

MEMORANDUM

DATE: September 11, 2012

TO: Richard D. Garrity, Ph.D.

FROM: Stephen Hathaway, P.E. **THRU:** Diana M. Lee, P.E.

**SUBJECT: Operating Permit Renewal – ConAgra Foods, Inc. (Flour Mill Facility)
(0570251-010-AF)**

Attached is Permit No. 0570251-010-AF for the renewal of the synthetic non-Title V operating permit for ConAgra Foods, Inc. ConAgra operates a flour processing facility located at 110 S. Nebraska Avenue in Tampa. Grain (wheat) is received by railcar and truck, cleaned through various separators and ground into flour and millfeed. The flour is then sent to a series of storage bins. Different types of flour are stored in different bins, and the desired blend of flour for shipments is then mixed via blending bins. The flour is sent to the bagging stations, or the truck or railcar loadout stations for bulk loading.

During the review of the application, which included an inspection of the facility, some discrepancies were noted in the pulse air cleaning pressure for the Kice Industries baghouses. Additional information was requested to clarify the manufacturer's recommended operating parameters and the O&M Plan was revised accordingly. According to the baghouse manufacturer's information, the optimal PM control efficiency is maintained using a pulse air pressure of 13 psig. The Kice baghouses are Pneu-Jet baghouses, meaning that the cleaning pressure is provided by a positive displacement pump which eliminates the need for storing compressed air at high pressures.

The PM potential to emit for the facility is 96.1 ton/yr based on the baghouse air flow rates and requested exhaust grain loading standards. This facility is subject to 62-296.711, F.A.C. (PM RACT), and therefore, is required to meet a visible emissions standard of 5% opacity. This permit is being processed as a Federally Enforceable State Operating Permit (FESOP). Since there have been no changes to the operation since the latest permit issuance, a public notice is not being required for this permit renewal.

Based upon our review, we recommend issuance of the above referenced permit as drafted.

SRH

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

Mr. Richard Roberts
Plant Manager
ConAgra Foods, Inc.
110 S. Nebraska Avenue
Tampa, FL 33602

Dear Mr. Roberts:

Re: Hillsborough County - AP

Enclosed is Permit Number 0570251-010-AF for the renewal of the facility's operation permit issued pursuant to Section 403.087, Florida Statutes. Please read this permit thoroughly, as there are changes to the previous permit.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 3629 Queen Palm Dr, Tampa, Florida 33619; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

Richard D. Garrity, Ph.D.
Executive Director

RDG/SRH/srh

cc: Florida Department of Environmental Protection, Southwest District (via e-mail)
Ken Given, P.E., Air Testing & Consulting, Inc.

ConAgra Foods, Inc.
Tampa, FL 33602

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CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on _____ to the listed persons.

Clerk Stamp

FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated clerk, receipt of which is hereby acknowledged.

Clerk

Date

PERMITTEE:

ConAgra Foods, Inc.
110 S. Nebraska Avenue
Tampa, FL 33602

PERMIT/CERTIFICATION

Permit No: 0570251-010-AF
County: Hillsborough
Expiration Date: September 11, 2017
Project: Flour Mill Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the EPC and made a part of hereof and specifically described as follows:

This permit is for the renewal of a flour mill facility. ConAgra Foods, Inc. operates a flour mill in Tampa, Florida. Grain (wheat) is received by railcar and truck. Both are unloaded at their respective receiving pits. The grain is transferred to one of six steel grain receiving silos using enclosed bucket elevators, screw conveyors, and drag conveyors. The maximum receiving rate is 180 ton/hr. The grain is blended while being transferred to any of the ten blending silos. The blended grain is conveyed from storage to the two grain cleaning operations (Lines A and B) at a total rate of 45 ton/hr. The system is enclosed, allowing no emissions in the transfer operation. Particulate matter is sent along with the grain to the two grain cleaning systems where it is controlled by baghouses.

