MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 122017-009

Project Number: 2017-07-052
Installation Number: 053-0024

Parent Company: Pilot Grove Cooperative Elevator Inc.

Parent Company Address: 12302 Highway 135, Pilot Grove, MO 65233

Installation Name: Pilot Grove Cooperative Elevator Inc.

Installation Address: 12302 Highway 135, Pilot Grove, MO 65233

Location Information: Cooper County, S5, T47N, R18W

Application for Authority to Construct was made for:
Two new grain storage bins. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

☐ Standard Conditions (on reverse) are applicable to this permit.

☑ Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

Prepared by
Chad Stephenson
New Source Review Unit

Director or Designee
Department of Natural Resources

DEC 20 2017
Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
http://dnr.mo.gov/regions/

SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Pilot Grove Cooperative Elevator Inc.
Cooper County, S5, T47N, R18W

1. PM_{10} Emission Limitation
   A. Pilot Grove Cooperative Elevator Inc. shall emit less than 15.0 tons of PM_{10} in any consecutive 12-month period from the emission points listed in the table below.

Table 1: Emission Points for Grain Storage Facility - Section E

Emission Point	Description
EP-20a	Straight Truck Grain Receiving
EP-20b	Hopper Truck Grain Receiving
EP-21	Grain Handling
EP-22	Storage Bin Vents (2)
EP-23	Truck Shipping
EP-24	Grain Shipping/Receiving 1200' Gravel Road for Two New Storage Bins

   B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.

2. Record Keeping and Reporting Requirements
   A. Pilot Grove Cooperative Elevator Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

   B. Pilot Grove Cooperative Elevator Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at aircompliancereporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW
Project Number: 2017-07-052
Installation ID Number: 053-0024
Permit Number: 122017-009

Installation Address:
Pilot Grove Cooperative Elevator Inc.
12302 Highway 135
Pilot Grove, MO 65233

Parent Company:
Pilot Grove Cooperative Elevator Inc.
12302 Highway 135
Pilot Grove, MO 65233

Cooper County, S5, T47N, R18W

REVIEW SUMMARY

- Pilot Grove Cooperative Elevator Inc. has applied for authority to construct two new grain bins with a new grain leg to facilitate the loading and unloading of grain.
- The application was deemed complete on August 22, 2017.
- HAP emissions are not expected from the proposed equipment.
- Subpart DD, *Standards of Performance for Grain Elevators* applies to the installation because the storage capacity at this facility is greater than 2.5 million bushels of grain.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM_{10} are conditioned below de minimis levels.
- This installation is located in Cooper County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.

- Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules

- An Intermediate or Part 70 Operating Permit application is required no later than 90 days after the issuance of this permit.

- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Pilot Grove Cooperative Elevator Inc. is a grain and feed handling and dry bulk fertilizer blending plant. Upon completion of this project Pilot Grove Cooperative Elevator Inc. will have a permanent grain storage capacity greater than 2.5 million bushels. Therefore, 40 CFR Part 60 Subpart DD, *Standards of Performance for Grain Elevators*, applies to this installation.

Pilot Grove Cooperative Elevator, Inc. applied for an Intermediate Operating Permit, under project number 2002-10-012. The project was closed out because it was believed that construction permit 022006-006 limited the facility to less than de minimis levels. After the project was closed out it was determined that construction permit 022006-006 only limited non grandfathered equipment at the site and did not include grandfathered equipment. In 2007, Pilot Grove Cooperative Elevator, Inc. submitted a new construction permit application under project 2007-01-036 to add an installation wide requirement including grandfathered equipment to emit less than 15 tpy of PM_{10}. During the review of that project the site decided an installation wide limit would not be feasible for their operations so the project was closed out. No operating permit application has been received since that project was closed out. Pilot Grove Cooperative Elevator, Inc. will need to submit an application for an Intermediate or Part 70 Operating Permit within 90 days of issuance of this permit.

The following Construction Permits have been issued to Pilot Grove Cooperative Elevator, Inc from the Air Pollution Control Program.

