

ADEQ
DRAFT
MINOR SOURCE
AIR PERMIT

Permit No. : 0604-AR-12

IS ISSUED TO:

Busch Agricultural Resources, LLC
3723 County Road 905, Highway 49 North at Farville
Jonesboro, AR 72401
Craighead County
AFIN: 16-00104

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. § 8-4-101 *ET SEQ.*) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Stuart Spencer
Associate Director, Office of Air Quality

Date

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

Table of Contents

Section I: FACILITY INFORMATION	4
Section II: INTRODUCTION.....	5
Summary of Permit Activity	5
Process Description.....	5
Regulations	8
Total Allowable Emissions	8
Section III: PERMIT HISTORY	9
Section IV: EMISSION UNIT INFORMATION.....	12
Section V: INSIGNIFICANT ACTIVITIES	19
Section VI: GENERAL CONDITIONS	20
Appendix A - 40 C.F.R. Part 60, Subpart DD - <i>Standards of Performance for Grain Elevators</i>	

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

List of Acronyms and Abbreviations

Ark. Code Ann.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller Than Ten Microns
SO ₂	Sulfur Dioxide
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Busch Agricultural Resources, LLC
Permit #: 0604-AR-12
AFIN: 16-00104

Section I: FACILITY INFORMATION

PERMITTEE: Busch Agricultural Resources, LLC

AFIN: 16-00104

PERMIT NUMBER: 0604-AR-12

FACILITY ADDRESS: 3723 County Road 905, Highway 49 North at Farville
Jonesboro, AR 72401

MAILING ADDRESS: 3723 County Road 905, Highway 49 North at Farville
Jonesboro, AR 72401

COUNTY: Craighead County

CONTACT NAME: Chris Merten

CONTACT POSITION: Operations Manager

TELEPHONE NUMBER: (870) 930-2350

REVIEWING ENGINEER: Jeremy Antipolo

UTM North South (Y): Zone 15: 3972650.71 m

UTM East West (X): Zone 15: 716565.45 m

Section II: INTRODUCTION

Summary of Permit Activity

Busch Agricultural Resources, Inc. (BARI), a subsidiary of Anheuser-Busch Companies, Inc., operates a rice milling and storage facility near Jonesboro in Craighead County. This facility handles up to 22,300,000 bushels (500,000 tons) of rice per year, and has the capability of processing 60 tons/hour of rough rice.

This modification replaced one of two existing rice hull hammer mills (SN-76). Dust collector for hammer mills (SN-76) was replaced with a new dust collector. Bucket elevator feeding the hammer mills was replaced with a new bucket elevator and the two screw conveyors/bucket system leaving the hammer mills was replaced with a pneumatic conveyance system. This permitting action will result in total emission rate increases of 0.4 tpy PM and 0.4 tpy PM₁₀.

Process Description

The Jonesboro Rice Mill stores enough rice to supply the facility during production. The facility is projected to handle up to 22,300,000 bushels of rice per year beginning in 2002. Included is a very small amount of green rice that is dried at the facility. Dried rice or green rice is received at the facility by trucks. The trucks unload the rice into a receiving pit at up to 13,500 bushels per hour. All rice is transferred via the scalpers (SN-02) to storage bins. All rice received is conveyed through one of three scalperators. A rotating wire mesh drum removes any large particles of trash and an internal fan system removes any airborne dust in the rice.

At the large rice bins, dried rice up to the 120,000 bushel bin capacity enters one of four bins from the scalpers. On occasion, dried rice is loaded into trucks for shipment. During storage, which averages 20 days, the rice is periodically aerated with ambient air using two 6150 cfm fans. The intermediate storage bins store rice from the scalpers. The storage process is identical to that of the large rice bins.

As required for shipment, dried rice is transferred from a storage bin to the truck loadout via the various conveyors at up to 6000 bushels per hour. The loadout consists of an inclined 10 inch diameter pipe through which dried rice flows by gravity. A "sock" encloses the end of the pipe to minimize dust as the dried rice drops into a truck.