The grain cleaning operation consists of a series of machines to remove foreign materials from the grain prior to milling. The equipment includes millerators, disc separators, scourers, stoners, entoleters and mixing conveyors. The grain is transported between machines in enclosed bucket elevators, spouts and screw conveyors. The product from the grain cleaning operation is transported to temper bins where water is added to the grain to soften the bran coat. The softened grain is then transferred to the flour mills by enclosed bucket elevators and screw conveyors at the rate of 22.5 TPH for each system. Particulate emissions from the two grain cleaning operations are controlled by the following baghouses:

Baghouse A-2 (Cleaning - Line A) - 7,800 ACFM Kice Metal Products Co., Model M96-6

Baghouse A-3 (Cleaning - Line A) - 20,000 ACFM Kice Metal Products Co., Model M168-10

Baghouse A-19 (Cleaning - Line B/Millfeed) - 15,375 ACFM Buhler-Miag, Model ASFB 88/10

Material cleaned from the grain is sent to a hammermill for grinding, then to the millfeed tank for storage. Emissions from the hammermill are controlled by:

Baghouse A-4 (Hammermill) - 1,500 ACFM Kice Metal Products Co., Model R21-6

The cleaned grain is transferred to two flour mills, each with their own baghouses. Each flour mill consists of a series of equipment that grinds the grain and separates it into flour and millfeed (a mixture of bran, by-product from the cleaning operation and low-grade flour). The material is transported between equipment using enclosed spouting and negative and positive pneumatic conveying systems. The equipment includes scales, roller mills, sifters, purifiers and bran finishers. The high-grade flour from the flour mills are transported to bulk storage (12 silos) using positive pneumatic conveying systems. The total production rate is 33.75 ton/hr for flour and 11.25 ton/hr for millfeed. The millfeed is sent to the millfeed tank, and subsequently to the truck and/or railcar loadout stations. Emissions from the millfeed tank and loadout are controlled by Baghouse A-19. Particulate emissions from the two grain milling operations are controlled by the following baghouses:

Baghouse A-5 (Milling - Line A) - 12,000 ACFM Kice Metal Products Co., Model M144 6/7/9/10

Baghouse A-6 (Milling - Line A) - 12,000 ACFM Kice Metal Products Co., Model M144 6/7/9/10

Baghouse A-7 (Milling - Line A) - 10,000 ACFM Kice Metal Products Co., Model R88/10

Baghouse A-20 (Milling - Line B) - 12,800 ACFM Buhler-Miag, Model ASFB 64/10

Baghouse A-21 (Milling - Line B) - 16,000 ACFM Buhler-Miag, Model ASFB 88/10

Baghouse A-22 (Storage/Packer/Loadout) – 14,000 ACFM Kice Metal Products Co., Model M120-10

The flour is transferred from bulk storage to the blending plant, consisting of eight blend bins with variable screw feeders to blend different types of flours. Flour is transferred from each bin via screw and pneumatic conveyors to sifters for removal of foreign materials, to scales for weighing and through entoleters to kill any insect eggs. The maximum flour transfer rate is 90 ton/hr. From here the flour is conveyed pneumatically to a packer (bagging) system, or to truck or railcar loadout stations. The maximum loadout rate to the packer (bagging) system, the two truck stations, and the railcar station is 30 ton/hr each. Emissions from the packer and railcar loadout are controlled by Baghouse A-22. Particulate emissions from the truck loadout operations are controlled by:

Baghouse A-24 (Truck Loadout) - 2,000 ACFM Kice Metal Products Co., Model R21-10

The facility is subject to Rule 62-296.711, F.A.C. (PM-RACT) and therefore is subject to a 5% opacity limit for all the emission units.

Location: 110 S. Nebraska Avenue, Tampa

UTM: 17-357.0 E 3092.5 N NEDS NO: 0251

Emission Unit ID: 002 - Grain Cleaning (Line A) - Baghouse A-2
003 - Grain Cleaning (Line A) - Baghouse A-3
004 - Hammermill - Baghouse A-4
005 - Grain Milling (Line A) - Baghouse A-5
006 - Grain Milling (Line A) - Baghouse A-6
007 - Grain Milling (Line A) - Baghouse A-7
016 - Grain Cleaning (Line B)/Millfeed - Baghouse A-19
017 - Grain Milling (Line B) - Baghouse A-20
015 - Grain Milling (Line B) - Baghouse A-21
018 - Flour Processing (Storage/Packer/Loadout) - Baghouse A-22
014 - Truck Loadout Bin Loading/Truck Loadout - Baghouse A-24

Replaces Permit No. 0570251-009-AF

PERMITTEE:
ConAgra Foods, Inc.

