

NOTICE OF CONSTRUCTION APPLICATION

CORN DRYER 4 REPLACEMENT



Pioneer Hi-Bred International, Inc. / Connell, WA

Prepared By:

Anna Henolson – Principal Consultant
Nancy Liang – Managing Consultant
Sam Najmolhoda – Senior Consultant
Ella Ramos-O'Neill – Associate Consultant

TRINITY CONSULTANTS

315 5th Ave. S.
Suite 830
Seattle, WA 98104
253.867.5600

August 2026



TABLE OF CONTENTS

1. INTRODUCTION	1-1
1.1 Process & Project Description	1-1
2. EMISSION CALCULATIONS	2-1
2.1 Dryer 4.....	2-1
3. REGULATORY APPLICABILITY	3-1
3.1 NOC Applicability	3-1
3.2 New Source Review	3-1
3.3 New Source Performance Standards (NSPS).....	3-1
3.3.1 40 CFR 60 Subpart A – General Provisions.....	3-1
3.3.2 40 CFR 60 Subpart DD – Standards of Performance for Grain Elevators.....	3-1
3.3.3 40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	3-2
3.4 National Emission Standards for Hazardous Air Pollutants (NESHAP).....	3-2
3.4.1 40 CFR 63 Subpart JJJJJ (6J) – Industrial, Commercial, and Institutional Boilers, Area Sources	3-3
3.5 Washington Toxic Air Pollutant (TAP) Regulations	3-3
4. BEST AVAILABLE CONTROL TECHNOLOGY (BACT)	4-1
4.1 BACT Methodology.....	4-1
4.1.1 Step 1 – Identify All Control Technologies.....	4-1
4.1.2 Step 2 – Eliminate Technically Infeasible Options	4-1
4.1.3 Step 3 – Rank Remaining Control Technologies by Control Effectiveness	4-1
4.1.4 Step 4 – Evaluate Most Effective Controls and Document Results.....	4-2
4.1.5 Step 5 – Select BACT.....	4-2
4.2 BACT Analysis for Dryer 4	4-2
4.2.1 BACT Analysis for PM, PM ₁₀ , and PM _{2.5}	4-2
4.2.2 BACT Analysis for VOC.....	4-2
4.2.3 BACT Analysis for NO _x	4-2
4.2.4 BACT Analysis for CO	4-3
4.2.5 tBACT Analysis for TAP Emissions	4-3
5. DISPERSION MODELING	5-1
5.1 Model Selection.....	5-1
5.2 Meteorological Data	5-1
5.3 Coordinate System.....	5-1
5.4 Terrain Elevations	5-1
5.5 Urban / Rural Determination	5-2
5.6 Receptor Grids	5-2
5.7 Building Downwash	5-4
5.8 Source Types and Parameters.....	5-4
5.9 NO ₂ to NO _x Conversion.....	5-5
5.10 TAP Modeling Analysis	5-5
5.11 NAAQS and SIL Modeling Analysis	5-5
APPENDIX A. NOC FORMS & SEPA CHECKLIST	A-1

APPENDIX B. EMISSION CALCULATIONS	B-1
APPENDIX C. SPECIFICATION SHEETS	C-1
APPENDIX D. HONEYWELL BURNER LETTER	D-1
APPENDIX E. CONSTRUCTION DRAWINGS	E-1
APPENDIX F. AERMOD MODELING FILES	F-1

LIST OF FIGURES

Figure 5-1. Zoomed-Out Receptor Grid	5-3
Figure 5-2. Zoomed-In Receptor Grid	5-3
Figure 5-3. Facility Fenceline	5-4

LIST OF TABLES

Table 2-1. Project Emission Summary	2-1
Table 3-1. TAP Emissions	3-4
Table 5-1. Model Source Parameters	5-5
Table 5-2. SIL Results	5-6
Table 5-3. NAAQS Results	5-6

1. INTRODUCTION

Pioneer Hi-Bred International, Inc. (Pioneer) owns and operates a seed corn processing plant located at 1040 Settler Rd, Connell, WA 99326 (Connell Facility). Pioneer is proposing to replace the existing corn dryer 4 at the Connell Facility. The associated NOC form is included in Appendix A.

1.1 Process & Project Description

Corn is received into the Connell Facility as green corn (on ear) in semi-trucks directly from the growers via receiving pits. The corn is transferred from receiving to the husking & sorting building via belt conveyors where the husks are removed from the ears. The clean ear corn is then transferred by conveyor to the drying buildings (dryers). Once the corn is dried, it is conveyed via conveying lines to the sheller building where seed corn shellers are used to remove the corn from the cobs. The shelled corn is then rough cleaned. The clean shelled corn is conveyed to the bulk storage building for holding prior to conditioning. Corn can be loaded out directly from bulk storage via a conveying system and load-out areas. Shelled corn can also be added to the bulk storage buildings via truck unloading pits.

Pioneer is proposing to replace the existing dryer 4 with an upgraded dryer and its associated conveyors. Emissions from the replaced conveyors are expected to be negligible, as the corn is on the cob and has a high moisture content. The shellers and bulk storage building will not be modified as part of this project. The new dryer has a capacity of 12,000 bushels of green corn and a maximum throughput of 6.09 tons per hour when drying at the process design rate, as shown in the calculations included in Appendix B. The new dryer is expected to include 20 burners at 1 MMBtu/hr each and 20 burners at 2 MMBtu/hr each for a total heat capacity of 60 MMBtu/hr. Specification sheets are included in Appendix C.

2. EMISSION CALCULATIONS

This section presents the methodology used to quantify pollutant emissions from the Project. Pollutants emitted from the Project include PM, PM with an aerodynamic diameter less than 10 micron (PM₁₀), PM with an aerodynamic diameter less than 2.5 micron (PM_{2.5}), sulfur dioxide (SO₂), oxides of nitrogen (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), hazardous air pollutants (HAPs), and toxic air pollutants (TAPs). Emission calculations are included in this report under Appendix B. Emissions from the replaced belt conveyors are expected to be negligible due to the low dust and high moisture characteristics of the ears of corn and have not been included in the calculations.

2.1 Dryer 4

The dryer 4 burners will use propane as fuel. The NO_x emissions from the dryer 4 burners are based on the burner manufacturer (Honeywell) emissions guarantee (Appendix C). All other pollutants (PM/PM₁₀/PM_{2.5}, CO, SO₂, and VOC) from the dryer 4 burners are based on emission factors from AP-42 Chapter 1.5 “Liquefied Petroleum Gas Combustion.” For HAPs and TAPs, natural gas emission factors from Ventura County Air Pollution Control District¹ are converted to a heating value basis using the natural gas heating value from AP-42 Chapter 1.4 “Natural Gas Combustion.” The project emissions are summarized in Table 2-1, and are compared to the exemption levels set forth under WAC 173-400-110(5).

PM/PM₁₀/PM_{2.5} emissions have also been calculated for the material handling of the corn in the dryer. Emission factors are based on AP-42 Chapter 9.9 for column grain dryers.

Table 2-1. Project Emission Summary

Pollutant	Maximum Emission Rate		NOC Exemption Levels	Above Exemption Level?
	(lb/hr)	(tpy)	tpy	
TSP	1.80	7.88	1.25	Yes
PM ₁₀	0.79	3.48	0.75	Yes
PM _{2.5}	0.52	2.26	0.5	Yes
SO ₂	0.04	0.16	2	No
NO _x	7.29	31.94	2	Yes
VOC	0.66	2.87	2	Yes
CO	4.92	21.54	5	Yes
Total HAPs	4.82E-03	0.021	--	--

¹ Ventura County Air Pollution Control District, AB 2588 Combustion Emission Factors. Accessed August 2026.
<http://www.aqmd.gov/docs/default-source/permitting/toxics-emission-factors-from-combustion-process-.pdf>

3. REGULATORY APPLICABILITY

The proposed project will be located near Connell, Washington, which is in attainment for all criteria pollutants. The following section analyzes the regulatory requirements potentially applicable to the emission sources identified for the Connell Facility.

3.1 NOC Applicability

An NOC permit application must be filed and an approval order issued by Ecology prior to the construction or modification of an affected facility per WAC 173-400-110(2)(a), unless the installation meets exemptions under WAC 173-400-110(4) or (5). The proposed project involves the replacement of dryer 4, which does not meet any of the exemption criteria under WAC 173-460-110; therefore, the construction of dryer 4 requires NOC approval. The relevant NOC forms are included in Appendix A. The proposed changes will be covered under the State Environmental Protection Act (SEPA), which was submitted to the Franklin County Planning and Building Department in August of 2026. A copy of the submitted SEPA checklist is also included in Appendix A.

3.2 New Source Review

A project in an attainment area is subject to the Prevention of Significant Deterioration (PSD) permitting program under WAC 173-400-700 if the project is either a “major modification” to an existing “major source,” or is a new major source itself.

The Connell Facility is not a listed source category with a major source threshold of 100 tpy. Therefore, the major source threshold for the Connell Facility is 250 tpy of any regulated pollutant. The currently permitted Connell Facility is not considered a major source. As shown in Table 2-1, the PTE of the Project will be well below the 250 tpy threshold for all criteria pollutants. Therefore, the Project is neither considered a major modification to an existing major source nor is the Project a new major source itself, so it does not trigger major source review.

3.3 New Source Performance Standards (NSPS)

WAC 173-400-115 adopts federal NSPS by reference. NSPS apply to certain types of equipment that are newly constructed, modified, or reconstructed after a given applicability date. NSPS applicability is reviewed below for each emission unit for the expansion project.

3.3.1 40 CFR 60 Subpart A – General Provisions

New Source Performance Standards (NSPS) apply to certain types of equipment that are newly constructed, modified, or reconstructed after a given applicability date. NSPS applicability is reviewed below for the proposed project at the Connell Facility.

3.3.2 40 CFR 60 Subpart DD – Standards of Performance for Grain Elevators

Pursuant to 40 CFR §60.300(a), NSPS Subpart DD applies to “...each affected facility at any grain terminal elevator or any grain storage elevator.” The affected facilities include “...each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.”

Although the Connell Facility utilizes a grain dryer, Subpart DD applies only when the affected facility is located at a qualifying grain terminal elevator or grain storage elevator. Under 40 CFR §60.301(b), a grain elevator is defined as “any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.”

Under 40 CFR §60.301(c), a grain terminal elevator is defined as:

“any grain elevator which has a permanent storage capacity of more than 88,100 m³ (ca. 2.5 million U.S. bushels).”

Additionally, a grain storage elevator is defined in 40 CFR §60.301(f) as:

“any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m³ (ca. 1 million bushels).”

The Connell Facility has a permanent seed storage capacity of less than 2.5 million bushels and is not located at a wheat flour mill, wet corn mill, dry corn mill, rice mill, or soybean oil extraction plant. Therefore, the facility does not meet the definition of either a grain terminal elevator or a grain storage elevator. Although a grain dryer is present at the facility, the dryer is not located at a facility subject to Subpart DD. As such, NSPS Subpart DD does not apply to the Connell Facility.

3.3.3 40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Pursuant to 40 CFR 60.40c(a), Subpart Dc applies to any:

“...steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).”

Further, 40 CFR 60.41c defines the steam generating unit as:

“a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.”

The proposed dryer at the Connell Facility does not meet the definition of a steam generating unit because it does not heat water or other heat transfer medium, so NSPS Subpart Dc does not apply.

3.4 National Emission Standards for Hazardous Air Pollutants (NESHAP)

National Emission Standards for Hazardous Air Pollutants (NESHAP) are emission standards for HAP and are applicable to major and area sources of HAP. A HAP major source is defined as a facility with potential emissions in excess of 25 tpy for total HAP or potential emissions in excess of 10 tpy for any individual HAP. An area source is a stationary source that is not a major source. The Connell Facility is an area source of HAPs.

Similar to NSPS, any source subject to a NESHAP is also subject to the general provision of NESHAP Subpart A, unless specifically excluded.

3.4.1 40 CFR 63 Subpart JJJJJJ (6J) – Industrial, Commercial, and Institutional Boilers, Area Sources

NESHAP Subpart JJJJJJ applies to boilers at area sources of HAP. Boilers are defined in 40 CFR §63.11237 as:

“...an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. Waste heat boilers are excluded from this definition.”

The proposed dryer at the Connell Facility does not meet the definition of a boiler under NESHAP Subpart JJJJJJ because it does not heat water, and therefore NESHAP Subpart JJJJJJ does not apply.

3.5 Washington Toxic Air Pollutant (TAP) Regulations

In Washington, all new sources emitting TAPs are required to show compliance with the Washington TAP program pursuant to WAC 173-460. Ecology has established a *de minimis* emission rate, a small quantity emission rate (SQER), and an acceptable source impact level (ASIL) for each listed TAP. If the total project-related TAP emissions increase exceeds the *de minimis* level for a pollutant, then permitting and a control technology review are triggered. If an emissions increase exceeds its respective SQER, further determination of compliance with the ASIL using air dispersion modeling is required. Table 3-1 summarizes the Project's TAP emissions, and the detailed calculations are included in Appendix B.

Table 3-1. TAP Emissions

Pollutant	Averaging Period	Emission Rate	TAP <i>de minimis</i>	SQER	Modeling Required?
		(lb / period)			
SO ₂	1-hr	0.035	0.46	1.2	No
NO ₂ ^a	1-hr	0.73	0.46	0.87	No
CO	1-hr	4.92	1.1	43	No
Benzene	year	2.99	1	21	No
Formaldehyde	year	6.34	1.4	27	No
Naphthalene	year	0.15	0.24	4.8	No
Acetaldehyde	year	1.60	3.0	60	No
Acrolein	24-hr	0.00	0.0013	0.026	No
Propylene	24-hr	0.748	11	220	No
Toluene	24-hr	0.04	19	370	No
Xylenes	24-hr	0.03	0.82	16	No
Ethyl Benzene	year	3.56	3.2	65	No
Hexane	24-hr	0.01	2.6	52	No

- a. The NO_x to NO₂ conversion has been calculated directly using an in-stack ratio (ISR) of 0.1 multiplied by the NO_x emission rate.

4. BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

4.1 BACT Methodology

In a memorandum dated December 1, 1987, EPA stated its preference for a “top-down” BACT analysis.² After determining if any NSPS or NESHAP is applicable, the first step in this approach is to determine, for the emission unit in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically, environmentally, or economically infeasible for the unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections. The five basic steps of a top-down BACT review as identified by the EPA are presented below.³

4.1.1 Step 1 – Identify All Control Technologies

Available control technologies are identified for each emission unit in question. The following methods are used to identify potential technologies: (1) reviewing entries in the Reasonable Available Control Technology (RACT)/BACT/Lowest Achievable Emission Rate (LAER) Clearinghouse (RBLC) database, (2) surveying regulatory agencies, (3) drawing from similar experience in assessing emissions control strategies from other comparable facilities, (4) surveying air pollution control equipment vendors, and/or (5) researching available literature.

4.1.2 Step 2 – Eliminate Technically Infeasible Options

After the identification of control options, an analysis is conducted to eliminate technically infeasible options. A control option is eliminated from consideration if there are process specific conditions that prohibit the implementation of control technology or if the highest control efficiency of the option would result in an emission level that is higher than any applicable regulatory limits, such as an NSPS or NESHAP. Additionally, EPA’s Draft New Source Review Workshop Manual states that

“in cases where the level of control in a permit is not expected to be achieved in practice (e.g., a source has received a permit but the project was cancelled, or every operating source at that permitted level has been physically unable to achieve compliance with the limit), . . . the level of control (but not necessarily the technology) may be eliminated from further consideration.”^{13F}

Therefore, even if a permit lists a BACT or BACT emission limit, it is possible that the control technology (or limit) has not been demonstrated in practice.

