July 18, 2018

Ms. Melanie Smith
State of Delaware – DNREC
Division of Air Quality
100 West Water Street, Suite 6A
Dover DE 19904

Re: Mountaire Farms of Delaware, Inc.
APC-2014/0090-OPERATION Amendment

Dear Ms. Smith:

Enclosed please find the application forms for a modification to the current construction permit for pellet cooler #1 (EU 54). The forms attached as requested are; AQM-1, AQM-2, AQM-3.13, and AQM-5, in addition with a calculation sheet for emission release of PM-10.

The forms attached are for a modification to our current permit where we are seeking to replace the current CP pellet cooler with a Hayes & Stolz pellet cooler. There will; however, be no change to emissions of PM-10 or the production of 50 tons per hour of said equipment.

Should you have any questions, please do not hesitate to call me at 302-934-3070.

Sincerely,

Austin Pajda
Environmental Manager

cc: Tanya Rogers-Vickers (Mountaire) TMRV
JR Lapearl (Mountaire)

DNREC – Division of Air Quality
Application to Construct, Operate, or Modify Stationary Sources

Administrative Information

One original and one copy of All Application Forms Should Be Mailed To:
Division of Air Quality
100 West Water Street, Suite 6A
Dover, DE 19904

All Checks Should Be Made Payable To:
State of Delaware

Company and Site Information

1.	Company Name: **Mountaire Farms of Delaware, Inc.**		
2.	Company Mailing Address: **PO Box 1320**		
	City: **Millsboro**	State: **Delaware**	Zip Code: **19966**
3.	Site Name: **Millsboro Complex**		
4.	Site Mailing Address: *(if different from above)*		
	City:	State:	Zip Code:
5.	Physical Location of Site: **29106 John J. Williams Hwy** *(if different from above)*		
	City: **Millsboro**	State: **Delaware**	Zip Code: **19966**
6.	Site Billing Address: *(if different from above)*		
	City:	State:	Zip Code:
7.	Air Quality Management Facility ID Number: **1000500004**		
8.	Site NAICS Code): **31165, 311119, 11234** *(list all that apply*		
9.	Site SIC Code: **2015, 2048, 0254** *(list all that apply)*		
10.	Site Location Coordinates:	Latitude: 38 ° 36' 2.3508" Longitude: 75 ° 15' 24.2288"	
11.	Is the Facility New or Existing?	☐ NEW ☒ EXISTING	
If the Facility is an Existing Facility, Complete the Rest of Question 11. If Not, Proceed to Question 12.			
11.1.	Does the Facility Have Active Air Permits?	☒ YES ☐ NO	
12.	Is this Application For New Equipment or a Modification to Existing Equipment? ☐ New Equipment ☒ Modification of Existing Equipment ☐ Other (Specify):		
If the application is for the modification of existing equipment, complete the rest of Question 12. If not, proceed to Question 13.			

Company and Site Information

12.1. Does the Equipment Have an Active Air Permit? ☒ YES ☐ NO

If the equipment has an active air permit, complete the rest of Question 12. If not, proceed to Question 13.

12.2. Permit Number of Existing Equipment: **APC-2014/0090-OPERATION (Amendment 1)**

13. Status of Equipment Being Applied For:
☒ Natural Minor Source
☐ Synthetic Minor Source
☐ Major Source
☐ Federally Enforceable Restrictions

14. Facility Status: ☒ Natural Minor Facility ☐ Synthetic Minor Facility ☐ Major Facility

If the facility is a Major Source, complete the rest of Question 14. If not, proceed to Question 15.

14.1. Responsible Official Name: **Jimmy Paulakuhn**

14.2. Responsible Official Title: **VP of Live Operations**

Contact Information

15. Name of Owner or Facility Manager: **Jimmy Paulakuhn**

16. Title of Owner or Facility Manager: **VP of Live Operations**

17. Permit Contact Name: **Austin Pajda**

18. Permit Contact Title: **Environmental Manager**

19. Permit Contact Telephone Number: **302-934-3070**

20. Permit Contact Fax Number:

21. Permit Contact E-Mail Address: **apajda@mountaire.com**

22. Billing Contact Name:

23. Billing Contact Title:

24. Billing Contact Telephone Number:

25. Billing Contact Fax Number:

26. Billing Contact E-Mail Address:

Proposed Construction and Operating Schedule

27. When Will the Proposed Construction/Installation/Modification Occur: upon amendment approval

28. Proposed Operating Schedule: **24** hours/day **7** days/week **52** weeks/year

28.1. Is There Any Additional Information Regarding the Operating Schedule? ☐ YES ☒ NO

If YES, complete the rest of Question 28. If NO, proceed to Question 29.