Table 2: Previously Issued Construction Permits

Permit Number	Description
0995-013	Add a Dry Fertilizer and Grain Handling Plant
1095-005	New Elevator Leg, Drag Conveyor, Receiving Pit
0896-003	Bulk Fertilizer Plant
052002-003	Installation of two storage bins
012005-014	New Grain Bin
022006-006	New Grain Bin

The installation consists of five existing sections and one new section as constructed as part of this project:

- Existing - Feed Handling – Section A – The oldest portion of the installation, the feed operation receives feed by truck through pits and then elevates it with the grain leg to a number of storage bins (bins 6-0, 4-0, 2-0, G-4, G-3, G-2E, G-2W and G-1). The feed is transferred to a mixer prior to being elevated with the feed leg. The feed is either loaded directly to trucks or into the sacking bins, whereupon the feed is bagged and shipped.
- Existing - Grain Handling – Section A – Grain is received by trucks through pits. The grain is elevated with the grain leg to storage bins 5-8. A portion of the grain is re-elevated with the grain leg to the crimper. After the grain is crimped, it is elevated with the grain leg once more to storage bins 9-11. The grain is then mixed and elevated with the feed leg to truck loadout.
- Existing - Grain Handling – Section B – The grain elevator portion of the facility receives grain by truck through two pits. The grain is then elevated and transferred to various storage bins (bins 1-12) by feed legs. "Wet corn" that is stored in Bin 1 is elevated with the jump leg to the dryer. From the dryer, the corn is elevated by the discharge leg to storage bin 4 directly or to the grain receiving leg and then to storage bins 1-5, before being transferred to trucks for shipping.
- Existing - Grain Storage Facility – Section C – The grain storage facility is located approximately 0.5 miles north of the main facility and serves only to store grain. The applicant has stated that no improvements have been made to the Grain Storage Facility since it was purchased in 1977; all of the equipment located in Section C is grandfathered. Grain is received in a pit, elevated to bins for storage and then re-elevated for loadout to trucks. A receiving pit, elevator leg, dryer and several small storage bins (numbered 1-7, 9, 12-15), originally located at this site have been removed, or rendered incapable of operation.
- Existing - Fertilizer – Section D – The dry fertilizer plant receives dry material by truck into a pit. The unloading conveyor then transfers the fertilizer to bays. A bobcat type loader then transfers the various fertilizer materials to a mixer. After blending, the mixed fertilizer is transferred by loadout conveyor to waiting trucks.
- New - Grain Storage Facility – Section E - Two grain storage bins with a capacity of 737,125 bushels each equipped with a leg for loading and unloading of grains.

PROJECT DESCRIPTION

Pilot Grove Cooperative Elevator Inc. is installing two new grain storage bins (EP-20 through EP-24) that are equipped with a 20,000 bushels per hour grain leg to facilitate the loading and unloading of grains referred to as Grain Storage Facility – Section E. Each storage bin will have a 105' diameter with 25 rings, 91'9" eave, and 120'5" peak height. The bins have a capacity of 737,125 bushels each, for a total of 1,474,250 bushels. The maximum hourly design rate (MHDR) for the new grain bins is 20,000 bushel per hour (600 tons per hour). There are no control devices being used to control emissions from this equipment. The haul road associated with the new grain bins will be approximately 1,200 feet long and unpaved.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 "Grain Elevators and Processes," May 2003. The emission factors and control efficiencies for haul roads were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 13.2.2 "Unpaved Roads," November 2006.

Pilot Grove Cooperative Elevator Inc. will have the ability to receive different types of grain at different test weights and moisture contents (densities). Grain receiving at the elevator was assumed to occur through a 50/50 split of straight trucks and hopper trucks. This is a conservative assumption as the emission factor for straight truck receiving is higher than the emission factor for hopper bottom receiving and the trend in the industry is moving towards more hopper bottom trucks compared to straight trucks. Without placing limits on the amount of each grain type received, calculations were performed at all grain having the conservative density of 60 pounds per bushel.