4.1.3 Step 3 – Rank Remaining Control Technologies by Control Effectiveness

Once technically infeasible options are removed from consideration, the remaining options are ranked based on their control effectiveness. If there is only one remaining option or if all the remaining technologies could achieve equivalent control efficiencies, ranking based on control efficiency is not required. Accordingly, the tables below outline effectiveness by pollutant.

² U.S. EPA, Office of Air and Radiation. Memorandum from J.C. Potter to the Regional Administrators. Washington, D.C. December 1, 1987.

³ U.S. EPA. *Draft New Source Review Workshop Manual*, Chapter B. Research Triangle Park, North Carolina. October, 1990.

4.1.4 Step 4 – Evaluate Most Effective Controls and Document Results

Beginning with the most efficient control option in the ranking, detailed economic, energy, and environmental impact evaluations are performed. If a control option is determined to be economically feasible without adverse energy or environmental impacts, it is not necessary to evaluate the remaining options with lower control efficiencies.

The economic evaluation centers on the cost effectiveness of the control option. Costs of installing and operating control technologies are estimated and annualized following the methodologies outlined in the EPA's OAQPS Control Cost Manual (CCM) and other industry resources.⁴

4.1.5 Step 5 – Select BACT

In the final step, one pollutant-specific control option and/or limit is proposed as BACT for each emission unit under review based on evaluations from the previous step.

The BACT analyses for the Project are presented in the following section.

4.2 BACT Analysis for Dryer 4

BACT analysis is not included for SO₂, as the PTE calculations show the calculated uncontrolled SO₂ emissions are below the exemption level in WAC 173-400-110.

4.2.1 BACT Analysis for PM, PM₁₀, and PM_{2.5}

Dryer particulate matter emissions consist of filterable and condensable PM produced by the combustion of propane, and from the corn handling during the drying process. The use of propane as fuel with good combustion practices is proposed as BACT for combustion PM emissions from the dryer. For PM emissions associated with grain handling and drying operations, no add-on controls are considered available. Therefore, implementation of industry-standard equipment design and operation practices, together with routine preventative maintenance consistent with manufacturer recommendations, is proposed as BACT.

4.2.2 BACT Analysis for VOC

Use of propane or natural gas as fuel and good combustion practices are identified as the only available control technologies. Therefore, use of propane as fuel and good combustion practices are proposed as VOC BACT for the dryer.

4.2.3 BACT Analysis for NO_x

4.2.3.1 Step 1 – Identify All Control Technologies

NO_x emissions result primarily from thermal NO_x formation from nitrogen and oxygen in the combustion air. An RBLC search was performed to identify NO_x control technologies. The following technologies were identified for use on burners of similar capacity to the proposed burners (60 MMBtu/hr):

- ▶ Low NO_x Burners (LNB)/Ultra-Low NO_x Burners (ULNB)
- ▶ Flue Gas Recirculation (FGR)
- ▶ Use of Propane (a clean-burning fuel) as Fuel
- ▶ Good Combustion Practices

4.2.3.2 Step 2 – Eliminate Technically Infeasible Options

Pioneer considers LNB/ULNB and FGR to be technically infeasible. The dryer is a direct-fired unit and the combustion exhaust is used in the drying process, so FGR is incompatible. The dryer requires a high burner turn-down ratio for proper operation to support the range of heating loads required, while maintaining the corn product quality. The available LNB/ULNB were found to have insufficient turn-down ratios, as further explained in a letter from Honeywell included in Appendix D. Therefore, LNB/ULNB is not technically feasible for this process.

Pioneer considers use of propane as fuel, and good combustion practices to be technically feasible.

4.2.3.3 Step 3 – Rank Remaining Control Technologies

The following control technologies are available and feasible to control NO_x emissions from the dryer:

- ▶ Use of Propane as Fuel
- ▶ Good Combustion Practices

4.2.3.4 Step 4 – Evaluate Most Effective Control Technologies

The remaining technologies (use of propane fuel, and good combustion practices) do not incur any undue economic costs.

4.2.3.5 Step 5 – BACT Selection

Use of propane as fuel and good combustion practices are available and feasible and are therefore proposed as BACT for NO_x.

4.2.4 BACT Analysis for CO

CO emissions result primarily from the incomplete combustion of fuel. Use of propane or natural gas as fuel, catalytic oxidation, and good combustion practices are identified as available control technologies.

The dryer is a direct-fired unit and the combustion exhaust is used in the drying process. The dryer exhaust contains product-derived particulate matter that would foul and deactivate the catalyst used in a catalytic oxidation process, and therefore catalytic oxidation is technically infeasible.

The only identified control technologies are good combustion practices and use of natural gas or propane, which are clean-burning fuels. Therefore, use of propane as fuel with good combustion practices is proposed as BACT for CO emissions from the dryer.

4.2.5 tBACT Analysis for TAP Emissions

All TAPs other than those addressed above (i.e., NO₂ and CO) that exceed the *de minimis* rates are emitted in the form of VOC or PM. Therefore, the BACT determinations listed for VOC and PM emissions also satisfy the tBACT requirements for these TAPs.

5. DISPERSION MODELING

This section of the modeling protocol presents the procedures that are used to perform the air dispersion modeling analysis.

5.1 Model Selection

The latest version (26135) of the AERMOD model is used to estimate maximum ground-level concentrations in the air dispersion analysis. AERMOD is a refined, steady-state, multi-source, air dispersion model to be used for industrial sources.⁴

5.2 Meteorological Data

The modeling analysis is performed using five years of representative meteorological data (2020 to 2024) for the AERMOD dispersion model. The meteorological data is processed using AERMET version 26135 with all regulatory default options. Data are obtained from the following sources:

- ▶ Surface meteorological data (wind speed, wind direction, temperature) correspond to readings from the meteorological station at the Moses Lake Grant County Airport (KWMH, Station ID 24233).
- ▶ Upper air data are obtained from the nearest upper air Spokane, Washington (OTX).⁵

The KWMH station represents the closest ASOS 1-minute station to the proposed project. While other stations are located at a similar distance, the other nearby stations (in Richland and Pasco) are much closer to the Columbia river. Although the Pasco Tri-Cities Airport station is closer (by about 15 km), this station sits on the floor of the Columbia/Snake River trench, roughly 220 m below the project site's elevation, and is in a more urbanized setting. This proximity to the Columbia river and the Tri-Cities area results in wind patterns that are not representative of expected wind patterns near the project. The KWMH station is therefore expected to be more representative of expected ambient conditions at the site on the basis of elevation, land use, and site exposure.

5.3 Coordinate System

The location of the emission source, structures, and receptors are represented in the Universal Transverse Mercator (UTM) coordinate system using the World Geodetic System 1984 (WGS 84) projection. The UTM grid divides the world into coordinates that are measured in north meters (measured from the equator) and east meters (measured from the central meridian of a particular zone, which is set at 500 km). UTM coordinates for this analysis are based on UTM Zone 11. The location of the facility is approximately 351,276 Easting and 5,172,126 Northing in UTM Zone 11.

5.4 Terrain Elevations

Terrain elevations for receptors, buildings, and sources are determined using National Elevation Dataset (NED) supplied by the United States Geological Survey (USGS). The NED is a seamless dataset with the best available raster elevation data of the contiguous United States. NED data retrieved for this model have a

⁴ 40 CFR 51, Appendix W–*Guideline on Air Quality Models*, Appendix A.1– AMS/EPA Regulatory Model (AERMOD).

⁵ Due to a lack of upper air data availability, 2025 data is not available for Spokane. The 2020-2024 data therefore represents the most recent readily-available dataset.

grid spacing of 1/3 arc-second or 10 m. The AERMOD preprocessor, AERMAP version 24142, is used to compute model object elevations from the NED grid spacing. AERMAP also calculates hill height data for all receptors. All data obtained from the NED files are checked for completeness and spot-checked for accuracy.

5.5 Urban / Rural Determination

The Facility is located in a rural area of Connell, Washington. Therefore, the urban option is not selected in AERMOD.

5.6 Receptor Grids

The model has receptors along the fenceline spaced 12.5 meters apart. There is also a variable density, circular Cartesian receptor grid extending 10,000 meters from the center of the facility. This receptor grid spacing is set up according to the following list:

- ▶ 12.5-meter spacing for the first 300 meters from the center of the facility;
- ▶ 25-meter spacing from 300 to 600 meters from the center of the facility;
- ▶ 50-meter spacing from 600 to 900 meters from the center of the facility;
- ▶ 100-meter spacing from 900 to 2,000 meters from the center of the facility;
- ▶ 300-meter spacing from 2,000 to 4,500 meters from the center of the facility; and
- ▶ 600-meter spacing from 4,500 to 10,000 meters from the center of the facility.

In addition, 10-meter spaced receptors are included along the property fenceline. All model receptors are placed at a flagpole height of 1.5 meters. Maps of the receptors are shown in Figure 5-1 and Figure 5-2 below. The Facility is shown below in Figure 5-3 with the fenceline represented by the purple outline surrounding the facility with included buildings.

Figure 5-1. Zoomed-Out Receptor Grid

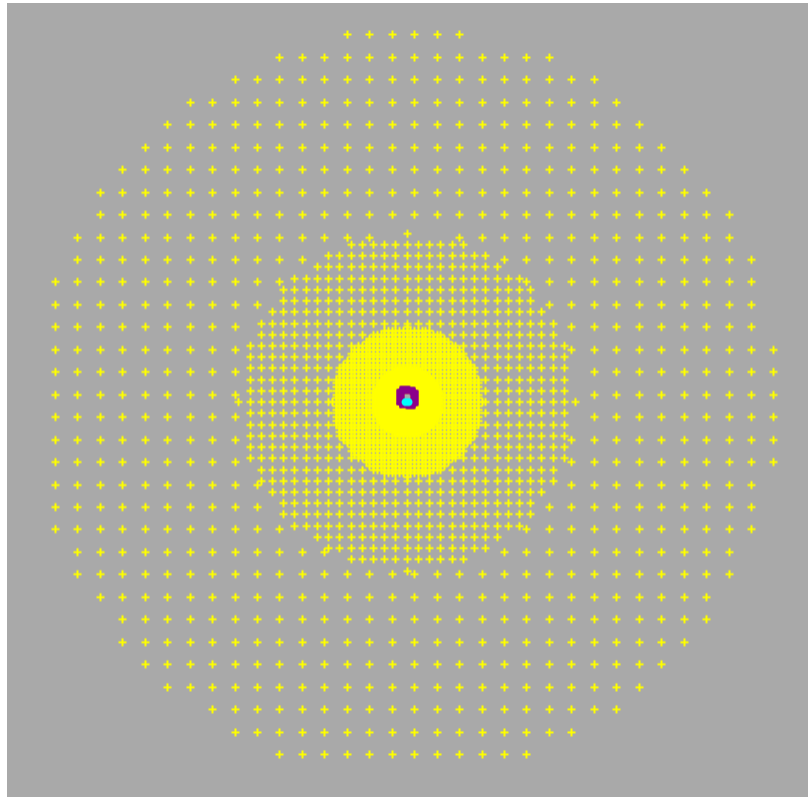


Figure 5-2. Zoomed-In Receptor Grid

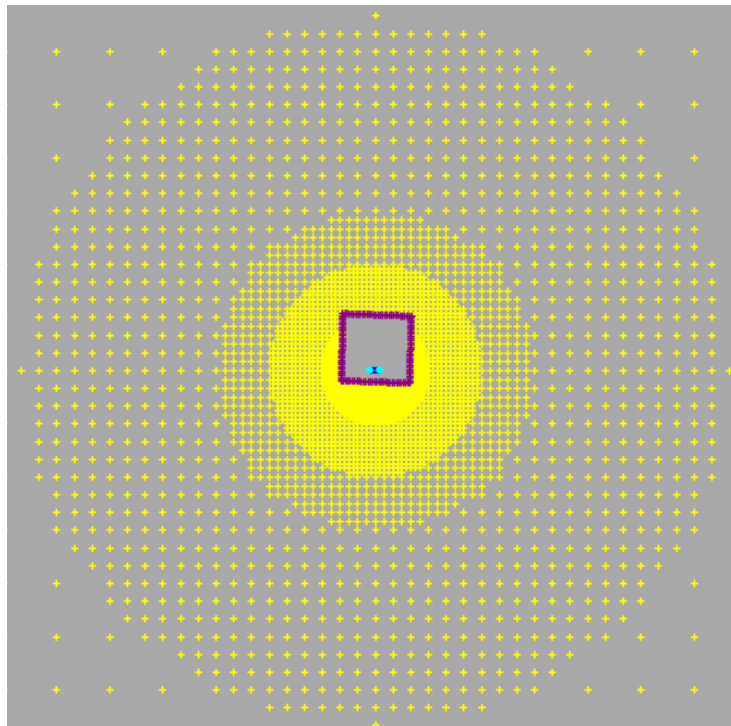


Figure 5-3. Facility Fenceline



5.7 Building Downwash

Emissions from a source are evaluated in terms of its proximity to nearby structures. The purpose of this evaluation is to determine if stack discharges might become caught in the turbulent wakes of these structures. Wind blowing around a building creates zones of turbulence that are greater than if the buildings were absent. The concepts and procedures expressed in the GEP Technical Support document, the Building Downwash Guidance document, and other related documents are applied. All structures that may affect downwash of emissions from the proposed project are included in the models. In this case, the proposed dryer structure dominates downwash for the dryer emission points in all 36 directions; therefore, the dryer structure is the only downwash structure included in the models.

5.8 Source Types and Parameters

Emission releases from the project are represented in the model as a horizontal point source. Emission unit parameters are based on vendor specifications and planned usage. Emissions for all sources are on a PTE basis. The Connell Facility will operate dryer 4 with two emission points located on either side of the building. Design specifications for the dryer structure, including the openings at either end of the building where exhaust will exit the process, are provided in Appendix E.

Table 5-1. Model Source Parameters

Source	X Coordinate (m)	Y Coordinate (m)	Elevation (m)	Stack Height (m)	Stack Temperature (k)	Stack Velocity (m/s)	Stack Diameter (m)
Dryer 4 East	351276.7	5172126	343.12	9.65	305.37	3.3	8.06
Dryer 4 West	351332	5172124	343.11	9.65	305.37	3.3	8.06

5.9 NO₂ to NO_x Conversion

NO_x is formed when nitrogen in ambient air is exposed to high temperatures during the combustion process. At these temperatures, some nitrogen is converted to NO and NO₂ (collectively referred to as NO_x). This project includes NO_x emitted from the dryer 4 burners at the facility. Emission factors for these units are for emissions of NO_x, while the ambient air quality objective is for NO₂. In order to estimate the amount of NO₂ concentration from the amount of emitted NO_x, the following modeling approaches are applied to AERMOD inputs:

- ▶ Plume Volume Molar Ratio Method (PVMRM) in AERMOD.
- ▶ In-stack ratio (ISR) of 0.1 for the burner. The ISR is aligned with other recent approved analyses, and is a conservative value based on EPA's ISR database for uncontrolled boilers and furnaces firing natural gas.⁶
- ▶ Ozone background concentration of 66 ppb, conservatively based on WA Ecology's 2025 Ambient Air Monitoring Network Plan and data from the nearest monitoring site at Kennewick S Steptoe St.⁷

5.10 TAP Modeling Analysis

A project's emissions of TAPs must be reviewed as part of the Washington TAP program codified in WAC 173-460-150. WAC 173-460-150 establishes a *de minimis* emission rate, a Small Quantity Emission Rate (SQER), and an Acceptable Source Impact Level (ASIL) for each listed TAP. An acceptable source impact analysis must be conducted for each TAP with an emission increase. Per WAC 173-400-110(5), TAPs are exempt from additional review if their emission rates are below the respective *de minimis* thresholds. Modeling is required when TAP emission rates exceed the higher Small Quantity Emission Rate (SQER). As shown in Table 3-1, all TAP emission rates are below the SQER, so no TAP modeling is required.