Proposed Construction and Operating Schedule

28.2. Describe the Additional Information: **The pellet cooler is being replaced. All associated air equipment is remaining.**

Coastal Zone Information

29. Is the Facility Located in the Coastal Zone? ☒ YES ☐ NO

If the facility is located in the Coastal Zone complete the rest of Question 29. If not, proceed to Question 30.

29.1. Is a Coastal Zone Permit Required for Construction or Operation of the Source Being Applied for? ☐ YES ☒ NO

Attach a copy of the Coastal Zone Determination if it has not been previously submitted

If a Coastal Zone Permit is required complete the rest of Question 29. If not, proceed to Question 30.

29.2. Has a Coastal Zone Permit Been Issued? ☐ YES ☐ NO

Attach a copy of the Coastal Zone Permit if it has not been previously submitted

Local Zoning Information

30. Parcel Zoning: **H-1; Heavy Industrial**

Attach Proof of Local Zoning if it has not been previously submitted

Application Information

31. Is the Appropriate Application Fee Attached? ☒ YES ☐ NO

32. Is the Advertising Fee Attached? ☒ YES ☐ NO

For help determining your application and advertising fees see:
http://www.dnrec.state.de.us/DNREC2000/Library/Fees/DE%20Permit%20Fees.htm

Attach the appropriate fees. Note that your Application will not be considered complete if the appropriate fees are not included.

33. Is a Cover Letter Describing the Process Attached? ☒ YES ☐ NO

Attach a brief cover letter describing your Application.

If the Facility is a New Facility complete Question 34. If not, proceed to Question35.

34. Is a Copy of the Applicant Background Information Questionnaire on Record at the Department? ☐ YES ☐ NO

If NO, complete the rest of Question 34. If YES, process to Question 35.

34.1 Is a Copy of the Applicant Background Information Questionnaire Attached? ☐ YES ☐ NO

For a copy of the Applicant Background Information Questionnaire see
http://www.dnrec.delaware.gov/services/Documents/Chapter79Form.pdf

Attach a copy of the Applicant Background Information Questionnaire if applicable.

35. Check Which Application Forms are Attached:

Application Information

☒ AQM-1	☐ AQM-3.4	☐ AQM-3.9	☐ AQM-3.14	☐ AQM-4.4	☐ AQM-4.9	☐ AQM-6
☒ AQM-2	☐ AQM-3.5	☐ AQM-3.10	☐ AQM-3.15	☐ AQM-4.5	☐ AQM-4.10	
☐ AQM-3.1	☐ AQM-3.6	☐ AQM-3.11	☐ AQM-4.1	☐ AQM-4.6	☐ AQM-4.11	
☐ AQM-3.2	☐ AQM-3.7	☐ AQM-3.12	☐ AQM-4.2	☐ AQM-4.7	☐ AQM-4.12	
☐ AQM-3.3	☐ AQM-3.8	☒ AQM-3.13	☐ AQM-4.3	☐ AQM-4.8	☒ AQM-5	

36. Check Which Documents are Attached:

☐ Coastal Zone Determination
☐ Coastal Zone Permit
☐ Proof of Local Zoning
☒ Application Fee
☒ Advertising Fee
☐ Applicant Background Information Questionnaire
☐ Claim of Confidentiality
☐ Manufacturer Specification(s)
☐ Material Safety Data Sheets (MSDSs)
☒ Supporting Calculations
☒ Descriptive Cover Letter
☐ Other (Specify):

Confidentiality Information

37. Do You Consider Any of the Information Submitted With this Application Confidential? ☐ YES ☒ NO

For help on how to submit a confidentiality claim see
http://regulations.delaware.gov/register/december2011/final/15%20DE%20Reg%20864%2012-01-11.htm

If a Claim of Confidentiality is made it MUST meet the requirements of Section 6 of DNREC's Freedom of Information ("FOIA") Regulation at the time the Application is submitted.

Signature Block

I, the undersigned, hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all of its attachments as to the truth, accuracy, and completeness of this information. I certify based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete. By signing this form, I certify that I have not changed, altered, or deleted any portions of this application. I acknowledge that I cannot commence construction, alteration, modification or initiate operation until I receive written approval (i.e. permit, registration, or exemption letter) from the Department. I acknowledge that I may be required to perform testing of the equipment to receive construction or operation approval, and that if I do not receive approval to construct or operate that I may appeal the decision.