The facility uses a trash removal system to collect large field trash from the screen machine. The screen machine separates the wastes from the small surge bin into three streams. The largest size (<20 mesh) wastes go to trash removal, while the mid-size (20 to 80 mesh) wastes are pneumatically conveyed via the rough Hull Transfer (SN-12) to the Unground Hull Bin (SN-12, 73 & 74). Most of the hulls from SN-74 are transported via three screw/drag conveyors, a surge bin, a magnet, and one bucket elevator to be ground in one of two hammer mills. The smallest size (>80 mesh) wastes are pneumatically conveyed via the Rough Rice Dust Transfer (SN-13) to the Bran Receiver.

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

Milled rice is loaded into trucks or covered rail cars. Trucks are loaded inside a two wall shed. Rail cars are loaded in a semi-protected area having a roof and one wall. Since milled rice is virtually dust free and abrades very little in conveying, small amounts of emissions are generated. Up to two percent of the milled rice is bagged. This small operation generates essentially no emissions.

By-products (bran and hulls) are loaded into trucks or covered rail cars inside the by-product shipping building. For trucks, a vertically moving hood encloses the top of the truck trailer during loadout. Air is drawn into the hood and collects the generated dust in a fabric filter. For rail cars, three flexible spouts are lowered into the car during loadout for dust pickup. Air is drawn into the spouts and collects the adjacent dust in the same fabric filter. Air can be drawn from either the truck hood or the rail car spouts but not both. Rail cars and trucks cannot be filled simultaneously. Other processes at the facility include shelling, grading, screening, sorting, and pearling.

The mill has three large dust control systems which are connected to Fabric Filters C-31, C-32, and C-41. These systems have a dual function in that they control the dust emissions in the mill and they collect the bran by-product. The bran by-product is pneumatically transferred to five sifters (SN-111). Broken rice from the sifters will be mechanically conveyed (SN-114) to a rotary air-lock and then will be pneumatically conveyed to the reject storage bin (SN-65). A fabric filter, C-40, will be located on the pneumatic conveyor for the broken rice. Sifted bran will be mechanically conveyed (SN-113) to a rotary air lock where it will be pneumatically conveyed to SN-72, one of four bran storage bins. Whole rice will be produced from the sifters only in the event of a malfunction (i.e. screen breakage) in the rice handling systems. In the event whole rice is produced by the sifters, they will be mechanically conveyed to the front end of the whitening process by SN-112. The dust is pneumatically transferred via filter receiver to one of four bran by-product storage bins. Each elevator connects to two dust systems, one at the head and the other at the boot. Thus, their uncontrolled emissions are being split between two systems.

Generally, the equipment is enclosed to minimize fugitive emissions. Inside the building, the equipment fugitive emissions settle and remain inside. This solid material is then swept up or vacuumed up (Vacuum Cleaning System). Most pieces of equipment are connected directly to a dust collection system. Equipment with low dust potential does have a direct connection. However, the dust vents via the adjacent conveyor or elevator are connected to a dust system. Equipment used to handle the milled rice products is not connected to a dust system as the milled rice generates essentially no particulate emissions.

Based on as-received dried rough rice, the outputs are:

- 68% milled rice (fancy, broken, x-brewers)
- 9% bran (includes mill dust)
- 22% hulls
- 1% trash (includes precleaning at unloading pit).

Fumigation Process

Phosphine for Grain Fumigation

Phostoxin (aluminum phosphide) is used by the malt plant as a fumigation for grain stored on-site. Phostoxin use is partially dependent on weather conditions and may also be applied to grain being delivered if pests are detected. The Jonesboro Rice Mill minimizes the use of Phostoxin whenever possible.

The application rates for Phostoxin on grain are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act.

Methyl Bromide Fumigation

The rice mill will conduct methyl bromide space fumigation of the mill building and associated processing equipment three (3) times per year. Fumigation generally occurs over a three day week-end such as Memorial Day and Labor Day. The rice mill contracts this work to pesticide companies that specialize in methyl bromide fumigation.