5.11 NAAQS and SIL Modeling Analysis

Short-term and long-term significant impact analysis was conducted for PM_{2.5}, PM₁₀, NO₂, and CO. SO₂ was not modeled as it was below the exemption level set forth under WAC 173-400-110(5), as shown in Table 2-1. For the pollutant and averaging periods which are above the SIL, further NAAQS compliance demonstration is required. The results of the significant impact analysis and NAAQS demonstration are detailed in Table 5-2 and Table 5-3. AERMOD modeling files are provided in Appendix F.

⁶ In-Stack Ratios (ISRs) obtained from EPA Nitrogen Dioxide/Nitrogen Oxide ISR Database. Accessed July 2026. ISR of 0.1 is conservatively used for typical external combustion as the upper end of range in the record.
<https://www.epa.gov/scram/nitrogen-dioxidenitrogen-oxide-stack-ratio-isr-database>.

⁷ 2025 Ambient Air Monitoring Network Plan 2025. Washington State Department of Ecology. Accessed August 2026.
<https://apps.ecology.wa.gov/publications/documents/2502017.pdf>

Table 5-2. SIL Results

Pollutant	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	SIL ($\mu\text{g}/\text{m}^3$)	Exceeds SIL?
PM _{2.5}	24-hr	5.6	1.2	Yes
PM _{2.5}	Annual	0.3	0.13	Yes
PM ₁₀	24-hr	10.1	5	Yes
PM ₁₀	Annual	0.5	1	No
NO ₂	1-hr	43.0	7.5	Yes
NO ₂	Annual	0.5	1.0	No
CO	8-hr	119	500	No
CO	1-hr	612	2000	No

Table 5-3. NAAQS Results

Pollutant	Averaging Period	Background Concentration^a ($\mu\text{g}/\text{m}^3$)	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Modeled Concentration with Background ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)	Exceeds NAAQS?
PM _{2.5}	24-hr	12.9	2.5	15.4	35	No
PM _{2.5}	Annual	4.3	0.3	4.6	9	No
PM ₁₀	24-hr	83.8	8.4	92.2	150	No
NO ₂	1-hr	25.8	21.3	47.0	188	No

a. Background concentrations are from an average of four points in the facility from NWAirQuest data. Data from 2022-24 was used for PM_{2.5}, data from 2014-2017 was used for PM₁₀ and NO₂ as more recent data was not available.

Background concentrations for the NAAQS modeling were determined using the NW-AIRQUEST database tool, taking the average of four data points closest to the facility center. Data from 2022 to 2024 was used for PM_{2.5}; data from 2014-2017 was used for PM₁₀ and NO₂ as the most recent datasets. Background concentrations are included in Table 5-3.

APPENDIX A. NOC FORMS & SEPA CHECKLIST



Notice of Construction Application

A notice of construction permit is required before installing a new source of air pollution or modifying an existing source of air pollution. This application applies to facilities in Ecology’s jurisdiction. Submit this application for review of your project. For general information about completing the application, refer to Ecology Forms ECY 070-410a-g, “Instructions for Ecology’s Notice of Construction Application.”

Ecology offers up to two hours of free pre-application assistance. We encourage you to schedule a pre-application meeting with the contact person specified for the location of your proposal below. If you use up your two hours of free pre-application assistance, we will continue to assist you after you submit Part 1 of the application and the application fee. You may schedule a meeting with us at any point in the process.

Upon completion of the application, please enclose a check for the initial fee and mail it to:

**Department of Ecology
Cashiering Unit
PO Box 47611
Olympia, WA 98504-7611**

For Fiscal Office Use Only: 0299-3030404-B00-216-001-000404

Check the box for the location of your proposal. For assistance, call the appropriate office listed below:

Check Box	Permitting Authority	Contact Info
☐ CRO	Chelan, Douglas, Kittitas, Klickitat, or Okanogan County Ecology Central Regional Office – Air Quality Program 1250 West Alder Street; Union Gap, WA 98903	Central Region Reception 509-575-2490 airportablesourceCRO@ecy.wa.gov
☒ ERO	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, or Whitman County Ecology Eastern Regional Office – Air Quality Program 4601 North Monroe Street; Spokane, WA 99205	Air Quality Reception 509-329-3452 ecyaqciero@ecy.wa.gov
☐ IND	Pulp Mills and Aluminum Smelters Ecology Industrial Section P.O. Box 47600; Olympia, WA 98504-7600	ECY RE INDUSTRIAL SECTION (SWM) industrialsection@ECY.WA.GOV (360) 407-6868
☐ NWP	Hanford Nuclear Reservation Ecology Nuclear Waste Program 3100 Port of Benton Boulevard; Richland, WA 99354	Richland Field Office 509-372-7950 HanfordAir@ecy.wa.gov

Check the box below for the fee that applies to your application.

New project or equipment:

- ☒ **\$2,256: Basic project** initial fee covers up to 16 hours of review.
- ☐ **\$14,948: Complex project** initial fee covers up to 106 hours of review.

Change to an existing permit or equipment:

- ☐ **\$423: Administrative or simple change** initial fee covers up to 3 hours of review. Ecology may determine that your change is complex during the completeness review of your application. If your project is complex, you must pay the additional fee before we continue working on your application
- ☐ **\$1,410: Complex change** initial fee covers up to 10 hours of review
- ☐ **\$415 flat fee:** Replace or alter control technology equipment under WAC 173-400-114. Ecology will contact you if we determine your change belongs to another fee category. You must pay the fee associated with that category before we will continue working on your application.

Read each statement below, then check the box next to it to acknowledge that you agree.

- ☒ The initial fee you submitted may not cover the cost of processing your application. Ecology will track the number of hours spent on your project. If the number of hours Ecology exceeds the hours included in your initial fee, Ecology will bill you \$141 per hour for the extra time.
- ☒ You must include all information requested by this application. Ecology may not process your application if it does not include all the information requested.
- ☒ Submittal of this application allows Ecology staff to visit and inspect your facility.

Part 1: General Information

I. Project, Facility, and Company Information

1. Project Name: Dryer 4 Replacement
2. Facility Name: Pioneer Connell (aka Corteva Connell)
3. Facility Street Address:

1040 Settler Rd, Connell, WA 99326
4. Facility Legal Description: _____
5. Company Legal Name (if different from Facility Name):
Pioneer Hi-Bred International, Inc.
6. Company Mailing Address (street, city, state, zip)

7100 NW 62nd Avenue, Johnston, IA 50131

II. Contact Information and Certification

1. Facility Contact Name (who will be onsite): Victor Ramos, Plant Operations Manager
2. Facility Contact Mailing Address (if different than Company Mailing Address):
1040 Settler Rd, Connell, WA 99326
3. Facility Contact Phone Number: 509-234-9046
4. Facility Contact E-mail: victor.m.amos@vylor.com

5. Billing Contact Name (who should receive billing information):
Ryan Fahn, Project Manager
6. Billing Contact Mailing Address (if different from Company Mailing Address):
7100 NW 62nd Ave, Johnston, Iowa 50131 (same as company address)
7. Billing contact Phone Number: (515) 535-0296
8. Billing Contact E-mail: ryan.fahn@corteva.com
9. Consultant Name (optional – if 3rd party hired to complete application elements):
Nancy Liang
10. Consultant Organization/Company: Trinity Consultants
11. Consultant Mailing Address (street, city, state, zip):
12. Consultant Phone Number: 253.867.5600 x4819
13. Consultant E-mail: NLiang@trinityconsultants.com
14. Responsible Official Name and Title (who is responsible for project policy or decision making):
Brian Haverkamp, Production Location Manager
15. Responsible Official Phone: 509.318.0083
16. Responsible Official E-mail: brian.haverkamp@vylor.com
17. Responsible Official Certification and Signature:
I certify that the information on this application is accurate and complete.

Signature:  Date: 9/1/26

Part 2: Technical Information

Technical Information may be sent with this application form to the Cashiering Unit or may be sent directly to the Ecology regional office with jurisdiction, along with a copy of this application form.

For all sections, check the box next to each item as you complete it.

III. Project Description

- ☒ Written narrative describing your proposed project.
- ☒ Projected construction starts and completion dates. Targeted to begin November 2, 2026
- ☒ Operating schedule and production rates.
- ☒ List of all major process equipment and manufacturers, and maximum rated capacity.
- ☒ Process flow diagram with all emission points identified.
- ☒ Plan a view site map.
- ☒ Manufacturer specification sheets for major process equipment components
- ☒ Manufacturer specification sheets for pollution control equipment.
- ☒ Fuel specifications, including type, consumption (per hour and per year), and percent sulfur.

IV. State Environmental Policy Act (SEPA) Compliance

Check the appropriate box below.

- ☐ SEPA review is complete. Include a copy of the final SEPA checklist and SEPA determination (e.g., DNS, MDNS, and EIS) with your application.
- ☒ SEPA review has not been conducted:
 - ☒ If review will be conducted by another agency, list the agency. You must provide a copy of the final SEPA checklist and SEPA determination before Ecology will issue your permit.
Agency reviewing SEPA: Franklin County
 - ☐ If the review will be conducted by Ecology, fill out a SEPA checklist and submit it with your application. You can find a SEPA checklist online at <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-document-templates>

V. Emissions Estimations of Criteria Pollutants

Does your project generate criteria for air pollutant emissions? ☒ Yes ☐ No

If yes, please provide the following information regarding your criteria for emissions in the application.

- ☒ The names of the criteria air pollutants emitted (i.e., NO_x, SO₂, CO, PM_{2.5}, PM₁₀, TSP, VOC, and Pb)
- ☒ Potential emissions of criteria air pollutants in tons per hour, tons per day, and tons per year (include calculations)
- ☒ If there will be any fugitive criteria pollutant emissions, clearly identify the pollutant and quantity

VI. Emissions Estimations of Toxic Air Pollutants

Does your project generate toxic air pollutant emissions? ☒ Yes ☐ No

If yes, please provide the following information regarding your toxic air pollutant emissions in your application.

- ☒ The names of the toxic air pollutants emitted (specified in [WAC 173-460-150](http://apps.leg.wa.gov/WAC/default.aspx?cite=173-460-150)¹)
- ☒ Potential emissions of toxic air pollutants in pounds per hour, pounds per day, and pounds per year (including calculations)
- ☒ If there will be any fugitive toxic air pollutant emissions, clearly identify the pollutant and quantity

VII. Emission Standard Compliance

- ☒ Provide a list of all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, and emission standards adopted under Chapter 70A.15 RCW.

Does your project comply with all applicable standards identified? ☒ Yes ☐ No

VIII. Best Available Control Technology

- ☒ Provide a complete evaluation of Best Available Control Technology (BACT) for your proposal.

IX. Ambient Air Impacts Analyses

Please provide the following:

- ☒ Ambient air impacts analyses for Criteria Air Pollutants (including fugitive emissions)
- ☒ Ambient air impacts analyses for Toxic Air Pollutants (including fugitive emissions)
- ☒ Discharge point data for each point included in air impacts analyses (including only if modeling is required)
 - ☒ Exhaust height
 - ☒ Exhaust inside dimensions (ex., diameter or length and width)
 - ☒ Exhaust gas velocity or volumetric flow rate
 - ☒ Exhaust gas exit temperature
 - ☒ The volumetric flow rate
 - ☒ Description of the discharges (i.e., vertically or horizontally) and whether there are any obstructions (ex., raincap)
 - ☒ Identification of the emission unit(s) discharging from the point
 - ☒ The distance from the stack to the nearest property line
 - ☒ Emission unit building height, width, and length
 - ☒ Height of the tallest building on-site or in the vicinity and the nearest distance of that building to the exhaust
 - ☒ Whether the facility is in an urban or rural location

Does your project cause or contribute to a violation of any ambient air quality standard or acceptable source impact level? ☐ Yes ☒ No

To request an ADA accommodation, email aqpubs@ecy.wa.gov, call (360) 407-6800, or dial 711 to call through the Washington Telecommunications Relay for services like text telephone (TTY). Visit Ecology.wa.gov/ADA for more accessibility information.

¹ <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

SEPA¹ Environmental Checklist

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use “not applicable” or “does not apply” only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in “Part B: Environmental Elements” that do not contribute meaningfully to the analysis of the proposal.

¹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance>

A. Background

[Find help answering background questions](#)²

1. Name of proposed project, if applicable:

CNN1 Hybrid Wheat Parent Seed Facility

[CNN1 Dryer replacement](#)

2. Name of applicant:

Keen Project Solutions / Corteva Agriscience

[Agra Industries / Corteva Agriscience](#)

3. Address and phone number of applicant and contact person:

Nate Walker

(515) 401-4770

3001 SE Convenience Blvd.

Ankeny, Iowa 50021

[John Rainville](#)

[\(715\)409-1120](#)

[1211 W. water St.](#)

[Merrill, WI 54452](#)

4. Date checklist prepared:

7/8/2026

[8/18/2026](#)

5. Agency requesting checklist:

Franklin County Planning and Building Dept.

6. Proposed timing of schedule (including phasing, if applicable):

Design: 6/1/2026 - 2/15/2027

Phase 1 (Site development and building erection): 11/1/2026 - 6/30/2027

Phase 2 (Interior processing equipment): 10/1/2027 - 5/30/2028

Operations commencing June 2028

[Design: 1/12/2026 - 10/16/2026](#)

[Phase 1 Demolition 10/26/2026 – 12/18/2026](#)

[Phase 2 Site preparation 12/21/2026 – 3/5/2027](#)

² <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background>

Phase 3 Building erecting 2/8/2027 – 7/2/2027

- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

There is potential for future equipment installation within the building footprint. A future cold storage warehouse building is shown on the current design drawings. No future development is planned that is not currently shown on the design.

No future plans.

- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

No formal environmental studies have been completed to date. Standard engineering, site planning, and permitting documentation will be prepared as required.

The consulting team is currently working with Ecology on the emissions verification for the new dryer project.

- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

Yes, the corn dryer project on the site has open governmental approvals.

Corteva's new corn dryer project is working on open governmental approvals.

- 10. List any government approvals or permits that will be needed for your proposal, if known.**

Conditional Use Permit (Franklin County)

Building Permit

Grading / site development permits

Utility connection approvals (as applicable)

Demolition permit/ Building permit/ air permit/ electrical permit

- 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

The proposed project consists of the development of a seed processing and conditioning facility to support regional agricultural operations within Franklin County, the surrounding Columbia Basin and United States and Canada.

The facility will include:

Seed receiving, cleaning, conditioning, and storage operations

Associated support structures and utilities

Truck access for delivery and distribution of agricultural products

The primary purpose of the facility is to support local and regional seed production, including cleaning, treating, packaging, and storing seed for agricultural use.

The new corn dryer will replace the existing dryer. The old dryer is 6,500sqft and the new will be 13,780sqft. It will be build on the same location as the existing. We will be building a new 420sqft control office along side the new dryer. The proposal replaces and modernizes an existing seed-drying operation within the established Corteva facility and does not introduce a new land use.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

1040 Settler Road

Connell, Washington 99326

Parcel # 109560152, SEC 20, T14N, R31E

Same.

B.Environmental Elements

1. Earth

[Find help answering earth questions³](#)

a. General description of the site:

Circle or highlight one: **Flat**, rolling, hilly, steep slopes, mountainous, other:

Same.

b. What is the steepest slope on the site (approximate percent slope)?

³ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth>

Less than 1% across building site.

Same.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

The site consists primarily of agricultural soils typical of the Columbia Basin, generally characterized as:

- Sandy loam to silty soils
- Areas of sand and gravel components associated with irrigated agricultural production

The property is designated as Agricultural Lands of Long-Term Commercial Significance (ALLTCS), indicating that soils have high value for sustained commercial agricultural production.

The proposed project will result in the localized conversion of agricultural soils to developed use within the building footprint and associated improvements; however, the overall agricultural function of the site will be maintained through continued seed processing operations.

The area where the new dryer will be built, is over the top of the existing dryer. The ground all around there is just sand, gravel and rock.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

There are no known surface indications or documented history of unstable or geologically hazardous soils on or immediately adjacent to the site.

None according to the geotechnical evaluation.

- **Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**

The proposed project will involve limited site grading to support construction of the building pad, access drives, and stormwater improvements.

- Type of work: Minor grading, excavation for foundations, placement of structural fill
- Purpose: Building foundation preparation, site drainage, and circulation

- Extent: Disturbance will primarily occur within and immediately adjacent to the building footprint (~125' x 300') and associated site improvements
- Fill source: Imported structural fill from approved off-site sources, if required

Total disturbed area will be limited to what is necessary to support the facility and associated infrastructure

Limited site excavation, they will be removing what is necessary or soil to get down to the recommended compaction needed. We will bring in approved fill to support construction of the building pad, access drives, and stormwater improvements.

- Type of work: Minor grading, excavation for foundations, placement of structural fill
- Purpose: Building foundation preparation, site drainage, and circulation (400' x 300') and associated site improvements.

Total disturbed area will be limited to what is necessary to support the facility and associated infrastructure.

e. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Temporary erosion could occur during construction due to soil disturbance.

However, once construction is complete and the site is stabilized, long-term erosion potential is expected to be minimal due to:

- Flat topography
- Managed drainage systems
- Stabilized surfaces

Same.

f. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Following project construction, approximately 35%–45% of the site is expected to be covered by impervious surfaces, including:

- Building footprint
- Paved access and loading areas

Following project construction, approximately 75%–85% of the site is expected to be covered by impervious surfaces, including:

- Building footprint
- Paved access and loading areas

g. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

The following measures will be implemented to reduce and control erosion:

- Installation of temporary erosion and sediment control BMPs during construction (e.g., silt fence, stabilized construction entrances)
- Phased grading to minimize exposed soils
- Prompt stabilization of disturbed areas
- Design and implementation of a stormwater management system consistent with applicable regulations
- Ongoing site maintenance to minimize dust and soil displacement

These measures will effectively limit short-term construction impacts and prevent long-term erosion issues.

Same.

2. Air

[Find help answering air questions](#)⁴

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.**

Construction:

Temporary emissions may occur during construction activities, including:

- Dust generated from grading and site disturbance
- Minor emissions from construction equipment (diesel exhaust)

These emissions will be short-term and limited to the construction period.

⁴ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air>

Operation:

Operational emissions will primarily consist of:

- Particulate matter (dust) associated with handling, cleaning, and conditioning of seed
- Minor emissions from truck traffic accessing the site

Seed processing operations are not expected to generate significant combustion-related emissions. The facility will operate as an agricultural processing use, and emissions will be similar in nature to other seed conditioning and agricultural handling operations commonly found in the region.

Maintenance:

Routine facility maintenance is not expected to result in any significant air emissions beyond those described above. No significant adverse air quality impacts are anticipated as a result of the proposed project.

During the construction phase will be minimal, some dust from site development, and exhaust from equipment being used in the construction phase.

Operational emissions will include products of propane combustion from the dryer burner systems, particulate/dust associated with seed handling and conveying, and vehicle emissions associated with normal facility operation. Corteva is currently working with Ecology on the emissions to get permitting for the new dryer with its larger burners.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

The surrounding area consists primarily of active agricultural operations, which may generate:

- Dust from fieldwork and harvesting
- Agricultural chemical application odors (seasonal)

These conditions are typical for the area and are not expected to adversely affect the proposed facility. The project is designed to be compatible with the existing agricultural environment.

Same.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The following measures will be implemented to reduce and control air emissions:

- Dust control during construction, including water application and stabilization of disturbed areas
- Use of enclosed processing areas where feasible to limit release of particulates
- Installation of dust collection and filtration systems within the conditioning facility
- Maintenance of paved and unpaved areas to minimize fugitive dust
- Compliance with applicable local, state, and federal air quality regulations

These standard best management practices will minimize emissions and ensure that the project does not result in significant adverse impacts to air quality.

Construction dust will be controlled with water and other standard BMPs. Equipment will be maintained to limit unnecessary exhaust and idling. Dryer combustion systems will use engineered propane burner/gas-train assemblies with regulators, shutoff valves, pressure switches, and burner-management controls. Applicable air-quality requirements will be addressed through the permitting process.

3. Water

[Find help answering water questions](#)⁵

a. Surface:

[Find help answering surface water questions](#)⁶

- **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

There are no known surface water bodies (including streams, rivers, lakes, or wetlands) located on or in the immediate vicinity of the subject property.

The site and surrounding area are primarily utilized for irrigated agricultural production and do not contain regulated surface water features.

Same.

- **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

No work is proposed over, in, or within 200 feet of surface waters or wetlands. As such, no impacts to surface water bodies are anticipated.

⁵ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water>

⁶ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water>

Same.

- **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

No fill or dredge material will be placed in, or removed from, any surface water bodies or wetlands.

No such areas will be affected by the proposed project.

Same.

- **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

The proposed project will not require any surface water withdrawals or diversions.

Same.

- **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

Based on available mapping and site conditions, the project site is not located within a 100-year floodplain.

Same.

- **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

The proposed project will not involve any direct discharge of waste materials to surface waters.

Stormwater runoff will be managed onsite in accordance with applicable regulations and will not result in direct impacts to surface water systems.

Same.

b. Ground:

[Find help answering ground water questions](https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater)⁷

- **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

⁷ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater>

The facility will utilize water for typical restroom domestic uses. Water service will be provided through existing well connections.

Groundwater withdrawal, if any, will be limited and consistent with typical agricultural and facility usage and is not expected to adversely impact local groundwater supplies.

No direct discharge of process water to groundwater is proposed.

Same.

- **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

Domestic wastewater generated by the facility will be:

- Managed through a new on-site septic system

The system will be properly designed and permitted in accordance with applicable health and environmental regulations.

No industrial wastewater or hazardous discharges to ground are proposed. Operations are agricultural in nature and do not involve significant process waste streams.

No new septic system or sanitary discharge is proposed as part of this project. The new office has no plumbing, restroom, or water service. Existing facility sanitary systems, if any, are not proposed to be modified by this project.

c. Water Runoff (including stormwater):

- **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Stormwater runoff will be generated from:

- Building roof areas
- Paved access, parking, and loading areas

Runoff will be collected and managed through a designed stormwater system, which may include:

- Drainage conveyance systems
- Infiltration or detention facilities

Stormwater will be retained and treated onsite to the extent practicable and released in a controlled manner consistent with regulatory requirements.

Runoff is expected to follow existing drainage patterns and will not adversely impact off-site properties or water bodies.

Runoff will be generated from replacement/new roof areas, slabs, pads, and other impervious surfaces. Stormwater will be managed through existing and/or engineered site drainage features. The project budget includes a possible French drain at a conveyor pit, with a pump system. Final routing, quantities, and drainage details must be confirmed from the final civil/site design.

- **Could waste materials enter ground or surface waters? If so, generally describe.**

The potential for waste materials entering ground or surface waters is minimal.

Seed processing operations do not generate significant liquid waste streams. Any materials used (e.g., seed treatment products) will be:

- Stored properly
- Handled in accordance with applicable regulations
- Managed to prevent spills or releases

Standard BMPs will be implemented to prevent contamination.

Same.

- **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

The project will introduce localized changes to drainage patterns due to impervious surfaces; however:

- Stormwater will be managed through engineered systems and the existing storm water system
- Post-development drainage will be controlled to prevent adverse off-site impacts

No significant changes to regional drainage patterns are anticipated.

Same.

- **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:**

The following measures will be implemented to control impacts related to water resources:

- Design and construction of a stormwater management system in compliance with applicable state and local requirements
- Implementation of erosion and sediment control measures during construction
- Proper storage and handling of materials to prevent contamination
- Use of best management practices (BMPs) for agricultural processing facilities
- Regular maintenance of drainage systems to ensure long-term performance

These measures will effectively minimize impacts and ensure protection of surface water, groundwater, and drainage functions.

Same.

4. Plants

[Find help answering plants questions](#)

a. Check the types of vegetation found on the site:

- ☐ **deciduous tree: alder, maple, aspen, other**
- ☐ **evergreen tree: fir, cedar, pine, other**
- ☐ **shrubs**
- ☐ **grass**
- ☐ **pasture**
- ☒ **crop or grain**
- ☐ **orchards, vineyards, or other permanent crops.**
- ☐ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- ☐ **water plants: water lily, eelgrass, milfoil, other**
- ☐ **other types of vegetation**

• What kind and amount of vegetation will be removed or altered?

The subject property is currently utilized as active agricultural land, consisting primarily of:

- Cultivated crop areas (row crops and seed production)
- Managed agricultural groundcover and grasses
- Limited disturbed-field vegetation typical of irrigated farmland

Development of the proposed facility will result in the removal of existing agricultural vegetation within the building footprint and associated site improvements, including access drives and circulation areas.

Vegetation removal will be limited to the area necessary to construct the proposed facility and related infrastructure, with the remainder of the property continuing to support agricultural functions.

The conversion of vegetation is consistent with the existing agricultural use of the site and does not involve removal of native forest, riparian, or undisturbed habitat areas.

The dryer project is using the same foot print. There is very little vegetation that will be disturbed. The only area will be a small section of the lawn where we will be adding another concrete pad to set the new LP tank for gas.

- **List threatened and endangered species known to be on or near the site.**

Based on available information, there are no known threatened or endangered plant species located on the subject property.

The site is actively farmed and does not represent sensitive habitat typically associated with protected species.

Same.

- **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.**

Landscaping associated with the project will be limited and functional in nature, consistent with agricultural facility development.

Proposed measures include:

- Stabilization of disturbed non-operational areas through reseeding or groundcover establishment
- Use of low-maintenance and drought-tolerant plantings where landscaping is provided
- Preservation of agricultural use on remaining portions of the property

Where practicable, plant materials may include native or regionally adapted species suitable for the Columbia Basin environment.

These measures will help minimize soil disturbance, reduce dust, and maintain compatibility with surrounding agricultural uses.

The area around the dryer will be either concrete or gravel, the only area that will have any landscaping is where we will reseed the lawn from the new concrete slab by LP tank.

- **List all noxious weeds and invasive species known to be on or near the site.**

The site is located within the Columbia Basin, where noxious weeds and invasive species are commonly present in agricultural and disturbed areas.

Typical species that may occur in the vicinity include:

- Russian thistle (tumbleweed)
- Cheatgrass
- Canada thistle and bull thistle
- Kochia
- Knapweed species

These species are identified as invasive or noxious weeds that commonly occur in the region and can impact agricultural lands and native ecosystems.

The Washington State Noxious Weed Control Board maintains an official statewide list of regulated species and encourages landowners to control their spread.

As part of project development and ongoing operations:

- Standard agricultural weed management practices will be implemented
- Site maintenance will include efforts to prevent the spread of invasive species

[Same.](#)

5. Animals

[Find help answering animal questions](#)⁸

- List any birds and other animals that have been observed on or near the site or are known to be on or near the site.**

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other:**
- **Mammals: deer, bear, elk, beaver, other:**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

The subject property is located within an active agricultural area, and wildlife present is typical of irrigated farmland and open agricultural landscapes in the Columbia Basin.

Birds:

- Hawks (raptors commonly observed in agricultural fields)
- Songbirds (sparrows, blackbirds, starlings, and other small birds)

⁸ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals>

- Occasional waterfowl or migratory birds in nearby irrigated areas

Mammals:

- Small mammals such as rodents (mice, voles)
- Rabbits
- Coyotes may occasionally be present in surrounding agricultural lands

Fish:

- No fish species are present on-site, as no surface water bodies occur on the property

Wildlife presence is generally limited and typical of working agricultural environments, where habitat is regularly disturbed and managed.

Same.

- **List any threatened and endangered species known to be on or near the site.**

Based on available information, there are no known threatened or endangered animal species located on the subject property.

While Washington State supports a number of listed species, these species are generally associated with specific habitat types such as wetlands, river systems, forested areas, or protected corridors, which are not present at the project site.

Due to the site's active agricultural use and lack of sensitive habitat features, the likelihood of listed species occurring on-site is considered low.

Same.

- **Is the site part of a migration route? If so, explain.**

The site may be located within a general regional flyway used by migratory birds, as is common throughout agricultural areas in Washington State.

However:

- The site does not contain designated or critical migratory habitat
- No significant stopover or nesting areas are present

As a result, the project is not expected to materially impact migration patterns.

Same.

- **Proposed measures to preserve or enhance wildlife, if any.**

Given the agricultural nature of the site, wildlife use is expected to remain limited. However, the following measures will help maintain compatibility with wildlife:

- Minimization of disturbed area to only what is necessary for construction
- Continued agricultural use of remaining land, which provides open habitat for common species
- Implementation of standard operational practices to reduce dust, noise, and disturbance
- Proper waste and material handling to avoid attracting nuisance wildlife

No specialized habitat enhancement measures are proposed, as the site is not identified as a wildlife-sensitive area.

Same.

- **List any invasive animal species known to be on or near the site.**

No specific invasive animal species are known to be present on the site.

However, species commonly found in agricultural areas of the region may include:

- Rodents that thrive in disturbed environments
- Starlings and other non-native bird species common to agricultural settings

These species are typical of farmed landscapes and do not represent a unique or site-specific environmental concern.

Same.

6. Energy and natural resources

[Find help answering energy and natural resource questions](#)⁹

- **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

The proposed facility will primarily utilize electrical energy to support operations, including:

- Seed receiving, conveying, and conditioning equipment
- Dust collection and air handling systems
- Lighting and general building systems

Electrical energy will be the primary energy source for both processing operations and building functions.

Additional energy use may include:

- Propane for space heating of the facility, if required
- Limited use of fuel-powered vehicles and equipment associated with deliveries and site operations

No unusual or energy-intensive industrial processes are proposed. Energy usage will be consistent with that of a typical agricultural processing facility.

Electricity and propane will be the primary energy sources. Electricity will operate dryer fans, conveyors, trippers, controls, instrumentation, lighting, receptacles, and other support equipment. Propane will fuel the dryer burner systems through a new 30,000-gallon storage tank and associated piping. The office building will use electricity for lighting/receptacles and two ductless mini-split HVAC systems.

- **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The proposed project is not expected to adversely affect the potential use of solar energy by adjacent properties.

The facility will be located within an agricultural area characterized by:

- Large parcels
- Low building density

⁹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou>

While the structure will have a 40-foot eave height, it will be set back and located in a manner that minimizes shading impacts. Given the open agricultural setting, solar access for surrounding properties will remain largely unchanged.

No significant effect on adjacent solar access is expected because the project replaces existing processing infrastructure within a large, low-density agricultural/industrial setting.

- **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.**

The project will incorporate standard energy efficiency measures consistent with modern agricultural facility design, including:

- Use of energy-efficient lighting systems (e.g., LED fixtures)
- Installation of efficient motors and equipment for processing operations
- Insulated building systems to improve heating efficiency
- Use of automated controls where applicable to optimize energy use

The dryer-fan scope includes premium-efficiency electric motors. The project also uses VFD-based fan motor controls, automated dryer controls and sequencing, and modern electrical/control systems intended to operate equipment efficiently. The office includes basic insulation and ductless mini-split HVAC systems.

