure of other equipment resulting in increased emissions, or a failed source test indicating an exceedance of an emission limit. The duration of a violation may also be determined based on credible evidence which shows that the violation was of longer duration, that there were intervening

days during which no violation occurred, or that the violation was not continuous in nature.

- i. **Obligations Under Other Laws or Regulations** - Nothing in this NOC Approval Order excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.
- j. **Maintaining Compliance** - It will not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the operations in order to maintain compliance with the conditions of this NOC Approval Order.
- k. **Visible Emissions** - No visible emissions from the source are allowed beyond the property line, as determined by 40 C.F.R. Part 60, Appendix A, Test Method 22.
- l. **Changes in Operations** - Any changes in operation contrary to information submitted in the NOC application must be reported to Ecology at least 60 days before the changes are implemented. Such changes in operation may require a new or amended NOC Approval Order.

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

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

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

Your Right to Appeal

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

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

Address and Location Information

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

Dated on this Day of April, 2022.

Prepared by:

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Air Quality Program
Department of Ecology
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Approved by:

David T. Knight, Section Manager
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Technical Support Document
Notice of Construction Approval Order No. 22AQ-E019
Washington State University – Animal Feed Plant
AQPID No. A0750008
Pullman, WA

Prepared by: Jenny Filipy, P.E.

1. Project Summary

Washington State University (the source) has a Animal Feed Plant and other sources and will be classified as a Synthetic Minor 80 with all existing emissions units. This review is for the source to take limits per WAC 173-400-091 to come out of Title V and become a Synthetic Minor 80 source. WSU's Grimes Way Steam Plant and Seed Plant will go on public comment period at the same time as this order.

An initial Notice of Construction (NOC) application dated October 29, 2021 was submitted by Washington State University for the Animal Feed Plant project. The Washington State Department of Ecology (Ecology) reviewed the initial application and found it complete per WAC 173-400-111 on November 29, 2021.

2. Application Processing

a. Public Notice

This project is subject to a mandatory 30-day public comment period per WAC 173-400-171(3)(k) for an order issued under WAC 173-400-091 that establishes limitations on a source's potential to emit. [The comment period was held <start date> through <end date>. <any comments received? .](#)

b. State Environmental Policy Act

SEPA was not required for this project as it is documenting an existing source.

3. Applicable Regulations

a. State Regulations

i. Minor New Source Review Applicability

Per WAC 173-400-110, a NOC application and an order of approval must be issued by the permitting authority prior to the establishment of a new source or modification.

As stated in the NOC application and consistent with Ecology's review, the Animal Feed Plant is taking limits to reduce potential to emit and allow WSU to come out of Title V. This project is not subject to minor new source review (NSR). A new order will be issued with limitations on feed throughput.

C. Proposed Emissions (Allowable Emissions)

The allowable emissions from the project, considering all emission and operational limits contained in the approval order, are shown below in Table 3 and 4.

Table 3. Allowable emissions for pollutants listed under WAC 173-400-110(5)

Pollutant	Animal Feed Plant (tons/year)
NOx	0.20
CO	0.17
VOC	0.01
SO ₂	0.0012
Lead	1.02E-06
PM ₁₀	4.42
PM _{2.5}	2.32
Total Suspended Particulates (TSP)	8.25

Table 4. TAP allowable emissions

Pollutant	Boiler Emissions at 1664 hours/yr (lb/yr)
3-Methylcholanthrene	7.31E-06
7,12-Dimethylbenz(a)anthracene	6.50E-05
Acetaldehyde*	1.75E-02
Acrolein*	1.10E-02
Benz(a)anthracene	7.31E-06
Benzene*	3.25E-02
Benzo(a)pyrene	4.87E-06
Benzo(b)fluoranthene	7.31E-06
Benzo(k)fluoranthene	7.31E-06
Chrysene	7.31E-06
Dibenz(a,h)anthracene	4.87E-06
Ethyl benzene*	3.86E-02
Formaldehyde	3.05E-01
Hexane	7.31
Indeno(a,2,3-cd)pyrene	7.31E-06
Naphthalene	2.48E-03
Propylene*	2.97
Toluene*	1.49E-01
Xylenes*	1.10E-01
Arsenic	8.12E-01
Beryllium	4.87E-05
Cadmium	4.47E-05
Chromium (hexavalent)[4% Cr]	2.27E-04
Cobalt	3.41E-04
Copper	3.45E-03
Manganese	1.54E-03
Mercury	1.06E-03
Nickel	8.53E-03
Selenium	9.75E-05
Vanadium	9.34E-03

ii. Prevention of Significant Deterioration

PSD does not apply, based on WSU potential to emit.

iii. Other Applicable Requirements

In accordance with WAC 173-400-113, the proposed Animal Feed Plant sources must comply with all applicable emission standards adopted under Chapter 70A.15 RCW. The following applicable emission standards are associated with the proposed project:

- A. WAC 173-400-040 General standards for maximum emissions. All emission units must meet 20 percent opacity or less for three minutes in one hour.
- B. WAC 173-400-060 Emission standards for general process units. Limits emissions of particulate matter from general process units to 0.23 gram per dry cubic meter at standard conditions (0.10 grains per dry standard cubic foot) of exhaust gas.
- C. WAC 173-400-115 See below for Standards of performance for new sources.

b. Federal Regulations

In accordance with WAC 173-400-113, the proposed sources must comply with all applicable new source performance standards (NSPS) included in 40 C.F.R. Part 60, national emission standards for hazardous air pollutants (NESHAPs) included in 40 C.F.R. Part 61, and NESHAPs for source categories included in 40 C.F.R. Part 63.

i. Standards of Performance for New Stationary Sources

NSPS Subpart (Standards of Performance for Grain Elevators) applies to facilities with grain elevators where grains are received, stored, weighed, and distributed. This facility is not subject to this NSPS as it was constructed prior to August 3, 1978 and it produces animal feed.

ii. National Emission Standards for Hazardous Air Pollutants

No NESHAPs apply to this source.

iii. National Emission Standards for Hazardous Air Pollutants for Source Categories

The facility is not listed among the NESHAP source categories.

4. Emissions

a. Emission Factors/Calculations

Emission Factors for potential to emit came from AP-42 Table 9.9.1 for Grain Elevators.

Small natural gas boiler emission factors from AP-42 Tables 1.4-1 and 1.4-2 and
*Ventura County Air Pollution Control District

b. Best Available Control Technology

The limits set in the Approval Order 22AQ-E019 for the Animal Feed Plant are voluntary for particulate matter as this is a grandfathered source.

5. **Ambient Air Quality Standards**

As specified in WAC 173-400-113, the proposed new or modified source(s) must not cause or contribute to a violation of any ambient air quality standard. This includes the ambient air quality standards for both criteria and toxic air pollutants.

a. Pollutants Listed Under WAC 173-400-110 (Except TAPs)

An ambient air quality analysis was not preformed for this source, as it is a grandfathered source that is taking voluntary limits.

b. Toxic Air Pollutants

An ambient air quality analysis was not preformed for this source, as it is a grandfathered source that is taking voluntary limits.

Appendix A – Response to Comments

This section will be updated following the public comment period.