The contractor makes the mill building as airtight as possible with sealing techniques. Methyl bromide gas lines and monitoring stations are strategically located within the mill building. Methyl bromide is released into the mill building until the appropriate concentrations are obtained. The contractor monitors the methyl bromide levels, and, additional gas is released into the mill building as required based upon concentrations obtained from monitoring. According to the current mill contractor, the initial methyl bromide dosing conducted at Jonesboro has been sufficient for the maintenance of target doses for the entire fumigation process (i.e., no supplemental gas has to be injected into the building).

The methyl bromide fumigation process is maintained over a 20 to 24-hour period. Upon completion, the mill building is cleared of the methyl bromide gas using fans. According to the contractor, approximately 40% of the initial charge of gas remains in the building at the end of the fumigation process. The aeration process lasts approximately 3 hours, and, the contractor ensures the building is safe for entry via a final monitoring process.

Sulfuryl Fluoride Fumigation

The rice mill may conduct sulfuryl fluoride space fumigation of the mill building and associated processing equipment as an alternative to using methyl bromide. Similar to the methyl bromide fumigation process, the sulfuryl fluoride fumigation will typically be performed three times per year. At the end of the fumigation cycle, approximately 45% of the initial sulfuryl fluoride application will be purged from the facility over a three hour process.

Busch Agricultural Resources, LLC
 Permit #: 0604-AR-12
 AFIN: 16-00104

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective March 14, 2016
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective March 14, 2016
40 C.F.R. Part 60, Subpart DD - <i>Standards of Performance for Grain Elevators</i>

Total Allowable Emissions

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	24.4	24.7
PM ₁₀	20.6	21.0
PM _{2.5}	See Note*	
Phosphine	0.7	1.9
Methyl Bromide	345.00	5
Sulfuryl Fluoride	1500.00	6.75

*PM_{2.5} limits are source specific, if required. Not all sources have PM_{2.5} limits.

Section III: PERMIT HISTORY

- 348-A Permit 348-A was originally assigned to BARI on September 29, 1976, to install a rice drying and storage facility near Jonesboro, Arkansas. At that time, the facility was designed to handle approximately 2.2 million bushels of rice per year.
- 604-A Permit 604-A was later issued to BARI on April 25, 1980, for an expansion of rice milling operations, and rice storage capacity. This activity was regulated by 40 CFR Part 60, Subpart DD, New Source Performance Standards (NSPS).
- 604-AR-1 On September 25, 1981, permit 604-AR-1 modified permit 604-A to allow the additional time required (due to economic and design considerations) to proceed with construction of the proposed expansions of permit 604-A.
- 604-AR-2 On May 24, 1990, modified permit 604-AR-2 was issued for an increase in rough rice throughput capacity.
- 604-AR-3 Permit 604-AR-3 was issued on July 7, 1992, as a modification to permit 604-AR-2. This modification accounts for the installation of additional equipment, and a reduction in downtime due to equipment modification. This rerouting and enlargement of the Bran Transfer System is intended to improve its reliability and reduce mill restrictions. As previously stated, the mill throughput is expected to be 62,500 pounds per hour. Similarly, emission allowances are increased in proportion to throughput from the prior permit levels.
- 604-AR-4 Permit 604-AR-4 was issued on October 7, 1997, as a modification to permit 604-AR-3. BARI is proposing to modify the existing permit in order to re-evaluate New Source Performance Standards Subpart DD applicability and to obtain higher annual permitted production limits.
- 604-AR-5 Permit 604-AR-5 was issued on March 24, 2000, as a modification to permit 604-AR-4. This mill proposed to keep process throughput limits at 15 million bushels, thus, no changes in overall emissions were expected from this modification. BARI proposed the following modification to the existing permit:
1. Install 4 additional Carter-Day #618 Precision Size Graders (SN-36) and associated conveying equipment.
 2. Eliminate the Stick Machine (SN-34) and Reclaim Rotex (SN-35).
 3. Replace two screw conveyors used to transfer rough rice from the day tanks to the mill for processing (SN-21, equipment numbers 30-204 and 30-205).