7. Environmental health

[Health Find help with answering environmental health questions](#)¹⁰

- **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.**

The proposed project involves typical agricultural processing operations, and no significant environmental health hazards are anticipated.

Potential hazards during construction and operation may include:

- Temporary exposure to dust and equipment exhaust during construction
- Handling and storage of fuel, lubricants, and small quantities of agricultural products (e.g., seed treatments)
- Routine operational risks associated with equipment and material handling

¹⁰ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health>

These risks are standard for construction and agricultural facilities and are manageable through established practices.

Potential hazards include propane storage and distribution, combustion equipment, combustible agricultural material/dust, electrical equipment, construction fuels and lubricants, demolition/construction activities, and normal industrial equipment/material-handling hazards. The project includes a new 30,000-gallon propane tank and forty propane-fired dryer burner/gas-train systems. These hazards will be managed through engineered systems, code compliance, operating procedures, and site safety controls.

- **Describe any known or possible contamination at the site from present or past uses.**

The site has historically been used for agricultural purposes, and there are no known records of significant contamination.

Agricultural activities may result in minor residual impacts (e.g., fertilizers or pesticides); however, there is no indication of soil or groundwater contamination that would affect development.

If needed, site conditions can be confirmed through standard due diligence procedures.

Same.

- **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

No known hazardous conditions or regulated hazardous materials sites are present on the property.

There are no known underground hazardous liquid or gas transmission pipelines within or adjacent to the site that would affect development.

No known regulated hazardous-material site or hazardous liquid/gas transmission pipeline is identified on or adjacent to the project site in the supplied same-site information. Existing underground site utilities are present, and their exact locations/quantity are not fully known; the project includes utility locating, additional underground utility scanning, hydro-vac excavation, and utility protection before/while excavating.

- **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

During construction and operation, the project may involve limited use of:

- Fuels and oils associated with construction equipment
- Cleaning products and general maintenance materials
- Agricultural products such as seed treatment materials, if applicable

These materials will be:

- Stored in appropriate containers
- Managed in accordance with applicable regulations

No large-scale storage or handling of hazardous chemicals is proposed.

The project will store and use propane in a new 30,000-gallon tank and associated process piping. Construction and maintenance may also use fuels, oils/lubricants, cleaning products, coatings, adhesives, and similar materials in normal quantities. No large-scale production of hazardous chemicals is proposed.

- **Describe special emergency services that might be required.**

The project will be served by existing local emergency services, including:

- Fire protection services
- Emergency medical services

No specialized or unusual emergency services are anticipated beyond standard response capabilities for agricultural and light industrial facilities.

Same.

- **Proposed measures to reduce or control environmental health hazards, if any.**

The following measures will be implemented:

- Compliance with applicable health and safety regulations
- Proper storage, handling, and disposal of fuels and materials
- Implementation of spill prevention and response procedures
- Use of dust control measures during construction
- Routine inspection and maintenance of equipment

These measures will minimize risks and ensure a safe operating environment. Environmental health risks are typically associated with common, small-scale sources such as equipment and materials, and are effectively managed through standard practices.

Propane and burner systems will be engineered and installed in accordance with applicable codes and project requirements. Gas trains include regulators, main shutoff valves, control valves, and high/low gas-pressure switches; the propane piping scope includes isolation valves. Construction will use full-time safety oversight, utility locating/protection, dust control, barricades/fencing, proper material storage, spill-prevention/response practices, equipment inspection/maintenance, and clear emergency access.

b. Noise

- **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

The site is located within an agricultural area where existing noise sources may include:

- Agricultural equipment and field operations
- Vehicle traffic on nearby roadways
- General rural and farming activities

These noise levels are typical of an active agricultural environment.

Same.

- **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

Short-term (construction):

- Noise generated by construction equipment
- Intermittent increases during site grading and building activities

Construction noise will be temporary and limited to normal daytime working hours.

Long-term (operation):

- Equipment associated with seed processing (conveyors, fans, dust collection systems)
- Truck traffic loading and unloading
- General facility operations

Operational noise will be consistent with that of typical agricultural processing facilities and is not expected to produce significant impacts due to the rural setting.

Hours of operation:

- Construction: Standard daytime hours

- Operation: Primarily daytime with potential seasonal extended hours consistent with agricultural activities

Same.

- **Proposed measures to reduce or control noise impacts, if any:**
 - Limiting construction activities to daytime hours
 - Maintaining equipment in good working order to reduce excessive noise
 - Using enclosed building spaces to contain operational noise where feasible
 - Locating equipment and operations to minimize off-site impacts

These measures will reduce potential noise impacts and maintain compatibility with surrounding land uses.

Same.

8. Land and shoreline use

[Find help answering land and shoreline use questions](#)¹¹

- **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

The subject property is currently used for active agricultural production and seed processing operations.

Surrounding properties are primarily:

- Agricultural lands (row crops and irrigated farmland)
- Agricultural support and industrial uses associated with farming operations

The proposed project will expand and modernize existing agricultural processing on the site and is consistent with surrounding land uses.

The proposal is not expected to negatively affect adjacent properties.

Same.

- **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

¹¹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use>

Yes, the project site has been and continues to be utilized as working agricultural land classified as Agricultural Lands of Long-Term Commercial Significance (ALLTCS).

The proposed development will result in the localized conversion of agricultural soils within the building footprint and associated improvements.

- Conversion is limited to the facility footprint and required site infrastructure
- The majority of the property will remain in continued agricultural use

The project represents a necessary and typical conversion to support agricultural processing, which is compatible with long-term agricultural viability.

Yes. The property has been and continues to be used for agriculture and is designated Agricultural Lands of Long-Term Commercial Significance (ALLTCS). The dryer replacement is primarily within an existing developed processing footprint. Any additional conversion is expected to be localized to project foundations, pads, the office, propane facilities, and related infrastructure.

- Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

The proposed project is designed to coexist with and support surrounding agricultural operations.

Typical agricultural activities in the area may include:

- Movement of large farm equipment
- Application of fertilizers and pesticides
- Seasonal harvesting and tilling operations

The project:

- Will not restrict these activities
- Will be designed to maintain site access and circulation consistent with agricultural operations

As an agricultural support facility, the project is expected to be compatible with and beneficial to local farming operations.

Same.

- **Describe any structures on the site.**

Existing site improvements may include:

- Agricultural buildings and seed processing structures
- Storage buildings
- Utility and support infrastructure

These structures support current agricultural and processing activities.

Existing site structures include agricultural seed-processing buildings, dryer buildings and associated head/tail structures, conveyors, storage/support buildings, utilities, platforms, catwalks, and other processing infrastructure.

- **Will any structures be demolished? If so, what?**

No demolition will occur to accommodate the proposed development.

Yes. The project includes demolition of the existing control room, dryer buildings, head house and tail house, rooftop conveyors, associated footings/foundations, selected conveyors, and associated structures, catwalks and guardrail. Other existing conveyors will be selectively shortened or modified where identified.

- **What is the current zoning classification of the site?**

The site is zoned for agricultural or rural/agricultural-industrial use under Franklin County zoning regulations.

Same.

- **What is the current comprehensive plan designation of the site?**

The site is designated as Agricultural Land of Long-Term Commercial Significance (ALLTCS) in the Franklin County Comprehensive Plan.

This designation supports continued agricultural use and related support activities, including processing and storage facilities.

Same.

- **If applicable, what is the current shoreline master program designation of the site?**

The project site is not located within a shoreline jurisdiction, and no shoreline master program designation applies.

Same.

- **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

No known critical areas (e.g., wetlands, floodways, geologic hazard areas) are located on the project site.

Same.

- **Approximately how many people would reside or work in the completed project?**

The completed project will support approximately:

- 10–25 employees, depending on operational needs and seasonal activity

No residential uses are proposed.

Same.

- **Approximately how many people would the completed project displace?**

The proposed project will not displace any residents or existing population, as the site is used for agricultural purposes and does not contain residential development.

Same.

- **Proposed measures to avoid or reduce displacement impacts, if any.**

Not applicable

Same.

- **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

The project has been designed to ensure compatibility with surrounding land uses by:

- Maintaining agricultural-oriented operations consistent with regional land use patterns
- Locating structures to minimize impacts on adjacent properties
- Supporting local agricultural production through processing and handling capacity
- Designing site circulation and access to accommodate agricultural vehicles
- Same.

- **Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:**

The following measures will minimize impacts to ALLTCS lands:

- Limiting development to the minimum area necessary for facility operations
- Maintaining the majority of the site in agricultural use

- Supporting regional agriculture through improved processing infrastructure
- Avoiding fragmentation of agricultural lands

The project represents a supportive agricultural use rather than a conversion to non-agricultural development and therefore helps sustain long-term agricultural viability.

Same.

9. Housing

[Find help answering housing questions](#)¹²

- Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

Not Applicable, no housing units provided

Same.

- **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

Not Applicable, no housing units eliminated

Same.

- **Proposed measures to reduce or control housing impacts, if any:**

Not Applicable, no housing unit impacts

Same.

10. Aesthetics

[Find help answering aesthetics questions](#)¹³

- **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

The proposed facility will have a maximum height of approximately 40 feet (eave height).

The principal exterior building materials will consist of:

¹² <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing>

¹³ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics>

- Pre-engineered metal building systems
- Metal wall and roof panels in neutral, non-reflective finishes

These materials are typical of agricultural and industrial facilities in the surrounding area and are selected for durability, functionality, and compatibility with adjacent uses.

The wall height is 35'-6" overall height at peak is 40'. Principal exterior materials include structural steel, metal siding/roofing, panels, louvers, doors, platforms and catwalks; the new approximately 20-foot by 23-foot office is a pre-engineered metal building.

- **What views in the immediate vicinity would be altered or obstructed?**

The project will introduce a new structure that may alter local views across the agricultural landscape, particularly from nearby roadways and adjacent properties.

However:

- The surrounding area is characterized by existing agricultural buildings, open fields, and industrial support structures
- The proposed facility will be consistent in scale and character with similar agricultural processing buildings in the region

No significant scenic vistas, view corridors, or unique visual resources are located on or adjacent to the site. Therefore, visual impacts are expected to be limited and localized.

The project will replace existing dryer structures with new dryer, conveyor, platform, and support structures in an established agricultural/industrial processing complex. Localized views may change, but the project is consistent with the existing scale and character of the facility and surrounding agricultural support uses.

- **Proposed measures to reduce or control aesthetic impacts, if any:**

The following measures will be implemented to minimize visual impacts:

- Selection of non-reflective finishes to reduce glare
- Site layout designed to maintain orderly and functional appearance consistent with agricultural operations
- Limiting development to the minimum area necessary, preserving open agricultural character where feasible

Due to the nature of the project and its location within an agricultural setting, aesthetic impacts are expected to be minor and consistent with existing land use patterns.

Same.

11. Light and glare

[Find help answering light and glare questions](#)¹⁴

- **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

The proposed project will generate limited artificial lighting associated with normal facility operations, including:

- Exterior lighting for building entrances, loading areas, and site circulation
- Interior lighting associated with processing operations (contained within the building)

Exterior lighting will primarily occur during:

- Early morning and evening hours, particularly during seasonal operations
- Occasional nighttime use, consistent with agricultural processing activities

No significant glare-producing operations are proposed. Building materials will utilize non-reflective finishes, minimizing glare from sunlight.

Same.

- **Could light or glare from the finished project be a safety hazard or interfere with views?**

The proposed lighting is not expected to create a safety hazard or interfere with views, due to:

- The rural/agricultural setting with limited nearby sensitive receptors
- The use of directional, shielded lighting fixtures
- Non-reflective building materials that reduce glare

Any light generated will be comparable to typical agricultural or light industrial facilities in the area and is not expected to adversely impact surrounding properties.

Same.

- **What existing off-site sources of light or glare may affect your proposal?**

¹⁴ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare>

Existing light sources in the vicinity are limited and may include:

- Lighting from nearby agricultural facilities or farm operations
- Vehicle headlights from adjacent roadways

The area is generally low-light rural, and existing light levels are minimal.

Same.

• **Proposed measures to reduce or control light and glare impacts, if any:**

The following measures will be implemented to minimize light and glare impacts:

- Use of downward-directed, shielded lighting fixtures to prevent light spillover
- Installation of lighting only where necessary for safety and security
- Use of non-reflective exterior building materials to minimize glare
- Limiting unnecessary nighttime lighting where feasible

These measures will ensure that lighting remains functional for operations while minimizing impacts to surrounding properties and preserving the rural character of the area.

Same.

12. Recreation

[Find help answering recreation questions](#)

a. What designated and informal recreational opportunities are in the immediate vicinity?

The project site is located within an agricultural area, where recreational opportunities are limited.

Nearby recreational uses may include:

- Informal activities such as walking, hunting, or rural outdoor recreation on surrounding lands (where permitted)
- Regional recreational opportunities located outside the immediate vicinity, including parks and public recreation areas

No designated recreational facilities are located on or immediately adjacent to the project site.

Same.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The proposed project will not displace any existing recreational uses, as the site is currently utilized for agricultural purposes and is not used for formal or organized recreation.

Same.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No significant impacts to recreation are anticipated; however:

- The project will maintain compatibility with surrounding rural land uses
- Access to nearby recreational areas (off-site) will remain unchanged
- Continued agricultural use of surrounding land preserves the open space character of the area

No additional recreation facilities or mitigation measures are required.

Same.

13. Historic and cultural preservation

[Find help answering historic and cultural preservation questions](#)¹⁵

- **Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.**

Based on available information, there are no known buildings, structures, or sites on the property that are listed in or eligible for listing in national, state, or local historic registers.

The site is currently used for agricultural purposes and does not include any historically designated resources.

Same.

- **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

No known:

- Archaeological resources
- Tribal cultural sites
- Cemeteries or burial sites
- Historic landmarks

¹⁵ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p>

have been identified on or immediately adjacent to the site.

However, as is typical throughout Washington State, the potential for previous unknown cultural resources cannot be entirely excluded.

Same.

- **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

Evaluation of potential impacts has been based on:

- Review of existing land use and site conditions
- General knowledge of the area and its agricultural use history
- Standard SEPA-level assessment of potential resource presence

Formal archaeological or cultural resource studies have not been conducted at this stage, as no indicators of historic or cultural resources have been identified.

Same.

- **Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

The following measures will be implemented:

- If any archaeological materials or human remains are discovered during construction:
- Work in the immediate area will be halted
- Appropriate authorities (including DAHP and local tribes) will be notified
- Construction activities will comply with all applicable state and local regulations related to cultural resource protection

These measures will ensure that any previously unidentified resources are properly managed and protected.

Same.

14. Transportation

[Find help with answering transportation questions](#)¹⁶

- **Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.**

The site is served by existing public roadways typical of rural/agricultural areas, including:

- Local county roads providing access to agricultural and industrial properties
- Connections to regional highways supporting farm-to-market transportation

Access to the site will be provided via existing or improved driveway connections to the local road system. These access points will be designed to:

- Accommodate passenger vehicles and agricultural truck traffic
- Support safe ingress and egress consistent with county standards

No significant changes to the surrounding street network are anticipated.

No significant changes to the surrounding street network are anticipated. With this just being a replacement dryer nothing will change.

- **Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

The site is not currently served by public transit, which is typical for rural agricultural areas.

The nearest transit services are located in nearby urbanized areas and are not within convenient walking distance of the site.

Same.

- **Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

The project is not expected to require major off-site roadway improvements.