Jimmy Paulakuhn
Owner or Operator

7/18/18
Date

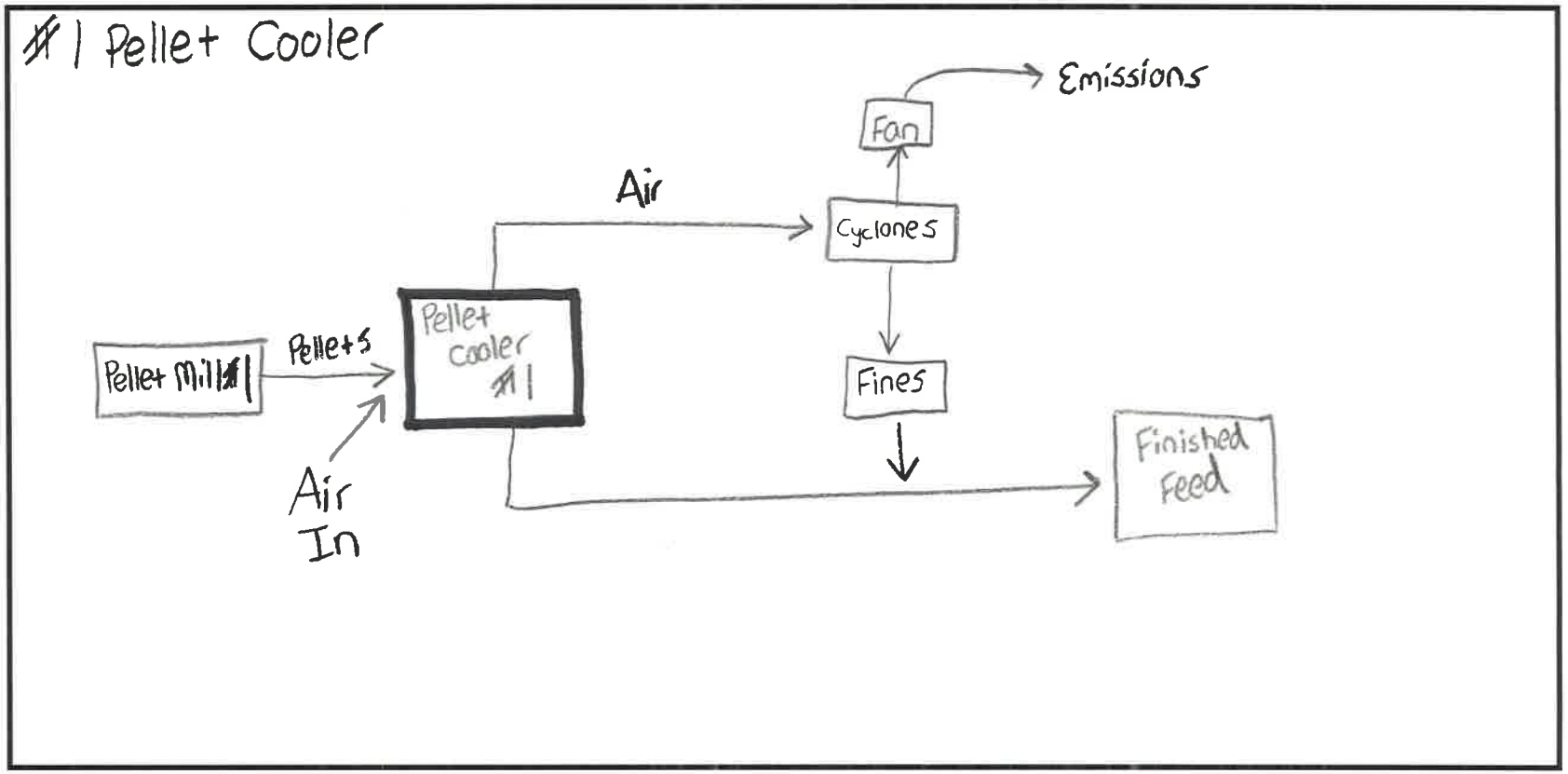
Jimmy Paulakuhn
Signature of Owner or Operator

One Original and One Copy of All Application Forms Should Be Mailed To:
Division of Air Quality
100 W. Water Street, Suite 6A
Dover, Delaware 19904

All Checks Should Be Made Payable To:
State of Delaware

Process Flow Diagram

Sketch the Process Flow Diagram for the equipment or process being applied for. Include each emission unit and control device (even existing emission units that will not be modified by this application). You may identify each emission unit with a simple shape. Label each emission unit and control device with a unique identifier. Show the relationship between each emission unit and/or control device by drawing arrows between them to indicate the flow of air pollutants. List which application forms are included for each emission unit or control device below the shape representing each emission unit or control device . See http://www.delaware.gov/reg2/default.htm for example Process Flow Diagrams for common processes. If you already have a Process Flow Diagram for the equipment or process being applied for, you may attach it to the application instead of using this form.