4. Replace six of the eight existing shellers (SN-40). The existing shellers are designed to process 1000 hundred weights (cwts) of rough rice per hour (50 tons/hour). Rough rice processing will not increase as a result of replacing the six shellers.
5. Replace all five (5) existing uniflow separators (SN-52). The current processing rate for the uniflows is 1000 cwts/hour (50 tons/hour) which will remain the same with the installation of the new equipment.
6. Replace all three existing precision graders with new like graders (SN-53). The current processing rate for fancy white rice is 1000 cwts/hour (50 tons/hour) which will remain the same with the installation of the new equipment.

604-AR-6 Permit 604-AR-6 was issued on March 28, 2001, as a modification to permit 604-AR-5. This mill proposed to increase the annual throughput from 340,875 to 400,000 tons (17.8 million bushels). Updated AP-42 emission factors were used in calculating emissions associated with increased production which resulted in annual PM₁₀ emissions less than the emissions indicated in permit 604-AR-5. Also the insignificant activities list was updated, and Specific Condition 6 was revised as follows:

1. Pursuant to 19.705 of Regulation 19 and A.C.A. 8-4-203 as referenced by 8-4-304 and 8-4-311, the facility shall not mill more than 400,000 tons of grain per consecutive twelve-month period.

604-AR-7 Permit 604-AR-7 was issued on December 27, 2001, as a modification to permit 604-AR-6. The mill increased the annual throughput from 400,000 tons to 500,000 tons (23 million bushels) of rice per year. An extensive modernization program was initiated which included replacement of old equipment, and the installation of new process equipment, and an additional fabric filter (SN-110) to control emissions from the new processing equipment.

This permit also included the conversion of four (4) bran storage bins, having a combined storage capacity of 20,800 bushels, to ground hull storage. A new bran storage bin having a capacity of 12,100 bushels was installed to replace all four (4) converted bran storage bins. The total by-product storage capacity will increase from 52,000 bushels to 64,100 bushels. Emissions associated with this change in by-product storage did not increase, but the process throughput for the mill changed.

604-AR-8 Permit 604-AR-8 was issued on March 24, 2003, as a modification to permit 604-AR-7. The facility increased the yearly use of methyl bromide for pest control fumigation. Non-stack emissions of the fumigant methyl bromide increased from 3 tons per year to 5 tons per year. However, the hourly emission rate (lbs/hr) did not change.

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

- 604-AR-9 Permit 604-AR-9 was issued on June 18, 2004, as a modification to permit 604-AR-8. This modification allowed for the installation of five new Sweco XS-60 sifters and associated conveyors, one new Satake RMGS-840 color sorter, and utilization of a new fumigation chemical. The new sifters were designed to separate whole and broken rice from the current bran stream. The pneumatic system would transfer broken rice from the sifters, mill sweepings and other rejects to the existing reject storage bin. The new color sorter was installed to provide additional retention time during the rice color sorting process. Utilization of a new fumigation chemical would ultimately replace use of methyl bromide. This permitting action allowed an increase in PM/PM₁₀ emissions by 2.4 tons per year (tpy) and sulfuryl fluoride emissions by 6.75 tpy.
- 604-AR-10 This modification allowed for the removal of the existing truck loading pit and conveyor (SN-01), ten small storage bins (SN-03), three mill day bins (SN-31), and the rough rice loadout systems (SN-06 and SN-66). The modification also allowed for the addition of a rice truck unloading (SN-116), conveying equipment (SN-117 through SN-124), rough rice storage bins (SN-125), reject rice truck loading (SN-126), reject rice railcar loading (SN-127), and a fabric filter (SN-129). All of the new equipment is routed to the fabric filter (SN-129). The rough rice storage bins increased the storage capacity of the facility to 1,635,700 bushels, which will make the facility subject to the NSPS Subpart DD – Standards of Performance for Grain Elevators. Also, an existing Railcar Unloading Connection was added to the permitted sources. The proposed changes resulted in a decrease of 0.1 tpy of PM₁₀ and 1.1 tpy in PM.
- 604-AR-11 Permit 604-AR-11 was issued on October 4, 2005, as a modification to permit 604-AR-10. This modification added a new rotary drum cleaner and associated handling equipment (SN-134). All equipment associated with this permit action was controlled with a baghouse. Additionally, two Insignificant Activities (IA) were removed from the IA list as they are no longer at the facility (20 burners rated at 1 MMBTU/hr and Two (2) – 1,000 gallon gasoline tanks).