PERMIT/CERTIFICATION NO.: 0570251-010-AF
PROJECT: Flour Mill Facility

SPECIFIC CONDITIONS:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]
3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
4. As requested by the permittee, in order to limit the potential to emit and establish the facility as a synthetic minor source for particulate matter, the maximum allowable particulate matter emissions (in gr/dscf and tons/yr) for the facility and each emission unit shall not exceed the following: [Rule 62-210.300, F.A.C.; Permit No. 0570251-002-AC; and Renewal Application received June 21, 2012]

<u>Emission Unit</u>	<u>Control Equipment</u>	<u>DSCFM</u>	<u>gr/dscf</u>	<u>Tons Per 12 Consecutive Months</u>
Grain Cleaning - Line A	Baghouse A-2	7,467	0.025	6.64
Grain Cleaning - Line A	Baghouse A-3	19,146	0.020	13.61
Hammermill Grain Milling Line A	Baghouse A-4	1,436	0.025	1.28
Grain Milling Line A	Baghouse A-5	11,488	0.020	8.17
Grain Milling Line A	Baghouse A-6	11,488	0.020	8.17
Grain Milling Line A	Baghouse A-7	9,573	0.025	8.51
Grain Cleaning Line B/Millfeed	Baghouse A-19	14,719	0.025	13.08
Grain Milling Line B	Baghouse A-20	12,254	0.025	10.89
Grain Milling Line B	Baghouse A-21	15,317	0.025	13.61
Flour Processing (Storage/Packer/Loadout)	Baghouse A-22	13,402	0.020	9.53
Truck Loadout Bin Loading/Truck Loadout	Baghouse A-24	2,915	0.025	2.59
FACILITY-WIDE TOTAL				96.1

PERMITTEE:
ConAgra Foods, Inc.

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SPECIFIC CONDITIONS:

5. Visible emissions from any emission unit at this facility shall not exceed 5% opacity. [Rule 62-296.711(2)(a), F.A.C.]

6. To ensure compliance with allowable emission limits in Specific Condition No. 4, the following shall apply for any 12 consecutive month period: [Permit No. 0570251-002-AC; Rule 62-4.070(3), F.A.C.; and Renewal Application received June 21, 2012]

- A) The hours of operation of each emission unit shall not exceed 8,296 hours.
- B) No more than 374,000 tons of grain shall be processed facility-wide.

7. In order to ensure compliance with the emission standards of Specific Condition No. 4, the following shall apply: [Permit 0570251-002-AC; Rule 62-4.070(3), F.A.C.; and Renewal Application received June 21, 2012]

- A) The maximum allowable material handling rates shall be:

<u>Emission Unit</u>	<u>Control Equipment</u>	<u>Material</u>	<u>TPH</u>
Grain Cleaning (Line A)	Baghouse A-2	Wheat	22.5
Grain Cleaning (Line A)	Baghouse A-3	Wheat	22.5
Hammermill	Baghouse A-4	Wheat	11.3
Grain Milling (Line A)	Baghouse A-5	Wheat	22.5
Grain Milling (Line A)	Baghouse A-6	Wheat	22.5
Grain Milling (Line A)	Baghouse A-7	Wheat	22.5
Grain Cleaning (Line B/Millfeed)	Baghouse A-19	Wheat	22.5
Grain Milling (Line B)	Baghouse A-20	Wheat	22.5
Grain Milling (Line B)	Baghouse A-21	Wheat	22.5
Flour Processing (Storage/Packer/Loadout)	Baghouse A-22	Flour	90
Truck Loadout Bin Loading/Truck Loadout	Baghouse A-24	Flour	30

- B) All dust laden air generated at any emission unit shall be vented back to the associated control equipment.

8. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320, F.A.C.]

9. Test each emission unit for visible emissions annually, each federal fiscal year (October 1-September 30) with a target date of December 12th, and submit two copies of the test data to the Air Compliance Section of the Air Management Division of the Environmental Protection Commission

PERMITTEE:
ConAgra Foods, Inc.

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SPECIFIC CONDITIONS:

(EPC) of Hillsborough County within 45 days of such testing. Visible emission testing for EU014 shall include testing of two separate emission points: 1) Baghouse A-24 exhaust; and 2) Truck loading spouts to trucks. Testing procedures shall be consistent with the requirements of Rule 62-297.310, F.A.C., and visible emissions shall be recorded from the point of highest observed opacity for the emission unit. [Rules 62-297.310 and 62-4.070(3), F.A.C.]