Grain Terminal, Elevator, and Drying Application

If you are using this form electronically, press F1 at any time for help

General Information

1. Facility Name: **Millsboro Feed Mill**

2. Types of Grain Handling Activities: *(check all that apply)*

- ☐ Receiving: Truck Unloading
- ☐ Receiving: Railcar Unloading
- ☐ Receiving: Barge Unloading
- ☐ Transferring and Conveying: Receiving Elevator Leg
- ☐ Transferring and Conveying: Elevator Head (Headhouse)
- ☐ Transferring and Conveying: Storage Bin Vents
- ☐ Transferring and Conveying: Turning
- ☐ Grain Processing: Scales (Microunits)
- ☐ Grain Processing: Hammermills
- ☐ Grain Processing: Mixers
- ☒ Grain Processing: Pellet Coolers
- ☐ Screening and Cleaning
- ☐ Grain Drying
- ☐ Shipping (Load Out): Truck Loading
- ☐ Shipping (Load Out): Railcar Loading
- ☐ Shipping (Load Out): Barge Loading
- ☐ Other (Specify):

3. Year Facility Installed: **1983**

4. Permanent Grain Storage Capacity: **6.2 million** bushels

Grain Receiving Information

If Grain Receiving activities do not occur, proceed to Question 9.

5. Types of Vehicles Unloaded and Grain Received *(check all that apply)*

If there are more than five combinations of Vehicles Unloaded and Grain Received, attach additional copies of this page as needed.

	Type of Vehicle Unloaded	Type of Grain Unloaded	Method of Unloading	Grain Density (lb/bushel)	Maximum Quantity Unloaded (tons/hour)	Maximum Quantity Unloaded (tons/year)
5.1.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			
5.2.	☐ Straight Truck ☐ Hopper Truck	☐ Corn ☐ Wheat	☐ Conveyor ☐ Pneumatic			

Grain Receiving Information

	☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Gravity Dump ☐ Other (Specify):			
5.3.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			
5.4.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			
5.5.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			

6. Number of Receiving Areas at this Facility:

7. Maximum Hourly Grain Throughput of All Receiving Areas: bushels

8. Describe Grain Receiving Equipment:

Grain Transferring and Conveying Information

If Grain Transferring and Conveying activities do not occur, proceed to Question 11.

Grain Transferring and Conveying Information

9. Grain Transferring and Conveying Information

If there are more than five types of grain transferred or conveyed, attach additional copies of this page as needed.

	Type of Grain	Maximum Quantity Transferred or Conveyed (tons/hour)	Maximum Quantity Transferred or Conveyed (tons/year)
9.1.	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		
9.2.	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		
9.3.	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		
9.4.	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		
9.5	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		

10. Describe Grain Transferring and Conveying Equipment:

Grain Processing Information

If Grain Processing activities do not occur, proceed to Question 13.

11. Grain Processing Information

If there are more than five combinations of grain processed, attach additional copies of this page as needed.

	Type of Grain	Processing Operation	Maximum Quantity Processed (tons/hour)	Maximum Quantity Processed (tons/year)
11.1.	☒ Corn ☐ Flax Seed ☒ Wheat ☐ Sorghum ☐ Rye ☒ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):	☐ Scales ☐ Hammermills ☐ Mixers ☒ Pellet Coolers ☐ Other (Specify):	**50**	**438000**

Grain Processing Information

11.2.	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Other (Specify): ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Barley	☐ Scales ☐ Hammermills ☐ Mixers ☐ Pellet Coolers ☐ Other (Specify):		
11.3.	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Other (Specify): ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Barley	☐ Scales ☐ Hammermills ☐ Mixers ☐ Pellet Coolers ☐ Other (Specify):		
11.4.	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Other (Specify): ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Barley	☐ Scales ☐ Hammermills ☐ Mixers ☐ Pellet Coolers ☐ Other (Specify):		
11.5	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Other (Specify): ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Barley	☐ Scales ☐ Hammermills ☐ Mixers ☐ Pellet Coolers ☐ Other (Specify):		

12. Is Any Other Material Added to the Grain During Processing? ☐ YES ☒ NO

If YES, complete the rest of Question 12. If NO, proceed to Question 13.

12.1. Describe the Material(s) Added and the Mixing Ratio:

Grain Cleaning and Screening Information

If Grain Cleaning and Screening activities do not occur, proceed to Question 15.

13. Grain Cleaning and Screening Information

If there are more than five types of grain cleaned and/or screened, attach additional copies of this page as needed.

	Type of Grain	Maximum Quantity Cleaned or Screened (tons/hour)	Maximum Quantity Cleaned or Screened (tons/year)
13.1.	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Other (Specify): ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Barley		
13.2.	☐ Corn ☐ Wheat ☐ Rye ☐ Flax Seed ☐ Sorghum ☐ Soybeans		

Grain Cleaning and Screening Information

	☐ Oats ☐ Barley ☐ Other (Specify):		
13.3.	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		
13.4.	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		
13.5	☐ Corn ☐ Flax Seed ☐ Wheat ☐ Sorghum ☐ Rye ☐ Soybeans ☐ Oats ☐ Barley ☐ Other (Specify):		

14. Describe Grain Cleaning and Screening Equipment:

Grain Drying Information

If Grain Drying activities do not occur, proceed to Question 33.