Section IV: EMISSION UNIT INFORMATION

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with this condition by compliance with Specific Conditions 6, 8, and 15. [Reg.19.501 *et seq.* and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
04	Four (4) Large Storage Bins	PM ₁₀	1.2	0.7
05	Three (3) Intermediate Storage Bins	PM ₁₀	1.2	0.3
02, 07, 08, 09, & 11	Trash Removal	PM ₁₀	0.1	0.1
10	Receiving Dust Collection	PM ₁₀	0.1	0.1
59; with emissions from 100-104, 40, 42, 44, 21-26, 54-58, 61-64, 87-90, 92, 95, and 68	Mill Rough Rice Dust Collector C-31	PM ₁₀	0.1	0.4
60; with emissions from 105-107, 52-54, 57, 40, 42, 50, 52, 53, 56, 79, 86, 91, 93, 94, and 96	Mill White Rice Dust Collector C-32	PM ₁₀	0.1	0.1
67	Milled Rice Storage	PM ₁₀	0.3	0.9
69	Milled Rice Bagging	PM ₁₀	0.1	0.1
70	Milled Rice Loadout	PM ₁₀	0.5	0.6
13, 61, 71	Bran Transfer & Rough Rice Transfer	PM ₁₀	0.1	0.1
72	Bran Storage – Five Bins	PM ₁₀	0.2	1.4
12, 73, 74	Unground Hull Storage	PM ₁₀	0.2	0.1

SN	Description	Pollutant	lb/hr	tpy
76	Hammermills	PM ₁₀	0.1	0.5
77	Ground Hull Storage – Nine Bins	PM ₁₀	2.0	5.5
78	By-product Loadout	PM ₁₀	0.8	3.5
96	Rice Cracker and Aspirator	PM ₁₀	0.1	0.1
110; with emissions from 108, 54, 55, 57, and 109	Bran Dust Collector C-39	PM ₁₀	0.1	0.1
111	Bran Sifters - Five	PM ₁₀	0.1	0.4
112	Whole Rice Conveyors	PM ₁₀	0.1	0.1
113	Bran Mechanical Conveyors	PM ₁₀	0.1	0.4
114	Broken Rice Mechanical Conveyors	PM ₁₀	0.1	0.1
115	Broken Rice Pneumatic Conveyors	PM ₁₀	0.1	0.1
128	Railcar Unloading Connection	PM ₁₀	0.5	0.1
129; with emissions from 116-127	Rough Rice System Duct Collector	PM ₁₀	0.3	0.6
SN-134 with emissions from SN-120, 131, 132, and 133	Rotary Drum Cleaner	PM ₁₀	1.1	4.6

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with this condition by compliance with Specific Conditions 6, 8, 13, and 15. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Rice Receiving	Removed		
03	Ten (10) Small Storage Bins	Removed		