10. [Reserved]

11. Compliance with the emission limitations of Specific Condition Nos. 4 and 5 shall be determined using EPA Methods 1, 2, 4, 5, and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The EPA Method 9 tests shall be at least thirty (30) minutes in duration and shall include the point of highest opacity. Except for the special particulate matter stack tests required by Specific Condition No. 12, a visible emissions test indicating no visible emissions (5 percent opacity) may be submitted in lieu of a particulate stack test where emissions are controlled by a baghouse. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. [Rules 62-296.320(4)(b)4., 62-296.711(3), and 62-4.070(3), F.A.C.]

12. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. For the purpose of confirming compliance with the emission limitations in this permit, the EPC may require the use of EPA Method 5, elapsed time meters on the emissions units, or other approved methods, as deemed necessary. [Rule 62-297.310(7)(b), F.A.C.]

13. [Reserved]

14. The permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)9., F.A.C.]

15. Testing of emissions shall be conducted with the sources operating at capacity. Capacity is defined as 90-100% of rated capacity of the material handling rates specified in Specific Condition No. 7. Testing of each emission unit shall occur while all processes that are controlled by the corresponding baghouse are in operation and operating at capacity. Testing of the baghouse controlling EU014 shall occur during simultaneous truck loading at rated capacity of 30 ton/hr and material transfer to the truck loading bins, since both operations are controlled by the same pollution control device. Observation of the baghouse exhaust and the truck loading spouts are both required for EU014 as specified in Specific Condition No. 9.

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ConAgra Foods, Inc.

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SPECIFIC CONDITIONS:

If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. Failure to submit the input rates, the air pressure drop across each baghouse, and actual operating conditions may invalidate the test. [Rule 62-4.070(3), F.A.C. and 62-297.310(2), F.A.C.]

16. The permittee shall comply with the requirements of the Operation and Maintenance Plan for Particulate Control as described in Appendix A and attached to this permit. [Rule 62-296.700, F.A.C.]

17. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions include, but are not limited to, the following: [Rule 62-296.320(4)(c), F.A.C.]

- A) Removal of particulate matter like flour or grain from paved areas and from work areas to prevent particulate from becoming airborne.
- B) Application of water to control emissions from such activities as demolition of buildings, grading roads, construction and land clearing.
- C) Inspection of storage, transfer and cleaning/milling systems to repair all leaks to prevent particulate emissions.
- D) Avoid excessive pneumatic pressures in process and control equipment, including material loading/unloading lines, to prevent rupture and leakage.
- E) Reduce vehicular traffic speed. Post limits, if necessary.

18. The permittee shall operate and maintain a measuring device to determine the air pressure differential across the control equipment and the air cleaning pressure listed in this permit within 10 percent accuracy. [Rule 62-4.070(3), F.A.C.]

19. In order to ensure compliance with the limitations in this permit, the following monthly records shall be maintained and kept on-site for at least the previous three (3) years and made available for inspection by staff of the Environmental Protection Commission of Hillsborough County upon request: [Rules 62-4.160(14) and 62-4.070(3), F.A.C.]

- A) Grain processed at the facility in tons
- B) Hours of operation of each emission unit
- C) A rolling twelve consecutive month total of A) and B) above.

PERMITTEE:
ConAgra Foods, Inc.

PERMIT/CERTIFICATION NO.: 0570251-010-AF
PROJECT: Flour Mill Facility

SPECIFIC CONDITIONS:

20. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before April 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

21. Circumvention. No owner or operator of an emissions unit subject to the requirements of Rules 62-296.701 through 62-296.712, F.A.C., establishing maximum concentrations of emissions of particulate matter in the exhaust gas from the emissions unit, shall circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means. [Rule 62-296.700(5), F.A.C.]

22. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200(203), F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

- a) Alteration or replacement of any equipment or major component of such equipment.
- b) Installation or addition of any equipment which is a source of air pollution.
- c) The use of materials and fuels other than those authorized by this permit.

23. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

24. The use of property, facilities, equipment, processes, products, or compounds, or the commission of paint overspraying or any other act, that causes or materially contributes to a public nuisance is prohibited, pursuant to the Hillsborough County Environmental Protection Act, Section 16, Chapter 84-446, Laws of Florida, as Amended. [Rule 62-4.070(3), F.A.C.]