15. Grain Dryer Equipment ID Number:

16. Grain Dryer Type: ☐ Column Dryer ☐ Rack Dryer ☐ Other (Specify):

17. Manufacturer:

18. Model:

19. Serial Number:

20. Maximum Design Grain Input Capacity at 5 Points Moisture Removal: bushels/hour

21. Design Operating Temperature: **°F**

22. Number of Burners in Dryer:

23. Rated Heat Input of Burners: MMBTU/hr

24. Total Rated Heat Input of Dryer: MMBTU/hr

25. Fuel Used:

☐ Natural Gas	☐ Propane
☐ Diesel	☐ Biodiesel
☐ No. 2 Fuel Oil	☐ Refinery Fuel Gas
☐ No. 4 Fuel Oil	☐ Waste Oil
☐ No. 6 Fuel Oil	☐ Other (specify):

25.1. Maximum Annual Fuel Consumption: **MMCF**

25.2. Heat Content of Fuel: **BTU/MMCF**

Grain Drying Information

25.3. Maximum Firing Rate: **MMCF/hr**

25.4. Percent Sulfur of Fuel: %

26. Airflow Through Dryer: cubic feet/minute

27. Grain Dried

	Grain	Grain Density (lb/bushel)	Maximum Hourly Input (tons/hour)	Maximum Annual Throughput (tons/year)
27.1.	Corn			
27.2.	Wheat			
27.3.	Rye			
27.4.	Oats			
27.5	Barley			
27.6.	Flax Seed			
27.7.	Sorghum			
27.8.	Soybeans			
27.9.				

28. Average Design Percent Moisture In Grain After Drying: %

29. Grain Dryer Diameter: **feet**

30. Grain Dryer Height: **feet**

31. Height of Grain Dryer Exhaust Section: **feet**

32. U.S. Sieve or Tyler Scale Mesh Screen Size: **Tyler Scale Mesh Size**

Grain Shipping (Load Out) Information

If Grain Shipping activities do not occur, proceed to Question 37.

33. Types of Vehicles Loaded and Grain Shipped *(check all that apply)*

If there are more than five combinations of Vehicles Loaded and Grain Shipped, attach additional copies of this page as needed.

	Type of Vehicle Loaded	Type of Grain Shipped	Method of Loading	Grain Density (lb/bushel)	Maximum Quantity Loaded (tons/hour)	Maximum Quantity Loaded (tons/year)
33.1.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			

Grain Shipping (Load Out) Information

		☐ Other (Specify):				
33.2.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			
33.3.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			
33.4.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			
33.5.	☐ Straight Truck ☐ Hopper Truck ☐ Rail: Boxcar ☐ Rail: Hopper Car ☐ Continuous Barge ☐ Marine Leg ☐ Ship ☐ Other (Specify):	☐ Corn ☐ Wheat ☐ Rye ☐ Oats ☐ Barley ☐ Flax Seed ☐ Sorghum ☐ Soybeans ☐ Other (Specify):	☐ Conveyor ☐ Pneumatic ☐ Gravity Dump ☐ Other (Specify):			

34. Number of Loading Areas at this Facility:

35. Maximum Hourly Grain Throughput of All Loading Areas: bushels

36. Describe Grain Loading Equipment:

Control Device Information

37. Is an Air Pollution Control Device Used?	☒ YES ☐ NO
If an Air Pollution Control Device is used, complete the rest of Question 37. If not, proceed to Question 38.	
37.1. Is Knockout Used?	☐ YES ☒ NO
If YES, complete Form AQM-4.11 and attach it to this application.	
37.2. Is a Settling Chamber Used?	☐ YES ☒ NO
If YES, complete Form AQM-4.10 and attach it to this application.	
37.3. Is an Inertial or Cyclone Collector Used?	☒ YES ☐ NO
If YES, complete Form AQM-4.5 and attach it to this application.	
37.4. Is a Fabric Collector or Baghouse Used?	☐ YES ☒ NO
If YES, complete Form AQM-4.6 and attach it to this application.	
37.5. Is a Venturi Scrubber Used?	☐ YES ☒ NO
If YES, complete Form AQM-4.8 and attach it to this application.	
37.6. Is an Electrostatic Precipitator Used?	☐ YES ☒ NO
If YES, complete Form AQM-4.7 and attach it to this application.	
37.7. Is Any Other Control Device Used?	☐ YES ☒ NO
If YES, attach a copy of the control device Manufacturer's Specification Sheet(s).	
If any other control device is used, complete the rest of Question 37. If not, proceed to Question 38.	
37.8. Describe Control Device:	
37.9. Pollutants Controlled:	☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☐ Other (Specify):
37.10. Control Device Manufacturer:	
37.11. Control Device Model:	
37.12. Control Device Serial Number:	
37.13. Control Device Design Capacity:	
37.14. Control Device Removal or Destruction Efficiency:	