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

SN	Description	Pollutant	lb/hr	tpy
04	Four (4) Large Storage Bins	PM	4.5	2.8
05	Three (3) Intermediate Storage Bins	PM	4.5	1.3
06	Truck Loadout	Removed		
02, 07, 08, 09, & 11	Trash Removal	PM	0.1	0.1
10	Receiving Dust Collection	PM	0.2	0.2
31	Three Mill Day Bins	Removed		
59; with emissions from 100-104, 40, 42, 44, 21-26, 54-58, 61-64, 87-90, 92, 95, and 68	Mill Rough Rice Dust Collector C-31	PM	0.1	0.4
60; with emissions from 105-107, 52-54, 57, 40, 42, 50, 52, 53, 56, 79, 86, 91, 93, 94, and 96	Mill White Rice Dust Collector C-32	PM	0.1	0.1
66	Reject Loadout	Removed		
67	Milled Rice Storage	PM	0.2	1.0
69	Milled Rice Bagging	PM	0.1	0.1
70	Milled Rice Loadout	PM	0.5	0.5
13, 61, 71	Bran Transfer & Rough Rice Transfer	PM	0.1	0.1
72	Bran Storage – Five Bins	PM	0.2	1.4
12, 73, 74	Unground Hull Storage	PM	0.1	0.1
76	Hammermills	PM	0.2	0.5

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

SN	Description	Pollutant	lb/hr	tpy
77	Ground Hull Storage – Nine Bins	PM	2.0	5.5
78	By-product Loadout	PM	0.8	3.5
96	Rice Cracker and Aspirator	PM	0.1	0.1
110; with emissions from 108, 54, 55, 57, and 109	Bran Dust Collector C- 39	PM	0.1	0.1
97	Fumigation Process	Phosphine	0.7	1.9
		Methyl Bromide	345.00	5.00
		Sulfuryl Fluoride	1,500.00	6.75
111	Bran Sifters - Five	PM	0.1	0.4
112	Whole Rice Conveyors	PM	0.1	0.1
113	Bran Mechanical Conveyors	PM	0.1	0.4
114	Broken Rice Mechanical Conveyors	PM	0.1	0.1
115	Broken Rice Pneumatic Conveyors	PM	0.1	0.1
128	Railcar Unloading Connection	PM	1.3	0.2
129; with emissions from 116 - 127	Rough Rice System Duct Collector	PM	0.4	1.0
SN-134 with emissions from SN- 120, 131, 132, and 133	Rotary Drum Cleaner	PM	1.1	4.6

- Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

SN	Limit	Regulatory Citation
04	20%	§18.501
05	5%	§18.501
02, 07, 08, 09, & 11	5%	§18.501
10	5%	§18.501
59; with emissions from 100-104, 21-26, 40, 42, 44, 54, 55, 57, 58, 61-64, 79, 87-90, 92, 95 and 68	5%	§18.501
60; with emissions from 105-107, 40, 41, 50, 52, 53, 56, 86, 91, 93, 94, and 96	5%	§18.501
67-69	20%	§18.501
70	20%	§18.501
13, 61, 71	5%	§18.501
72	20%	§18.501
12, 73, 74	5%	§18.501
76	5%	§18.501
77	20%	§18.501
78	5%	§18.501
110; with emissions from 108, 54, 55, 57, and 109	5%	§18.501
111	20%	§18.501
112	20%	§18.501
113	20%	§18.501
114	20%	§18.501
115	5%	§18.501
128	5%	40 C.F.R. §60.302

SN	Limit	Regulatory Citation
129; with emissions from 116-127	0%	40 C.F.R. §60.302
SN-134 with emissions from SN-120, 131, 132, and 133	0%	40 C.F.R. §60.302(b)(2)

4. The permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation 18, if the emission of the air contaminant constitutes air pollution within the meaning of Ark. Code Ann. § 8-4-303. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Reg.18.901 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
6. The facility will not mill more than 500,000 tons of grain per consecutive twelve month period, and all grain received at the facility must be milled. (Note: Facility requested to keep records of grain milled rather than grain received). [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
7. The permittee will maintain monthly records which demonstrate compliance with Specific Condition 6. Records will be updated by the fifteenth day of the month following the month to which the records pertain. These records will be kept on site, and will be made available to Department personnel upon request. A twelve month rolling total and each individual month's data will be kept on site. [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
8. The permittee will maintain and operate the moving vertical hood (by-product truck loadout SN-78) at all times when the loadout operations are in progress. [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
9. The permittee will dedicate by-product storage bins SN-74, and SN-77 to the storage of by-products (hulls) only. The by-product storage bins (hulls) capacity will not exceed 52,000 bushels, and will be excluded from the use of storage for grain. [Reg.19.705, Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
10. The permittee will dedicate bran storage bins SN-72, to the storage of bran only. The bran storage bins' capacities will not exceed a total of 32,900 bushels and will be excluded from the use of storage for grain. [Reg.19.705, Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