Potential minor improvements may include:

¹⁶ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation>

- Driveway upgrades or widening for truck access
- On-site circulation improvements

Any improvements will be designed in accordance with applicable local roadway standards.

The dryer replacement project will not have any impact.

- **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The proposed project will primarily rely on truck transportation for delivery and shipment of materials.

- No use of water or marine transportation is proposed
- No rail service is currently associated with the site
- No use of air transportation is anticipated
- Same.
- **How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

The completed project is estimated to generate:

- Approximately 20 total vehicle trips per day, depending on operational intensity and seasonal demand
- Of these trips, approximately 20%–40% may consist of trucks, including delivery and outbound product shipments

Traffic volumes will vary seasonally, with peak activity occurring during harvest and processing periods, which is typical for agricultural operations.

These estimates are based on:

- Comparable agricultural processing facilities
- Typical staffing and delivery patterns for seed conditioning operations

The new dryer is a replacement of the old, it is larger in size. This will increase the amount of seed that will be produced at this facility. They will have roughly a 30% increase on volume of product, which will increase hauling. This will only be on the harvest season.

- **Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

The project is located within an active agricultural area where roadways are commonly used by:

- Agricultural equipment
- Trucks transporting crops and farm inputs

The proposal:

- Will not interfere with existing agricultural traffic patterns
- Is designed to accommodate and support agricultural hauling operations

Truck movements associated with the project will be consistent with existing agricultural traffic conditions.

Same.

- **Proposed measures to reduce or control transportation impacts, if any:**

The following measures will be implemented:

- Design of site access to ensure safe truck entry and exit
- On-site circulation configured to prevent congestion or queuing onto public roads
- Coordination with local agencies for any required access improvements
- Scheduling and operations consistent with agricultural traffic patterns
- Use of established haul routes where applicable

These measures will ensure that transportation impacts remain minimal and compatible with the surrounding agricultural transportation network.

Use existing site access for Dryer project; maintain clear truck ingress/egress; avoid queuing on public roads; maintain emergency access.

15. Public services

[Find help answering public service questions¹⁷](#)

- **Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

The proposed project will result in a minor increase in demand for public services, typical of an agricultural processing facility.

Potential service needs include:

¹⁷ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services>

- Fire protection for the building and operations
- Emergency medical services (EMS) for employees
- Law enforcement services typical for industrial/agricultural sites

The increase in demand is expected to be minimal, as:

- The facility will employ a relatively small workforce
- Operations are consistent with existing agricultural and industrial activities in the area

No impacts to schools, public transit, or healthcare infrastructure are anticipated beyond typical service levels.

Same.

- **Proposed measures to reduce or control direct impacts on public services, if any.**

The following measures will help minimize impacts on public services:

- Design and construction of the facility in compliance with fire and life safety codes
- Coordination with local fire authorities regarding access, hydrants, and emergency response needs
- Implementation of onsite safety procedures and training
- Maintaining clear access for emergency vehicles

These measures ensure that the project will be adequately served by existing public services without requiring significant additional capacity.

Same.

16. Utilities

[Find help answering utilities questions¹⁸](#)

- **Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:**

Propane

Same.

¹⁸ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities>

- **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

The proposed project will utilize standard utilities typical of agricultural processing facilities:

Electricity

- Primary energy source for facility operations
- Provided by the local electrical utility
- New electrical service to support processing equipment

Water

- Used for domestic and limited operational purposes
- Provided via existing on-site well

Sanitary Waste

- Managed through:
- New On-site septic system
- Telephone and internet service provided by local providers

Refuse

- Standard solid waste collection service
- Same.

C.Signature

[Find help about who should sign](https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature)¹⁹

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X 

¹⁹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature>

Type name of signee: Brett Iverson

Position and agency/organization: PNW Growth Operations Leader, Corteva

Date submitted: 7/21/2026

Dryer Project 8/18/2026

D. Supplemental sheet for nonproject actions

[Find help for the nonproject actions worksheet²⁰](#)

Do not use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

- **Proposed measures to avoid or reduce such increases are:**

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

- **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

3. How would the proposal be likely to deplete energy or natural resources?

- **Proposed measures to protect or conserve energy and natural resources are:**

²⁰ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions>

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

- **Proposed measures to protect such resources or to avoid or reduce impacts are:**

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

- **Proposed measures to avoid or reduce shoreline and land use impacts are:**

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

- **Proposed measures to reduce or respond to such demand(s) are:**

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

APPENDIX B. EMISSION CALCULATIONS

Table 1a. Project Emissions Summary

Pollutant	Maximum Emission Rate		NOC	Above
	(lb/hr)	(tpy)	Exemption Levels tpy	Exemption Level?
TSP	1.80	7.88	1.25	Yes
PM ₁₀	0.79	3.48	0.75	Yes
PM _{2.5}	0.52	2.26	0.5	Yes
SO ₂	0.04	0.16	2	No
NO _x	7.29	31.94	2	Yes
VOC	0.66	2.87	2	Yes
CO	4.92	21.54	5	Yes
Total HAPs	4.82E-03	0.021	--	--

Table 1b. TAP Emissions Summary

Pollutant	Emission Rate (lb/period)	Averaging Period	Above TAP de minimis?			Above SQER?
			TAP de minimis lb/period		SQER lb/period	
SO ₂	0.035	1-hr	0.46	No	1.2	No
NO ₂ ^a	0.73	1-hr	0.46	Yes	0.87	No
CO	4.92	1-hr	1.1	Yes	43	No
Benzene	2.99	year	1	Yes	21	No
Formaldehyde	6.34	year	1.4	Yes	27	No
Naphthalene	0.15	year	0.24	No	4.8	No
Acetaldehyde	1.60	year	3.0	No	60	No
Acrolein	3.81E-03	24-hr	0.0013	Yes	0.026	No
Propylene	0.748	24-hr	11	No	220	No
Toluene	0.04	24-hr	19	No	370	No
Xylenes	0.03	24-hr	0.82	No	16	No
Ethyl Benzene	3.56	year	3.2	Yes	65	No
Hexane	6.49E-03	24-hr	2.6	No	52	No

^a The NO_x to NO₂ conversion has been calculated directly using an ISR of 0.1 multiplied by the NO_x emission rate.

Table 2a. Dryer Burner Criteria Pollutants Emissions

Maximum Operating Hours		8,760	hr/year	
Propane Usage ^a		5,744,262	gal/yr	
Estimated Heat Input ^b		60	MMBtu/hr	
Estimated Heat Input ^a		525,600	MMBtu/yr	
	Propane Emission Factor ^c	Propane Emission Factor	Emission Rate	
Pollutant	(lb/1000 gal)	(lb/MMBtu)	(lb/hr)	(tpy)
PM ₁₀	0.7	--	0.46	2.01
PM _{2.5}	0.7	--	0.46	2.01
SO ₂	0.054	--	0.04	0.16
NO _x ^d	--	0.122	7.29	31.94
VOC	1	--	0.66	2.87
CO	7.5	--	4.92	21.54

^a Propane heating value from AP-42 Chapter 1.5 is used to determine the propane usage.

Propane heating value 91.5 MMBtu/1000 gal

^b The dryer has 20 burners at 1 MMBtu/hr each and 20 burners at 2 MMBtu/hr each for a total capacity of 60 MMBtu/hr.

^c Emission factors for propane combustion are obtained from Table 1.5-1, AP-42 Chapter 1.5. According to an EPA study (<https://www3.epa.gov/ttnchie1/conference/ei12/area/haneke.pdf>), a national average sulfur content in LPG is 0.54 gr/1000 gal, which is used to determine the SO₂ emission factor.

^d Emission factor for NO_x is from the vendor emissions guarantee.

Table 2b. Dryer Burner HAP & TAP Emissions

Maximum Operating Hours		8760	hr/yr							
Estimated Heat Input		525,600	MMBtu/yr							
Pollutant	CAS	HAP?	TAP?	Emission Factor ^a		Total Emission Rate		Averaging Period	Emission Rate	
				(lb/MMscf)	(lb/MMBtu)	(lb/hr)	(tpy)		lb/period	
Benzene ^b	71-43-2	Yes	Yes	0.0058	5.69E-06	3.41E-04	1.49E-03	year	2.99E+00	
Formaldehyde ^b	50-00-0	Yes	Yes	0.0123	1.21E-05	7.24E-04	3.17E-03	year	6.34E+00	
Naphthalene ^b	91-20-3	Yes	Yes	0.0003	2.94E-07	1.76E-05	7.73E-05	year	1.55E-01	
Acetaldehyde ^b	75-07-0	Yes	Yes	0.0031	3.04E-06	1.82E-04	7.99E-04	year	1.60E+00	
Acrolein ^b	107-02-8	Yes	Yes	0.0027	2.65E-06	1.59E-04	6.96E-04	24-hr	3.81E-03	
Propylene ^b	115-07-1	No	Yes	0.5300	5.20E-04	0.03	0.14	24-hr	7.48E-01	
Toluene ^b	108-88-3	Yes	Yes	0.0265	2.60E-05	1.56E-03	6.83E-03	24-hr	3.74E-02	
Xylenes ^b	1330-20-7	Yes	Yes	0.0197	1.93E-05	1.16E-03	5.08E-03	24-hr	2.78E-02	
Ethyl Benzene ^b	100-41-4	Yes	Yes	0.0069	6.76E-06	4.06E-04	1.78E-03	year	3.56E+00	
Hexane ^b	110-54-3	Yes	Yes	0.0046	4.51E-06	2.71E-04	1.19E-03	24-hr	6.49E-03	
Total HAPs						4.82E-03	0.02			

^a Natural gas heating value from AP-42 Chapter 1.4 is used to convert emission factors from lb/MMscf to lb/MMBtu.

Natural Gas Heating Value 1020 Btu/scf

^b Emissions factors for HAPs are taken from the Ventura County Air Pollution Control District AB 2588 Combustion Emission Factors. <http://www.aqmd.gov/docs/default-source/permitting/toxics-emission-factors-from-combustion-process-.pdf>. The emission factors provided are in the unit of lb/MMscf for natural gas external combustion sources in the size of 10-100 MMBtu/hr. Natural gas emission factors are conservatively used as surrogate for LPG due to similar combustion characteristics.

Table 3. Potential Emissions from the Drying Process

Emission Unit (SCC code)	Maximum Throughput ^a (tons/hr)	Emission Factor ^b (lbs/ton)			Emission Rate (lb/hr)			Emission Rate ^c (tpy)		
		PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Dryer 4 (3-02-005-27)	6.09	0.22	0.055	0.0094	1.34	0.34	0.06	5.87	1.47	0.25

^a The dryer throughput was calculated using the numbers below.

moisture reduction	20	%, conservatively assuming that the corn dries from 32% to 12% moisture
drying rate	0.25	%/hr reduction in moisture
dryer capacity	12,000	bushels
dryer throughput	150	bushels/hr
conversion factor	81.25	lb/bu, green corn

^b Emission Factors obtained from AP-42 Chapter 9.9, Table 9.9.1-1, column grain dryer.

^c Dryer conservatively assumed to operate 8760 hours per year.

Point Sources Parameters

Emission Point	Point Source Type	Stack Height (m)	Stack Inside Diameter (m)	Stack Exit Temperature (K)	Flow Rate (ACFM)	Flow Velocity (m/s)
Dryer 4 East	Horizontal	9.65	8.06	305.37	356778	3.30
Dryer 4 West	Horizontal	9.65	8.06	305.37	356778	3.30
Urban/Rural:	Rural					

Building Input Parameters

Building	Building Tier (m)	Building Height (m)	Maximum Horizontal Dimension ¹ (m)	Minimum Horizontal Dimension ¹ (m)
Dryer 4	1	11.9	55.5	12.8
Dryer 4	2	5.5	55.5	25.1

¹ All distances and angles based on based on measurements taken from Facility Site Plan drawing.

² All other buildings have a lower GEP and so are not included in the model.

NO2 Conversion Inputs

Method	NO2/NOx In-Stack Conv. Ratio ¹	Ozone Background Conc. (ppm) ²
PVMRM	0.1	0.066

¹ In-Stack Ratios (ISRs) obtained from EPA Nitrogen Dioxide/Nitrogen Oxide ISR Database.

² Ozone background from WA Ecology's 2025 Ambient Air Monitoring Network Plan. Taken

Emission Rate for Each Side of the Dryer

Pollutant	Emission Rate per Side (lb/hr)	Emission Rate per Side (g/s)
PM ₁₀	0.40	0.05003
PM _{2.5}	0.26	0.03253
NO _x	3.65	0.45940
CO	2.46	0.30983

AERMOD SIL Modeling Results

Pollutant	Averaging Period	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	SIL ($\mu\text{g}/\text{m}^3$)	Exceeds SIL?
PM _{2.5}	24-hr	5.6	1.2	Yes
PM _{2.5}	Annual	0.32	0.13	Yes
PM ₁₀	24-hr	10.1	5	Yes
PM ₁₀	Annual	0.5	1	No
NO ₂	1-hr	43.0	7.5	Yes
NO ₂	Annual	0.5	1.0	No
CO	8-hr	119	500	No
CO	1-hr	612	2000	No

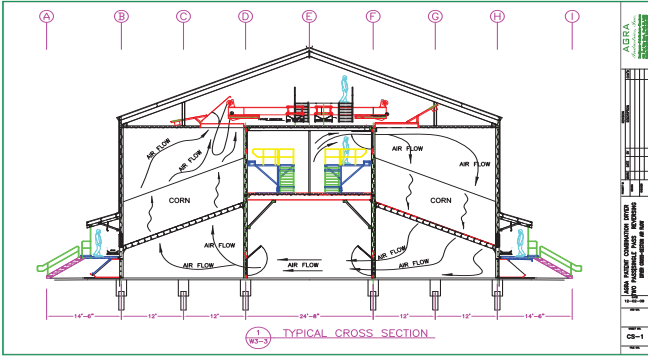
AERMOD NAAQS Modeling Results

Pollutant	Averaging Period	Background Concentration ^a ($\mu\text{g}/\text{m}^3$)	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Modeled Concentration with Background ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)	Exceeds NAAQS?
PM _{2.5}	24-hr	12.9	2.5	15.4	35	No
PM _{2.5}	Annual	4.3	0.3	4.6	9	No
PM ₁₀	24-hr	83.8	8.4	92.2	150	No
NO ₂	1-hr	25.8	21.3	47.0	188	No

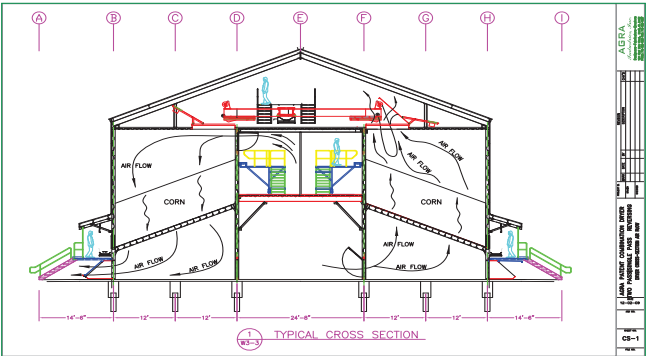
^a Background concentrations are from an average of four points in the facility from NWAirQuest data. Data from 2022-24 was used for PM_{2.5}, data from 2014-2017 was used for PM₁₀ and NO₂ as more recent data was not available.

APPENDIX C. SPECIFICATION SHEETS

COMBINATION TWO SINGLE PASS REVERSING DRYER



In two-pass reversing dryer air flow for even, complete drying.



In single-pass reversing dryer air flow for even, complete drying.



Two-pass | Single-pass reversing dryers are a patented AGRA innovation exclusive.