Stack Information

38. How Does the Process Equipment Vent:
(check all that apply)
- ☐ Directly to the Atmosphere
- ☒ Through a Control Device Covered by Forms AQM-4.1 through 4.12
- ☐ Through Another Control Device Described on This Form

If any of the process equipment vents directly to the atmosphere or through another control device described on this form, proceed to Question 39. If the process equipment vents through a control device, provide the stack parameters on the control device form and proceed to Question 43.

39. Number of Air Contaminant Emission Points:

If there are more than three Emission Points, attach additional copies of this page as needed.

For the first Emission Point

Stack Information

40.	Emission Point Name:
40.1.	Stack Height Above Grade: **feet**
40.2.	Stack Exit Diameter: **feet** *(Provide Stack Dimensions If Rectangular Stack)*
40.3.	Is a Stack Cap Present? ☐ YES ☐ NO
40.4.	Stack Configuration: ☐ Vertical ☐ Horizontal ☐ Downward-Venting *(check all that apply)* ☐ Other (Specify):
40.5.	Stack Exit Gas Temperature: **°F**
40.6.	Stack Exit Gas Flow Rate: **ACFM**
40.7.	Distance to Nearest Property Line: **feet**
40.8.	Describe Nearest Obstruction:
40.9.	Height of Nearest Obstruction: **feet**
40.10.	Distance to Nearest Obstruction: **feet**
40.11.	Are Stack Sampling Ports Provided? ☐ YES ☐ NO
For the second Emission Point. If there is no second Emission Point, proceed to Question 43.	
41.	Emission Point Name:
41.1.	Stack Height Above Grade: **feet**
41.2.	Stack Exit Diameter: **feet** *(Provide Stack Dimensions If Rectangular Stack)*
41.3.	Is a Stack Cap Present? ☐ YES ☐ NO
41.4.	Stack Configuration: ☐ Vertical ☐ Horizontal ☐ Downward-Venting *(check all that apply)* ☐ Other (Specify):
41.5.	Stack Exit Gas Temperature: **°F**
41.6.	Stack Exit Gas Flow Rate: **ACFM**
41.7.	Distance to Nearest Property Line: **feet**
41.8.	Describe Nearest Obstruction:
41.9.	Height of Nearest Obstruction: **feet**
41.10.	Distance to Nearest Obstruction: **feet**
41.11.	Are Stack Sampling Ports Provided? ☐ YES ☐ NO
For the third Emission Point. If there is no third Emission Point, proceed to Question 43.	
42.	Emission Point Name:
42.1.	Stack Height Above Grade: **feet**
42.2.	Stack Exit Diameter: **feet** *(Provide Stack Dimensions If Rectangular Stack)*
42.3.	Is a Stack Cap Present? ☐ YES ☐ NO
42.4.	Stack Configuration: ☐ Vertical ☐ Horizontal ☐ Downward-Venting *(check all that apply)* ☐ Other (Specify):
42.5.	Stack Exit Gas Temperature: **°F**

Stack Information

42.6. Stack Exit Gas Flow Rate:	**ACFM**
42.7. Distance to Nearest Property Line:	**feet**
42.8. Describe Nearest Obstruction:	
42.9. Height of Nearest Obstruction:	**feet**
42.10. Distance to Nearest Obstruction:	**feet**
42.11. Are Stack Sampling Ports Provided?	☐ YES ☐ NO

Visible Emissions Monitoring Information

43. Proposed Technique Used to Monitor Visible Emissions:
- ☐ Opacity Monitor (COM)
- ☐ Manual (Method 9)
- ☐ Manual (Method 22)
- ☒ Other (Describe):

If an Opacity Monitor (COM) is used, complete the rest of Question 43. If not, proceed to Question 44.

43.1. Describe the Continuous Opacity Monitoring System:

43.2. Manufacturer:

43.3. Model:

43.4. Serial Number:

44. Proposed Frequency of Opacity Monitoring:

Monitoring and Alarm Information

45. Are There Any Alarms You Would Like the Department to Consider When Drafting the Permit? ☐ YES ☒ NO

If YES, complete the rest of Question 45. If NO, proceed to Question 46.

45.1. Describe the System Alarm(s):

If there are more than five alarms, attach additional copies of this page as needed.