11. The permittee will store only processed rice in milled rice storage bins SN-67. The milled rice storage bins will be excluded from the use of storage for field grain. [Reg.19.705, Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
12. The permittee will label all control equipment and associated emission points for easy identification. A complete equipment list is included in Appendix A. [Reg.19.703 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
13. The permittee will not use more than 5.8 tons of aluminum phosphide, 5 tons of methyl bromide, and 15 tons of sulfuryl fluoride per consecutive 12 month period. [Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
14. The permittee will maintain monthly records which demonstrate compliance with the usage limits in Specific Condition 13. Records will be updated by the fifteenth day of the month following the month to which the records pertain. These records will be kept on site, and will be made available to Department personnel upon request. A twelve month rolling total and each individual month's data will be kept on site. [Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
15. The control equipment associated with this facility will be maintained and operated in serviceable condition prescribed by the manufacturer during the operation of the plant. [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

NSPS Requirements

16. The permittee will conduct an initial test for SN-129 and 134 to determine compliance with the opacity limits specified in Specific Condition 3 and the 0.01gr/dscf particulate matter limit. EPA Reference Method 9 should be used for opacity, Method 5 for particulate matter emissions, and the procedures in §60.11 will also be used. [Reg.19.304 and 40 C.F.R. §60.303 and §60.8 Appendix A and in accordance with General Condition 7 and 8]
17. The facility will not emit more than 0.01 gr/dscf of particulate emissions or exhibit more than 0% opacity from SN-129 and 134. [Reg.19.705 and 40 C.F.R. §60.302(b)]

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and Regulation 19 Appendix A. Group B insignificant activities may be listed but are not required to be listed in permits. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated March 23, 2004. [Reg.19.408 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Description	Category
One (1) - 500 gallon diesel fuel tanks	A-3
Containers of less than or equal to 5 gallons in capacity	A-8

Section VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
3. The permittee shall notify the Department in writing within thirty (30) days after each of the following events: commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Reg.19.704 and/or Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Reg.19.410(B) and/or Reg.18.309(B) and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [Reg.19.705 and/or Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [Reg.19.705 and/or Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Arkansas Department of Environmental Quality
Office of Air Quality
ATTN: Compliance Inspector Supervisor

Busch Agricultural Resources, LLC
Permit #: 0604-AR-12
AFIN: 16-00104

5301 Northshore Drive
North Little Rock, AR 72118-5317

7. The permittee shall test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee must submit compliance test results to the Department within sixty (60) calendar days after the completion of testing. [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
8. The permittee shall provide: [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment
9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Reg.19.303 and/or Reg.18.1104 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [Reg.19.601 and/or Reg.18.1101 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
 - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.
 - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
 - c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and

nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.

11. The permittee shall allow representatives of the Department upon the presentation of credentials: [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
 - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
 - c. To inspect any monitoring equipment or monitoring method required in this permit;
 - d. To sample any emission of pollutants; and
 - e. To perform an operation and maintenance inspection of the permitted source.
12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [Reg.19.410(A) and/or Reg.18.309(A) and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Reg.19.407(B) and/or Reg.18.307(B) and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