25. Prior to 60 days before the expiration of this operation permit, the permittee shall apply for a renewal of the permit using the current version of the permit renewal application form and submit the most recent 3 months of records required by this permit. A renewal application shall be timely and sufficient. If the application is submitted prior to sixty days before the expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the EPC or, if there is court review of the final agency action, until a later date is required by Section 120.60, Florida Statutes. [Rules 62-4.090 and 62-4.070(3), F.A.C.]

PERMITTEE:
ConAgra Foods, Inc.

PERMIT/CERTIFICATION NO.: 0570251-010-AF
PROJECT: Flour Mill Facility

SPECIFIC CONDITIONS:

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

Richard D. Garrity, Ph.D.
Executive Director

APPENDIX A

Operation and Maintenance Plan

for ConAgra Foods, Inc.

BAGHOUSE A-2

Process Parameters:

1. Source Designators: Baghouse A-2
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: M96-6
4. Design Flow Rate: 7,800 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 11.5:1
8. Bag Weave: Felt
9. Bag Material: Polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet and outlet 75° F
12. Stack Height Above Ground: 73 ft.
13. Exit Diameter: 20 in.
14. Exit Velocity: 60 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Cleaning
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-3

Process Parameters:

1. Source Designators: Baghouse A-3
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: M168-10
4. Design Flow Rate: 20,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 10.2:1
8. Bag Weave: Felt
9. Bag Material: Polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet and outlet 75° F
12. Stack Height Above Ground: 15 ft.
13. Exit Diameter: 24.8 in. x 37.3 in.
14. Exit Velocity: 52 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Cleaning
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-4

Process Parameters:

1. Source Designators: Baghouse A-4
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: R21-6
4. Design Flow Rate: 1,500 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 10.1:1
8. Bag Weave: Felt
9. Bag Material: Polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet and outlet 75° F
12. Stack Height Above Ground: 35 ft.
13. Exit Diameter: 12 in.
14. Exit Velocity: 39 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Hammermill
17. Material Handling Rate: 11.25 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-5

Process Parameters:

1. Source Designators: Baghouse A-5
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: M144 6/7/9/10
4. Design Flow Rate: 12,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 9.85:1
8. Bag Weave: Felt
9. Bag Material: Polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet and outlet 75° F
12. Stack Height Above Ground: 70 ft.
13. Exit Diameter: 24 in.
14. Exit Velocity: 64 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Milling
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-6

Process Parameters:

1. Source Designators: Baghouse A-6
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: M144 6/7/9/10
4. Design Flow Rate: 12,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 9.85:1
8. Bag Weave: Felt
9. Bag Material: Polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet and outlet 75° F
12. Stack Height Above Ground: 70 ft.
13. Exit Diameter: 24 in.
14. Exit Velocity: 64 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Milling
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-7

Process Parameters:

1. Source Designators: Baghouse A-7
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: R88/10
4. Design Flow Rate: 10,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 9.77:1
8. Bag Weave: Felt
9. Bag Material: Polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet and outlet 75° F
12. Stack Height Above Ground: 40 ft.
13. Exit Diameter: 24.3 in. x 30.5 in.
14. Exit Velocity: 39 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Milling
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-19

Process Parameters:

1. Source Designators: Baghouse A-19
2. Baghouse Manufacturer: Buhler-Miag, Inc.
3. Model Name and Number: ASFB 88/10, Type A
4. Design Flow Rate: 15,375 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 inches water
7. Air to Cloth Ratio: 12.0:1
8. Bag Weave: Felt
9. Bag Material: Dacron
10. Bag Cleaning Conditions, Pulse Air Pressure: 7.5 psi
11. Gas Temperatures: Inlet 77° F and outlet 77° F
12. Stack Height Above Ground: 82 ft.
13. Exit Diameter: 30.99 ft.
14. Exit Velocity: 48.9 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Cleaning
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-20

Process Parameters:

1. Source Designators: Baghouse A-20
2. Baghouse Manufacturer: Buhler-Miag, Inc.
3. Model Name and Number: ASFB 64/10, Type A
4. Design Flow Rate: 12,800 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 inches water
7. Air to Cloth Ratio: 17.2:1
8. Bag Weave: Felt
9. Bag Material: Dacron
10. Bag Cleaning Conditions, Pulse Air Pressure: 7.5 psi
11. Gas Temperatures: Inlet 77° F and outlet 77° F
12. Stack Height Above Ground: 82 ft.
13. Exit Diameter: 28.5 in. x 21.75 in.
14. Exit Velocity: 50.7 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Milling
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-21