	Operating Parameter Monitored	Describe Alarm Trigger	Monitoring Device or Alarm Type	Does the Alarm Initiate an Automated Response?
45.1.1.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
45.1.2.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
45.1.3.			☐ Visual	☐ NO ☐ YES

Monitoring and Alarm Information

			☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	Describe:
45.1.4.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
45.1.5.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:

Voluntary Emission Limitation Request Information

46. Are You Requesting Any Voluntary Emission Limitations to Avoid Major Source Status, Minor New Source Review, MACT, NSPS, etc.? ☐ YES ☒ NO

If YES, complete the rest of Question 46. If NO, proceed to Question 47.

46.1. Describe Any Proposed Emission Limitations:

Voluntary Operating Limitation Request Information

47. Are You Requesting Any Voluntary Operating Limitations to Avoid Major Source Status, Minor New Source Review, MACT, NSPS, etc.? ☐ YES ☒ NO

If YES, complete the rest of Question 47. If NO, proceed to Question 48.

47.1. Describe Any Proposed Operating Limitations:

Additional Information

48. Is There Any Additional Information Pertinent to this Application? ☒ YES ☐ NO

If YES, complete the rest of Question 48.

48.1. Describe: **Control device information per AQM 4.1 is not changing and should be referenced from the previous pellet cooler #1 permit application (Koger-Air model 2H54 high efficiency cyclones). The only modification is the replacement of the pellet cooler itself.**

Emissions Information Application

If you are using this form electronically, press F1 at any time for help

Process Information

1.	Number of Individual Pieces of Process Equipment in Process: **1**
2.	Number of Individual Control Devices in Process: **1**

Emissions Information for First Emission Point/Stack

3.	Emission Point Name: **#1 Pellet Cooler**
4.	Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack: **#1 Pellet Cooler**
5.	Pollutant Emissions

If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 5.10 through 5.18)	CAS Number (Not required for 5.1 through 5.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
5.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.2.	PM_{10}	**N/A**	**3.75 lbs/hour**	**3.75 lbs/hour**	**16.425** tons/year	**16.425** tons/year
5.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.8.	Total Hazardous Air		**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for First Emission Point/Stack						
	Pollutants (HAPs)					
5.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
6.	Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:					
Attach the Basis of Determination or Calculations for each Emission Rate provided above.						

Emissions Information for Second Emission Point/Stack						
7.	Emission Point Name:					
8.	Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:					
9.	Pollutant Emissions					
If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.						
	Pollutant Name (Specify VOCs and HAPs Individually in 9.10 through 9.18)	CAS Number (Not required for 9.1 through 9.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
9.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for Second Emission Point/Stack

9.3.	$PM_{2.5}$		lbs/hour	lbs/hour	tons/year	tons/year
9.4.	Sulfur Oxides (SO_X)		lbs/hour	lbs/hour	tons/year	tons/year
9.5.	Nitrogen Oxides (NO_X)		lbs/hour	lbs/hour	tons/year	tons/year
9.6.	Carbon Monoxide (CO)		lbs/hour	lbs/hour	tons/year	tons/year
9.7.	Total Volatile Organic Compounds (VOCs)		lbs/hour	lbs/hour	tons/year	tons/year
9.8.	Total Hazardous Air Pollutants (HAPs)		lbs/hour	lbs/hour	tons/year	tons/year
9.9.	CO_2		lbs/hour	lbs/hour	tons/year	tons/year
9.10.	CO_{2e}		lbs/hour	lbs/hour	tons/year	tons/year
9.11.			lbs/hour	lbs/hour	tons/year	tons/year
9.12.			lbs/hour	lbs/hour	tons/year	tons/year
9.13.			lbs/hour	lbs/hour	tons/year	tons/year
9.14.			lbs/hour	lbs/hour	tons/year	tons/year
9.15.			lbs/hour	lbs/hour	tons/year	tons/year

10. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Emissions Information for Third Emission Point/Stack

11.	Emission Point Name:
12.	Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:
13.	Pollutant Emissions

Emissions Information for Third Emission Point/Stack

If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 13.10 through 13.18)	CAS Number (Not required for 13.1 through 13.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
13.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

14. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Emissions Information for Third Emission Point/Stack

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Emissions Information for Fourth Emission Point/Stack

15. Emission Point Name:

16. Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:

17. Pollutant Emissions

If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 17.10 through 17.18)	CAS Number (Not required for 17.1 through 17.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
17.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.7.	Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for Fourth Emission Point/Stack

17.13.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.14.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.15.		**lbs/hour**	**lbs/hour**	tons/year	tons/year

18. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

If there are more than four Emission Points/Stacks, attach additional copies of this form as needed.