The AGRA patented combination dryer provides flexibility to allow the operator to run in either the single pass mode for more controlled drying or switch to the two pass mode which is typical in the industry.

When operated in the single pass mode, the combination dryer allows separate air temperature control for the up air plenum and the down air plenum. Air mixing chambers, with continuously adjusted profile plates in burner zones, control the air velocity across the burner to provide maximum burner efficiency and uniformly heated air before entering the fans in the upper and lower air plenums.



Ag Processing and Bio-Energy Systems

Ability. Reliability.™



EAR CORN

MONSANTO SEEDS - WATERMAN, IL

PRODUCTION DRYER SYSTEMS



UNRIVALED DRYING | EAR CORN PRODUCTION DRYERS

AGRA dryers are erected on your site by our expert construction crews. All dryer bin interiors are self cleaning and fully sealed to prevent kernel lodging. Bin floors feature perforated flashing to eliminate dead air pockets. All dryers are finish painted on the interior and can be finish painted on the exterior or clad and trimmed with building siding. These dryers come with full, partial, or no roof depending on your design. Doors are custom designed, steel fabrication for the high static pressure found in dryers. AGRA does not use off the shelf doors on our dryers. Automotive style door seals are crimped onto the doors for a tight seal.

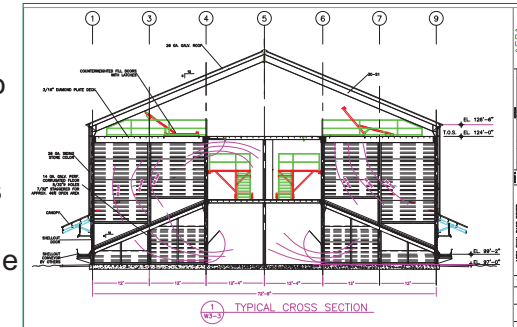
AGRA dryers are designed for minimum pressure drop through air plenums and doorways, with openings designed for 1500-1900 FPM velocities. Our dryers are custom designed to your airflow and temperature requirements. Dryers can be constructed with up to 75 CFM per bushel airflow. Dryer features can include monitoring packages, door automation packages, filling and unloading conveyors, ear corn let down devices and custom bin wall fill line painting.

We provide complete design, manufacturing and construction of drying systems designed to meet your specific needs. This includes all electrical plans.

DUAL PASS REVERSING DRYER

The AGRA dual pass reversing dryer provides high speed drying with an 8 fan/burner combination to offer excellent temperature control. A unique air-mixing chamber, with continuously adjusted profile plates in the burner zone, controls the air velocity across the burner to provide maximum burner efficiency and uniformly heated air.

This uniformly heated air allows the upper air plenum to maintain temperatures within approximately two (2) degrees Fahrenheit. This uniform plenum temperature provides more reliable and predictable drying. Dryer automation and monitoring packages are available to improve dryer efficiency.



Dual pass reversing dryer air flow for high speed burners units located in a common fan house with drying with excellent temperature control.



Dual pass reversing dryers are built with fans and a unique air-mixing chamber.



FROM THE HEARTLAND

Located in north-central Wisconsin, we take pride in our Midwestern work ethic which has made AGRA the top choice for all your seed processing system needs. Our company is committed to meeting each of our customer's needs with the ultimate goal of ensuring quality and efficiency. AGRA has been manufacturing seed corn dryers for more than 35 years. All of our dryer configurations feature heavy gauge wall panel construction and a unique angle iron corner design that reduces the number of fasteners by up to 50% over competitor designs, which saves time during field construction.

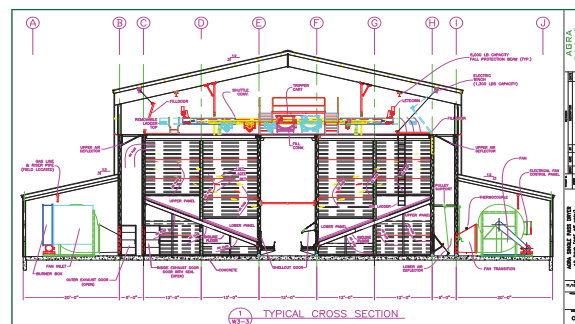
SINGLE PASS REVERSING DRYER

Single pass reversing dryers are built with individual fans, burners and doors for each bin, providing the ultimate in dryer control. No guessing on balancing or keeping bins in rotation or worrying about a temperature sensitive hybrid. With individual bin dryer controls, the operator can customize the drying criteria for each bin, minimizing temperature damage and maximizing the drying rate.

When incorporated with a dryer monitoring package, the dryer air temperature and CFM for a controlled drying rate can be continuously changed as the corn moisture decreases, thus maximizing the drying rate. Air delivery rates and seed depths are custom designed for the unique needs of each customer.



Single-pass reversing dryers are built with individual fans and burners for custom drying per bin.



Single-pass reversing dryer air flow for even, complete drying.

EXCELLENCE IN TURNKEY



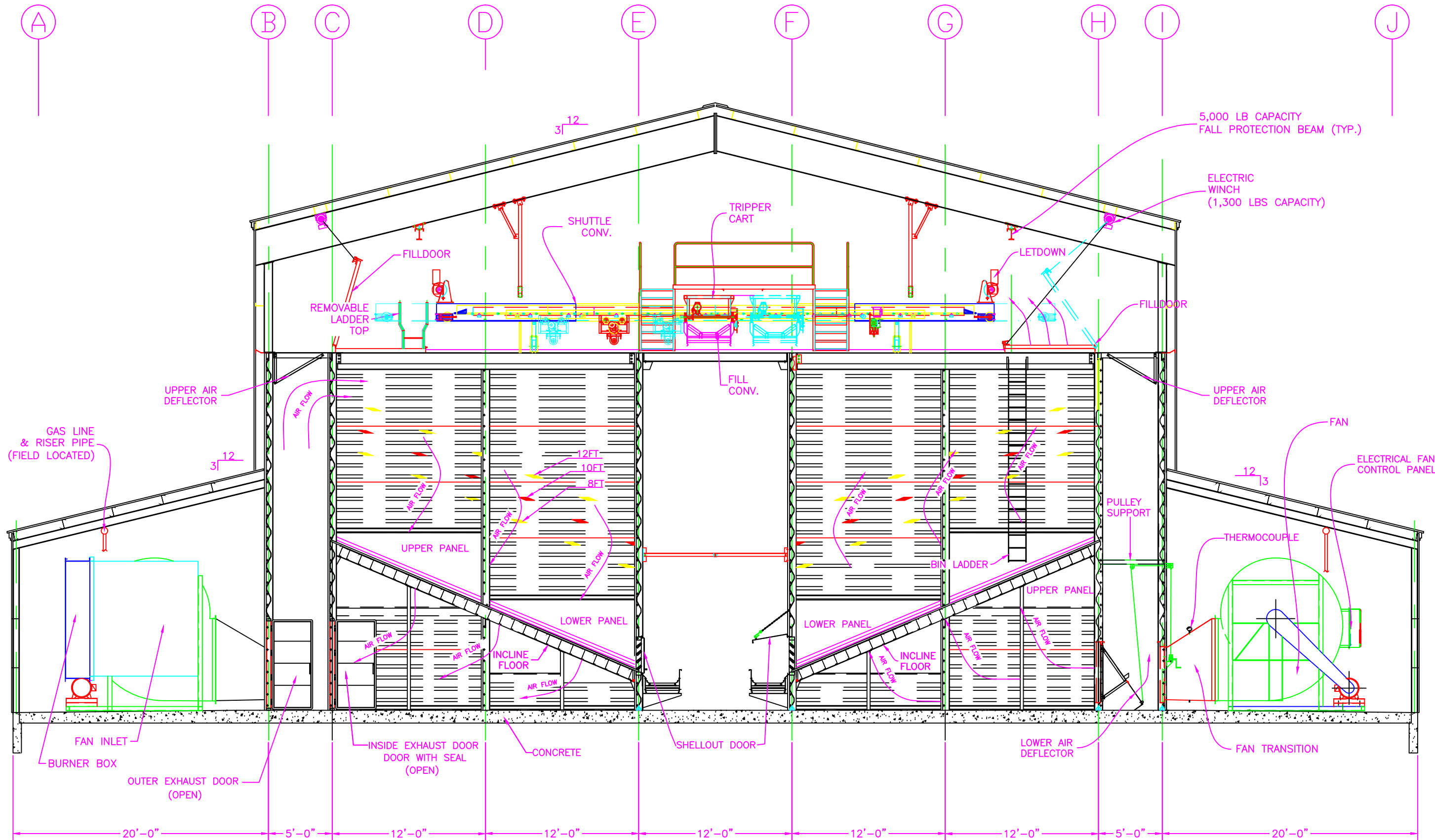
MONSANTO SEEDS - GRINNELL, IA

From greenfield to harvest, in one single phase or several construction phases, each project is managed by teams of project managers, engineers, and site supervisors designed to ensure unrivaled support during every phase of the construction process. Ability. Reliability.™ isn't just a slogan, it's our business.

We serve the seed industry in the following areas:

- Traffic Flow
- Receiving
- Husk / Sort
- Husk Chopping Systems
- Production Dryers
- Sheller / Bulk Storage
- Conveying
- Dust Collection
- Conditioning Towers
- Bagging & Warehousing
- Offices & Control Systems

Project Assurance Solutions



1
W3-3

TYPICAL CROSS SECTION

AGRA
Industries, Inc.
Designers-Fabricators-Erectors
1211 West Water Street, Merrill, WI. 54452
PHONE: 715-536-4584 FAX: 715-536-9587

REVISION	DESCRIPTION	CHK'D
1	11/19/2009 RED	

AGRA SINGLE PASS DRYER
18 BINS [28'-0" HIGH]
DRYER CROSS-SECTION AIR FLOW

DATE	11/19/2009
PROJECT NO.	
SHEET NO.	CS1
FILE NO.	CS1

Connected Combustion Solutions Technical Project Overview

Honeywell

ETO Assessment n°:

AS-34805

Customer reference:

Corteva Connell 1MM dryer

Date:

8/27/2026

Sales Engineer:

Matt Brady

CUSTOMER:

Technical Contact Name:

Merrill Fab

Phone:

Email:

END USER:

Region:

Country:

State (US only):

City:

AMERICAS

US - United States

Washington

Connell

HONEYWELL APPLICATION ENGINEERING ACCEPTANCE:

- ☐ Technical Risk Review Approved
☒ Emission Estimate Provided
☐ Emissions guaranteed

Approval provisions:

APX on grain dryer

Application Engineer

Date

Signature

Vernon Helverson

8/27/2026 18:03

Digitally signed

SCOPE OF SUPPLY

EQUIPMENT	DESCRIPTION	Qty	Mounted on
Burner	Maxon	1	supplied loose
Combustion air fan			
Air fuel ratio			
Fuel train			
Control panel			
Combustion chamber			
Heat Ex / Recuperator			
Process air fan			
Other items			
Set of Spare Parts			

SERVICES

- | | | |
|--|---|--|
| ☐ Commissioning | ☐ CFD | ☐ Documentation |
| ☐ Training | ☐ Performance Test | |
| ☐ Factory Acceptance Test | ☐ Installation | |

Specific detail on Scope of Supply:

Maxon APX burners in grain dryer application with minimal detail provided.

GENERAL PROCESS DATAHTS industry code
HTS application codeI03 - AGRICULTURE / AGRIBUSINESS
400 - DRYERS - DIRECT HEATED**GENERAL DESIGN DATA**Country of installation
Applicable directive
Main applicable standards
Customer requirements
Gas supplier requirements
Operating permits
Number of cycles
Max. continuous operating timeUS - United States
N/A
NFPA 86
No
No
No
< 10000/y
> 24h**CONDITIONS INSTALLATION SITE**Elevation
Climate conditions

850 feet

UTILITIESMain power
Control power
Comb air blower480V/3PH/60Hz
120V/1PH/60Hz
N/ABy: Customer
By: CustomerConnected to: Terminal Box
Connected to: Terminal Box

Comments

none

Instrument air
Purge air
Cooling air
Oxygen
NitrogenN/A
N/A
N/A
N/A
N/A

Comments

none

FUELFuel 1
Nominal inlet pressure
Design inlet pressure
Fuel temperature
Heating value☒ Single fuel ☐ Dual fuelLPG
10 psig
15 psig
°F
2500 Btu/scf HHV**COMBUSTION AIR REQUIREMENTS**

combustion air type

from process air

PROCESS CONDITIONS UPSTREAM THE BURNERFlow
Humidity
Oxygen level
Nom operating pressure
Design operating pressure
Upstream process temp10000 scfm
lb/lb air
Vol% O₂ wet
1 inchWC
inchWC
40 °F☐ FLUE GAS RECIRCULATION : NOT APPLICABLE**PROCESS CONDITIONS DOWNSTREAM THE BURNER**

Downstream process temp

105 °F

TECHNICAL DATAMax total thermal input
Total number of burners
Turndown
Capacity control
Burner excess air1,000,000 Btu/hr HHV
20
20:1
Modulating
N/A**SAFETY***Evacuation flue gasses by
Process flow protection by
Pre-purge time foreseen:
Overtemperature protection by
External process interlocks byCustomer
seconds**SPECIFIC DESIGN DATA ATTACHMENTS**☐ Other
☐ Oven layout**Special instructions**

Complete process review was not provided to the AE team. Estimates are based on the use of APX burner in ideal environmental conditions. Any updates in application information warrants a re-evaluation of emissions estimate.

***Notes on safety**

Total prepurge time and purge procedure and/or methodology shall be defined by the customer.
A differential pressure switch will only be effective as process flow protection when connected differentially across a fixed orifice.
Position of high temperature sensor shall be defined by customer, even when the sensor is supplied by Honeywell.

BURNER DESIGN DATA

Location	outdoor open air	
Area classification	Safe Area	
Requested protection	NEMA4X	
Ambient temperature	70	F
Burner type & size	Maxon - APX	1 ft
Piping between burner & pipe train	delivered by Honeywell, mounted by customer	
Pilot	Interrupted	
Flame supervision	Other - specify:	Unstated
Burner stop	At any firing rate	
Expected visual flame length		feet
Variation of process parameters and/or burner settings can dramatically influence flame length.		
Atomizing air flow-oil nozzle		scfm (max)
Cooling air flow-UV-scanner		scfm (max)
Paint procedure		
HTS Fabrication Site		

Special instructions

APX on Grain dryer

Comments



Process Stream Distribution:

For process air heating burners, the max. deviation of the velocity at the entrance of the combustion chamber or duct < +/-15% over 95% of the cross section.

The specified requested protection excludes spark ignitor, flame rod and ignition transformer.

Honeywell does not determine the stated area classification. This has been defined by the customer.

EER - ESTIMATED EMISSIONS REQUEST (data form)

Customer Merrill Fab
Site location US - United States
Application 400 - DRYERS - DIRECT HEATED
Burner model Maxon APX
Fuel LPG
Downstream process temperature 105 °F
Upstream process temperature 40 °F
Combustion air t° entering burner F
Burner firing arrangement describe here or refer to Scratch_Pad
Applicable firing rate 1000000 Btu/hr

Estimated emissions under limited condition information is 100 PPM NOX cor 3% O2 over a 2:1 emissions turndown range.

For what emissions do you need data?

- ☒ NOx
☐ CO
☐ Other - specify

Permit conditions (if any)

How should **estimated** emissions be stated?

- ☒ ppmvd (parts per million volume dry) corrected to 3% O2
☐ lb/million Btu
☐ lb/hour
☐ Other - specify

A formal guarantee would be issued through this TPO by Application Engineering only.

Do not use this estimation form for any guarantee related matters.