Process Parameters:

1. Source Designators: Baghouse A-21
2. Baghouse Manufacturer: Buhler-Miag, Inc.
3. Model Name and Number: ASFB 88/10, Type A
4. Design Flow Rate: 16,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 inches water
7. Air to Cloth Ratio: 112.5:1
8. Bag Weave: Felt
9. Bag Material: Dacron
10. Bag Cleaning Conditions, Pulse Air Pressure: 7.5 psi
11. Gas Temperatures: Inlet 77° F and outlet 77° F
12. Stack Height Above Ground: 82 ft.
13. Exit Diameter: 33.75 in. x 23.75 in.
14. Exit Velocity: 48.8 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Grain Milling
17. Material Handling Rate: 22.5 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-22

Process Parameters:

1. Source Designators: Baghouse A-22
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: M120-10
4. Design Flow Rate: 14,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 inches water
7. Air to Cloth Ratio: 10:1
8. Bag Weave: 12 oz. felt
9. Bag Material: 12 oz. felted polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet 75° F and outlet 75° F
12. Stack Height Above Ground: 4 ft.
13. Exit Diameter: 2.57 ft.
14. Exit Velocity: 44.92 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Flour/Storage/Packer/Loadout
17. Material Handling Rate: 90 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

BAGHOUSE A-24

Process Parameters:

1. Source Designators: Baghouse A-24
2. Baghouse Manufacturer: Kice Industries, Inc.
3. Model Name and Number: R-21-10
4. Design Flow Rate: 3,000 ACFM
5. Efficiency Rating at Design Capacity: 99.99%
6. Pressure Drop: 0-6 in. water
7. Air to Cloth Ratio: 8.16:1
8. Bag Weave: 12 oz. Felt per square yard
9. Bag Material: 12 oz. felted polyester
10. Bag Cleaning Conditions, Pulse Air Pressure: 13 psi
11. Gas Temperatures: Inlet 80° F and outlet 80° F
12. Stack Height Above Ground: 33 ft.
13. Exit Diameter: 3.8 ft.
14. Exit Velocity: 24 fps
15. Water Vapor Content: 3%
16. Process Controlled by Collection System: Flour Processing/Transfer
17. Material Handling Rate: 30 tons per hour
18. Operating Schedule: 8,296 hours/12 consecutive month period

All Baghouses:

The following observations, checks, and operations apply to this source and shall be conducted on the schedule specified:

Daily

1. Check and record pressure drop.
2. Observe stack (visual).
3. Walk through system listening for proper operation (audible leaks, proper fan and motor functions, bag cleaning systems, etc.).
4. Note any unusual occurrence in the process being ventilated.
5. Observe all indicators on control panel.
6. Check and record cleaning air pressure.
7. Assure that dust is being removed from system.

Weekly

1. Inspect screw conveyor and airlock bearings for lubrication.
2. Check packing glands.
3. Operate all damper valves (isolation, by-pass, etc.).
4. Check bag cleaning sequence to see that all valves are opening and closing properly.
5. Spot check bag tension inside bag collectors.
6. Check pressure drop indicating equipment for plugged lines.
7. Check inlet filter on reverse air blower (if applicable).

Monthly

1. Check cleaning mechanism moving parts.
2. Inspect fan for corrosion and material build-up.
3. Check all drive belts and chains for wear and tension.
4. Check all hoses and clamps.
5. Check accuracy of all indicating equipment.
6. Inspect housing for corrosion.

Quarterly

1. Inspect baffle plate for wear.
2. Thoroughly inspect bags.
3. Check dust for dust build-up.
4. Observe damper valves for proper seating.
5. Check gaskets on all doors.
6. Inspect paint.
7. Check screw conveyor flighting.

Annually

1. Check all bolts.
2. Check welds.
3. Inspect hopper for wear.
4. Check airlock rotor for wear.

Records:

Records of inspections, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Environmental Protection Commission of Hillsborough County upon request. [Rule 62-296.700(6)(e), F.A.C.]