15. This permit shall be available for inspection on the premises where the control apparatus is located. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
16. This permit authorizes only those pollutant emitting activities addressed herein. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
17. This permit supersedes and voids all previously issued air permits for this facility. [Reg. 18 and/or Reg. 19 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
18. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [Ark. Code Ann. § 8-1-105(c)]
19. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
 - a. Such an extension does not violate a federal requirement;
 - b. The permittee demonstrates the need for the extension; and
 - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Reg.18.314(A) and/or Reg.19.416(A), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]
20. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
 - a. Such a request does not violate a federal requirement;
 - b. Such a request is temporary in nature;
 - c. Such a request will not result in a condition of air pollution;
 - d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
 - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
 - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

Busch Agricultural Resources, LLC

Permit #: 0604-AR-12

AFIN: 16-00104

[Reg.18.314(B) and/or Reg.19.416(B), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

21. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
 - a. The request does not violate a federal requirement;
 - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
 - c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Reg.18.314(C) and/or Reg.19.416(C), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

APPENDIX A

40 C.F.R. Part 60, Subpart DD – *Standards of Performance for Grain Elevators*

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of May 24, 2017

[Title 40](#) → [Chapter I](#) → [Subchapter C](#) → [Part 60](#) → Subpart DD

Title 40: Protection of Environment

[PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES](#)

Subpart DD—Standards of Performance for Grain Elevators

Contents

[§60.300](#) Applicability and designation of affected facility.

[§60.301](#) Definitions.

[§60.302](#) Standard for particulate matter.

[§60.303](#) Test methods and procedures.

[§60.304](#) Modifications.

SOURCE: 43 FR 34347, Aug. 3, 1978, unless otherwise noted.

[↑ Back to Top](#)

§60.300 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are 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.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

[43 FR 34347, Aug. 3, 1978, as amended at 52 FR 42434, Nov. 5, 1988]

[↑ Back to Top](#)

§60.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Grain* means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(b) *Grain elevator* means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(c) *Grain terminal elevator* means any grain elevator which has a permanent storage capacity of more than 88,100 m³ (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(d) *Permanent storage capacity* means grain storage capacity which is inside a building, bin, or silo.

(e) *Railcar* means railroad hopper car or boxcar.

(f) *Grain storage elevator* means 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).

(g) *Process emission* means the particulate matter which is collected by a capture system.

(h) *Fugitive emission* means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(i) *Capture system* means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.

(j) *Grain unloading station* means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hopper.

(k) *Grain loading station* means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.

(l) *Grain handling operations* include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and the headhouse and other such structures.

(m) *Column dryer* means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

(n) *Rack dryer* means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).

(o) *Unloading leg* means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

[43 FR 34347, Aug. 3, 1978, as amended at 65 FR 61759, Oct. 17, 2000]

[↑ Back to Top](#)

§60.302 Standard for particulate matter.

(a) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any:

- (1) Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).
- (2) Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

- (1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).
- (2) Exhibits greater than 0 percent opacity.

(c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

- (1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
- (2) Any grain handling operation which exhibits greater than 0 percent opacity.
- (3) Any truck loading station which exhibits greater than 10 percent opacity.
- (4) Any barge or ship loading station which exhibits greater than 20 percent opacity.
- (d) The owner or operator of any barge or ship unloading station shall operate as follows:

(1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

(2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³/bu).

(3) Rather than meet the requirements of paragraphs (d)(1) and (2) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less.

[↑ Back to Top](#)

§60.303 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.302 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.

(2) Method 2 shall be used to determine the ventilation volumetric flow rate.

(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For Method 5, Method 17 may be used.

[54 FR 6674, Feb. 14, 1989]

[↑ Back to Top](#)

§60.304 Modifications.

(a) The factor 6.5 shall be used in place of “annual asset guidelines repair allowance percentage,” to determine whether a capital expenditure as defined by §60.2 has been made to an existing facility.

(b) The following physical changes or changes in the method of operation shall not by themselves be considered a modification of any existing facility:

(1) The addition of gravity loadout spouts to existing grain storage or grain transfer bins.

(2) The installation of automatic grain weighing scales.

(3) Replacement of motor and drive units driving existing grain handling equipment.

(4) The installation of permanent storage capacity with no increase in hourly grain handling capacity.

[↑ Back to Top](#)

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