ESTIMATED EMISSIONS DATA (to be filled out by Application Engineering)

NOx: 100 PPM NOX cor 3% O2 over a 2:1 emissions turndown range

CO:

Other:

Emissions estimated from test results as adjusted for site conditions herein. This is not to be used or construed as an emissions guarantee.

Connected Combustion Solutions Technical Project Overview

Honeywell  

ETO Assessment n°:

AS-34806

Customer reference:

Corteva Connell 2MM dryer

Date:

8/27/2026

Sales Engineer:

Matt Brady

CUSTOMER:

Technical Contact Name:

Merrill Fab

Phone:

Email:

END USER:

Region:

Country:

State (US only):

City:

Corteva

AMERICAS

US - United States

Washington

Connell

HONEYWELL APPLICATION ENGINEERING ACCEPTANCE:

- ☐ Technical Risk Review Approved
☒ Emission Estimate Provided
☐ Emissions guaranteed

Approval provisions:

APX on grain dryer

Application Engineer

Date

Signature

Vernon Helverson

8/27/2026 18:42

Digitally signed

SCOPE OF SUPPLY

EQUIPMENT

	DESCRIPTION	Qty	Mounted on
Burner	Maxon	1	
Combustion air fan			
Air fuel ratio			
Fuel train			
Control panel			
Combustion chamber			
Heat Ex / Recuperator			
Process air fan			
Other items			
Set of Spare Parts			

SERVICES

- | | | |
|--|---|--|
| ☐ Commissioning | ☐ CFD | ☐ Documentation |
| ☐ Training | ☐ Performance Test | |
| ☐ Factory Acceptance Test | ☐ Installation | |

Specific detail on Scope of Supply:

Maxon APX burners in grain dryer application with minimal detail provided.

GENERAL PROCESS DATAHTS industry code
HTS application codeI03 - AGRICULTURE / AGRIBUSINESS
400 - DRYERS - DIRECT HEATED**GENERAL DESIGN DATA**Country of installation
Applicable directive
Main applicable standards
Customer requirements
Gas supplier requirements
Operating permits
Number of cycles
Max. continuous operating timeUS - United States
N/A
NFPA 86
No
No
No
< 10000/y
> 24h**CONDITIONS INSTALLATION SITE**Elevation
Climate conditions

850 feet

UTILITIESMain power
Control power
Comb air blower480V/3PH/60Hz
120V/1PH/60Hz
N/ABy: Customer
By: CustomerConnected to: Terminal Box
Connected to: Terminal Box

Comments

none

Instrument air
Purge air
Cooling air
Oxygen
NitrogenN/A
N/A
N/A
N/A
N/A

Comments

none

FUELFuel 1
Nominal inlet pressure
Design inlet pressure
Fuel temperature
Heating value☒ Single fuel ☐ Dual fuelLPG
10 psig
15 psig
°F
2500 Btu/scf HHV**COMBUSTION AIR REQUIREMENTS**

combustion air type

from process air

PROCESS CONDITIONS UPSTREAM THE BURNERFlow 21000 scfm
Humidity lb/lb air
Oxygen level Vol% O₂ wet
Nom operating pressure 1 inchWC
Design operating pressure 2 inchWC
Upstream process temp 40 °F☐ FLUE GAS RECIRCULATION : NOT APPLICABLE**PROCESS CONDITIONS DOWNSTREAM THE BURNER**

Downstream process temp 105 °F

TECHNICAL DATAMax total thermal input 2,000,000 Btu/hr HHV
Total number of burners 20
Turndown 1:1
Capacity control Modulating
Burner excess air N/A**SAFETY***Evacuation flue gasses by
Process flow protection by
Pre-purge time foreseen:
Overtemperature protection by
External process interlocks byCustomer
seconds**SPECIFIC DESIGN DATA ATTACHMENTS**☐ Other
☐ Oven layout**Special instructions**

Complete process review was not provided to the AE team. Estimates are based on the use of APX burner in ideal environmental conditions. Any updates in application information warrants a re-evaluation of emissions estimate.

***Notes on safety**

Total prepurge time and purge procedure and/or methodology shall be defined by the customer.
A differential pressure switch will only be effective as process flow protection when connected differentially across a fixed orifice.
Position of high temperature sensor shall be defined by customer, even when the sensor is supplied by Honeywell.

BURNER DESIGN DATA

Location	outdoor open air	
Area classification	Safe Area	
Requested protection	NEMA4X	
Ambient temperature	70	F
Burner type & size	Maxon - APX	2 ft
Piping between burner & pipe train		
delivered by Honeywell, mounted by customer		
Pilot	Interrupted	
Flame supervision	Other - specify:	Unstated
Burner stop	At any firing rate	
Expected visual flame length		feet
Variation of process parameters and/or burner settings can dramatically influence flame length.		
Atomizing air flow-oil nozzle		scfm (max)
Cooling air flow-UV-scanner		scfm (max)
Paint procedure		
HTS Fabrication Site		

Special instructions

APX on Grain dryer

Comments



Process Stream Distribution:

For process air heating burners, the max. deviation of the velocity at the entrance of the combustion chamber or duct < +/-15% over 95% of the cross section.

The specified requested protection excludes spark ignitor, flame rod and ignition transformer.

Honeywell does not determine the stated area classification. This has been defined by the customer.

EER - ESTIMATED EMISSIONS REQUEST (data form)

Customer Merrill Fab
Site location US - United States
Application 400 - DRYERS - DIRECT HEATED
Burner model Maxon APX
Fuel LPG
Downstream process temperature 105 °F
Upstream process temperature 40 °F
Combustion air t° entering burner F
Burner firing arrangement describe here or refer to Scratch_Pad
Applicable firing rate 2000000 Btu/hr

Estimated emissions under limited condition information is 100 PPM NOX cor 3% O2 over a 2:1 emissions turndown range.

For what emissions do you need data?

- ☒ NOx
☐ CO
☐ Other - specify

Permit conditions (if any)

How should **estimated** emissions be stated?

- ☒ ppmvd (parts per million volume dry) corrected to 3% O2
☐ lb/million Btu
☐ lb/hour
☐ Other - specify

A formal guarantee would be issued through this TPO by Application Engineering only.

Do not use this estimation form for any guarantee related matters.

ESTIMATED EMISSIONS DATA (to be filled out by Application Engineering)

NOx: 100 PPM NOX cor 3% O2 over a 2:1 emissions turndown range

CO:

Other:

Emissions estimated from test results as adjusted for site conditions herein. This is not to be used or construed as an emissions guarantee.

APPENDIX D. HONEYWELL BURNER LETTER



August 26, 2026

Re: Corteva Connell burners

To whom it may concern,

Honeywell Thermal Solutions recommends the Maxon APX burner for seed corn box dryer applications because it provides the proven performance, operating flexibility, and product-quality control required for this process. The APX burner has been widely used in seed corn box dryers for approximately 15 years and is installed in hundreds of systems nationwide.

A key advantage of the APX burner is its 40:1 turndown ratio, which allows the dryer to operate efficiently across a very wide range of ambient conditions. This flexibility is especially important on warmer days, when the burner must operate at very low firing rates to maintain the desired drying air temperature without exceeding product temperature limits. Comparable low-emissions burner options typically have minimum firing rates that are approximately 2.5 to 4 times higher than the APX minimum capacity, which limits their ability to control temperature as precisely in this application. Low-emissions burners have not yet been validated for this process.

Use of low-emissions burner designs could also change how the dryer would need to be operated. These Low NOx burners modulate both air and fuel, while the APX uses a fixed airflow through the burner. This difference could affect dryer control strategy, operating stability, and overall process performance.

The request to evaluate whether lower NOx emissions levels could be feasible evaluated at a level of 0.0145 lb/MMBtu, which is approximately equivalent to 12 ppm, corrected to 3% O₂. Of the low-emissions options reviewed, only the Eclipse Minnox can meet this NOx level; however, it would do so at a maximum burner turndown of only 10:1, which is four (4) times less than the APX turndown capability, along with the emissions that would be guaranteed down to only a 4:1 turndown. Since the necessary turndown cannot be achieved, this burner is not feasible.

The Maxon Crossfire option could provide a minimum NOx emissions level of approximately 30 ppm, corrected to 3% O₂, or 0.0362 lb/MMBtu, with a lower burner turndown capability of approximately 18:1, and an emissions turndown of 4:1. Based on the available information, this makes the Crossfire even less suitable for this application where both emissions performance and low-fire operating flexibility must be considered.

If emissions are permitted on a tons-per-year basis, any conversion to a volumetric ppm value should be calculated carefully. Burner firing rate, operating profile, and annual operating hours must all be considered to ensure an accurate comparison.

Why Turndown is Critical

The drying process typically starts with an air temperature of approximately 85°F and gradually increases to a maximum of approximately 105°F. Because the product temperature must be controlled carefully, the burner must be capable of stable operation at the lowest practical firing rate.

For example, at the Connell, Washington site, ambient temperatures can vary significantly during the drying season:

August: approximately 54°F low to 91°F high
September: approximately 46°F low to 80°F high
October: approximately 37°F low to 65°F high
Site elevation is approximately 846 feet.

Because the dryer is designed to ramp up gradually and avoid exceeding the maximum allowable temperature, the burner must operate reliably at very low input levels. The burner capacity is selected for worst-case conditions; therefore, during warmer ambient conditions, the burner may need to operate at an extremely low firing rate for extended periods. This is the primary reason APX turndown capability is critical to maintaining process control and product quality.

For these reasons, Honeywell Thermal Solutions determined the Maxon APX burner as the best fit and that burners with lower NOx capabilities are not technically suitable for this seed corn box dryer application. It offers the proven field history, high turndown capability, simpler control approach, and cost effectiveness needed to support reliable dryer operation and consistent product quality.

Thanks,

A handwritten signature in black ink, appearing to read 'M. Brady', followed by a long horizontal flourish line.

Matt Brady
Technical Sales Engineer
Honeywell Thermal Solutions

APPENDIX E. FACILITY DIAGRAMS

These records may be available upon request. To find out if there are more records for this project, contact Ecology's Public Records Office.

- Online: <https://ecology.wa.gov/footer-pages/public-records-requests>
- Public Records Officer email: PublicRecordsOfficer@ecy.wa.gov • Call: 360-407-6040

Para averiguar si existen más registros sobre ese proyecto, póngase en contacto con la oficina de archivos públicos del Departamento de Ecología, envíe un correo electrónico a publicrecordsofficer@ecy.wa.gov, o llame al 360-407-6040

ALTA/NSPS LAND
TITLE SURVEY

OF PARCEL NUMBER 109560152
LOCATED IN A PORTION OF THE NE
1/4 OF SECTION 20, T 14 N, R 31 E
WILLAMETTE MERIDIAN
FRANKLIN COUNTY, WASHINGTON

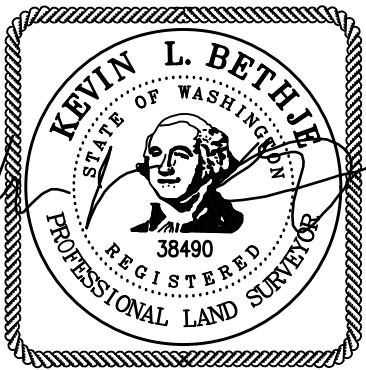
JOB NO.: 26-134
DATA COLLECT: 5-8-26
DRAWING DATE: 6-18-26

SHEET 3 OF 4

PARCEL 1
LOT 3
SHORT PLAT 91-15

SITE ADDRESS: 1040 SETTLER RD, CONNELL, WA 99326
PARCEL 109560152

MGS CONTROL
POINT #50
N: 497438.45
E: 2030565.68
EL: 1124.80



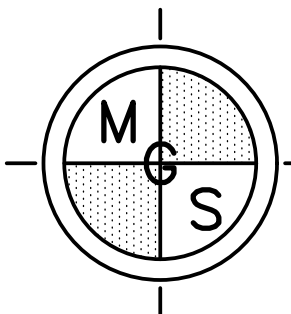
SURVEY REFERENCES:
1) WORLEY SURVEY, VOLUME 2 OF SURVEYS, PAGE 56
2) HACKWTH SHORT PLAT 91-45, BOOK 1, PAGE 288
3) COLUMBIA BASIN SOUTH IRRIGATION ZONE BLOCK 18, MAP NUMBER 14,
REVISION DATE 12-31-85. SERIAL NUMBER 222-116-32/61-14

80 40 0 80 120 160
SCALE 1 INCH = 80 FEET

HORIZONTAL AND VERTICAL DATUM:
WASHINGTON SOUTH, STATE PLANE COORDINATE SYSTEM, NAD83/2011 DATUM, US SURVEY FEET
PER OPUS SOLUTION ON CONTROL POINT 50 AS SHOWN HEREON, SCALE FACTOR 0.99986578 WAS
APPLIED AT POINT 50. SITE BENCHMARK IS MGS CONTROL POINT 50 ELEVATION 1124.80, NAVD88
VERTICAL DATUM. ALL DISTANCES SHOWN ARE GROUND DISTANCES.

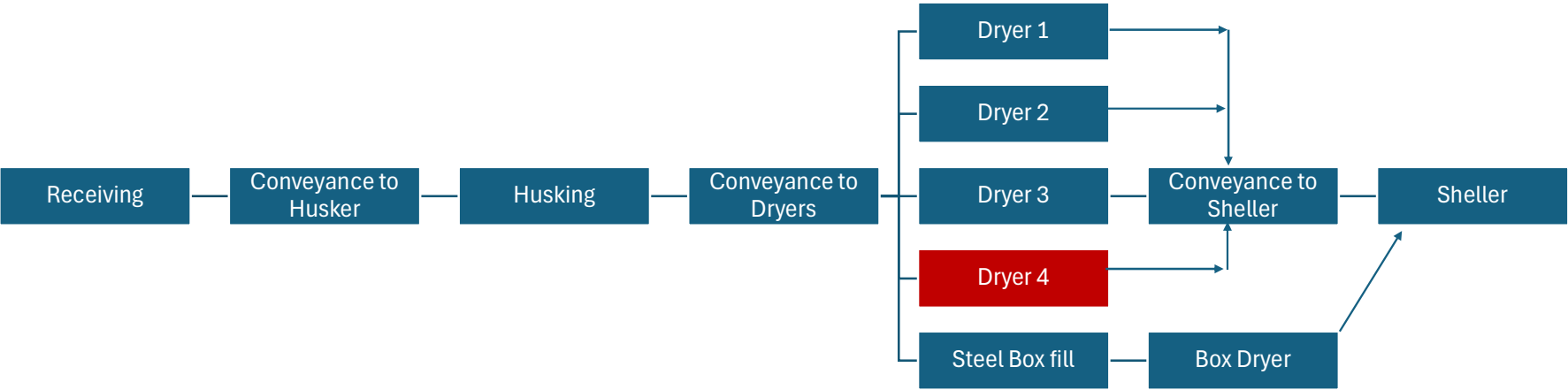
NOTE:
A PUBLIC UTILITY LOCATE WAS NOT CALLED FOR DURING THIS SURVEY, A PRIVATE
LOCATE REQUEST HAS BEEN GIVEN TO UTILITIES PLUS, THAT DATA WAS RECEIVED
ON 4-27-2026.

FLOOD ZONE:
THE SITE IS LOCATED IN FLOOD ZONE C
PER FIRM MAPS 5300440105B AND 530044011B.



MGS
PASCO, INC.
809 S AUBURN ST
KENNEWICK, WA 99336
509-491-1071

Pioneer - Connell Facility Corn Process Flow Diagram - Dryer 4 Replacement



Note: Equipment being replaced is indicated in red, existing equipment is indicated in blue.

APPENDIX F. AERMOD MODELING FILES

Provided electronically