Overall Process Emissions

19. Pollutant Emissions

If more than 15 pollutants are emitted from this Process, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 19.10 through 19.18)	CAS Number (Not required for 19.1 through 19.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
19.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.2.	PM_{10}		**3.75 lbs/hour**	**3.75 lbs/hour**	**16.425** tons/year	**16.425** tons/year
19.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year

Overall Process Emissions

19.9. CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.10. CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.12.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.13.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.14.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.15.		**lbs/hour**	**lbs/hour**	tons/year	tons/year

20. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Minor New Source Review Information

21. Does the Process Have the Potential to Emit More Than Five Tons Per Year of Any Pollutant? ☒ YES ☐ NO

22. Is the Source New or Existing? ☐ NEW ☒ EXISTING
See Question 11 of AQM-1

If the Process has the Potential to Emit more than five tons per year of any pollutant, and is a New Source, a Control Technology Analysis pursuant to Regulation No. 1125 Section 4 must be conducted and attached to this application.

Major New Source Review Information

23. Does the Process Have the Potential to Emit More Than the Significance Level for Any Pollutant? *(Check All That Apply)*

- ☐ Greater Than 25 Tons Per Year of Particulate Matter (PM)
- ☐ Greater Than 15 Tons Per Year of PM_{10}
- ☐ Greater Than 10 Tons Per Year of $PM_{2.5}$
- ☐ Greater Than 40 Tons Per Year of Sulfur Dioxide(SO_2)
- ☐ Greater Than 25 Tons Per Year of Nitrogen Oxides (NO_X) in New Castle and Kent County
- ☐ Greater Than 100 Tons Per Year of Nitrogen Oxides (NO_X) in Sussex County
- ☐ Greater Than 100 Tons Per Year of Carbon Monoxide (CO)
- ☐ Greater Than 25 Tons Per Year of Total Volatile Organic Compounds (VOCs) in New Castle and Kent County
- ☐ Greater Than 50 Tons Per Year of Total Volatile Organic Compounds (VOCs) in Sussex County
- ☐ Greater Than 75,000 Tons Per Year of Equivalent Carbon Dioxide (CO_{2e})

If the Process has the Potential to Emit greater than any of the amounts listed above 7 DE Admin. Code 1125 Sections 2 and/or 3 apply. Contact the Department at (302) 323-4542 or (302) 739-9402 for additional information

Additional Information

24. Is There Any Additional Information Pertinent to this Application? ☐ YES ☒ NO

If YES, complete the rest of Question 24.

24.1. Describe:

Pellet Cooler Cyclone #1 EU 54

Pellet Mill #1	50
Pellet Cooler (t/hr):	50
Hours/day of operation:	24
PM 10 factor (table 9.9.1-2)(#/ton feed):	0.075

Note: PM 10 factor: .5* 0.15 for high eff. Cyclone per table 9.9.1-2

PM 10= 0.075 #/ton * 50 t/hr * 8760 hr/yr * T/2000 #= tpy PM 10

Pellet Cooler Cyclone #1 (using maximum hours)

Pollutant	Emission Factor (#/ton)	Hourly Emissions (lb/hr)	PTE (tons/yr)
PM	0.15	7.5	32.85
PM-10	0.075	3.75	16.425

Table 9.9.1-2. PARTICULATE EMISSION FACTORS FOR GRAIN PROCESSING FACILITIES[a]

Type of Facility/ Emission Source	Type of Control	Filterable[b]				Condensible PM[c]			
		PM	EMISSION FACTOR RATING	PM-10[d]	EMISSION FACTOR RATING	Inorganic	Organic	Total	EMISSION FACTOR RATING
Animal feed mills									
Grain receiving (SCC 3-02-008-02)	None	0.017[e]	E	0.0025[e]	E				
Grain cleaning (SCC 3-02-008-07)	Cyclone	(f)		(f)					
Storage	None	ND		ND					
Grain milling (SCC 3-02-008-15)									
Hammermill (SCC 3-02-008-17)	Cyclone	0.067[h]	E	(g)					
	Baghouse	0.012[j]	E	(y)					
Flaker (SCC 3-02-008-18)	Cyclone	0.15[k]	E	(g)					
Grain cracker (SCC 3-02-008-19)	Cyclone	0.024[k]	E	(g)					
Mixer	None	ND		ND					
Conditioning	None	ND		ND					
Pelletizing									
Pellet cooler[m] (SCC 3-02-008-16)	Cyclone	0.36[n]	E	(g)		--	--	0.059[p]	E
	High efficiency cyclone[r]	0.15[q]	E	(g)					
Feed shipping (SCC 3-02-008-03)	None	0.0033[e]	E	0.0008[e]	E				
Wheat flour mills									
Grain receiving (SCC 3-02-007-31)	None	(f)		(f)					
Grain handling (SCC 3-02-007-32) (legs, belts, etc.)	None	(f)		(f)					