The following table provides an emissions summary for this project. Existing potential PM_{10} emissions were taken from project 2007-001-036 which calculated the potential PM_{10} emissions of the grandfathered equipment as 97.86 tpy and permit 022006-006 which included a 15.0 tpy limit for all non-grandfathered equipment. Only PM_{10} emissions were calculated with project 2007-01-036. Existing actual emissions were taken from the installation's 2016 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Conditioned potential emissions of the application represent a voluntary limit to avoid PM_{10} dispersion modeling at the time of permitting

Table 3: Emissions Summary (tpy)

Pollutant	Regulatory *De Minimis* Levels	Existing Potential Emissions	Existing Actual Emissions (2016 EIQ)	Potential Emissions of the Project	Conditioned Emissions of the Project
PM	25.0	N/D	N/D	1,490.95	46.11
PM_{10}	15.0	112.86	8.48	485.00	<15.0
$PM_{2.5}$	10.0	N/D	0.42	67.37	2.08
SOx	40.0	N/D	N/D	N/A	N/A
NOx	40.0	N/D	N/D	N/A	N/A
VOC	40.0	N/D	N/D	N/A	N/A
CO	100.0	N/D	N/D	N/A	N/A
GHG (CO_2e)	N/A	N/D	N/D	N/A	N/A
GHG (mass)	N/A	N/D	N/D	N/A	N/A
HAPs	10.0/25.0	N/D	N/D	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM_{10} are conditioned below de minimis levels. Potential PM emissions remain above the de minimis level, but below the major source level.

APPLICABLE REQUIREMENTS

Pilot Grove Cooperative Elevator Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Operating Permits*, 10 CSR 10-6.065
    - *An Intermediate or Part 70 Operating Permit application is due within 90 days of permit issuance.*

- *Start-Up, Shutdown, and Malfunction Conditions,* 10 CSR 10-6.050

- *Submission of Emission Data, Emission Fees and Process Information,* 10 CSR 10-6.110
    - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.

- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170

- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220

- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- 40 CFR Part 60 Subpart DD, *Standards of Performance for Grain Elevators,* applies to this installation

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 19, 2017, received July 20, 2017, designating Pilot Grove Cooperative Elevator Inc. as the owner and operator of the installation.
- The addendum to the Construction Permit Application, dated August 21, 2017, received August 22, 2017, providing information on haul roads and the application fee

Attachment A – PM_{10} Compliance Worksheet for Grain Storage Facility – Section E

Pilot Grove Cooperative Elevator Inc.
Cooper County, S5, T47N, R18W
Project Number: 2017-07-052
Installation ID Number: 053-0024
Permit Number: 122017-009

This sheet covers the period from _____ (month, year) to _____ (month, year).

C1	C2	C3	C4	C5	C6	C7
Date (Month/year)	Monthly Grain Shipped for Section E (tons)	Composite PM_{10} Emission Factor (lbs PM_{10}/ton)	Monthly PM_{10} Emissions (lbs)	Monthly PM_{10} Emissions (Tons)	Monthly SSM PM_{10} Emissions	12-Month Rolling Total PM_{10} Emissions (Tons/Year)
Example	10,000	0.1845	1,845	0.92	0.00	0.92 + previous 11 months

C1: Enter the date
C2: Enter the monthly total amount of grain shipped from Section E in units of tons per month
C3: Composite PM_{10} Emission Factor is in units of lbs PM_{10} per ton of grain shipped from Section E and considers the emissions from all emission units (EP20-EP24)
C4 = C2 × C3
C5=C4/2000
C6 = As reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050.
C7 = 12-Month Rolling Total PM_{10} Emissions (tons/year) are a rolling total calculated by adding [C5 + C6 + the total emissions of the previous eleven (11) months]. A total of less than **15.0** tons of PM_{10} in any consecutive 12-month period indicates compliance.

APPENDIX A

Abbreviations and Acronyms

%.....percent
°F.....degrees Fahrenheit
acfm.....actual cubic feet per minute
BACT.....Best Available Control Technology
BMPs.....Best Management Practices
Btu.....British thermal unit
CAM.....Compliance Assurance Monitoring
CAS.....Chemical Abstracts Service
CEMS.....Continuous Emission Monitor System
CFR.....Code of Federal Regulations
CO.....carbon monoxide
CO_2.....carbon dioxide
CO_2e.....carbon dioxide equivalent
COMS.....Continuous Opacity Monitoring System
CSR.....Code of State Regulations
dscf.....dry standard cubic feet
EIQ.....Emission Inventory Questionnaire
EP.....Emission Point
EPA.....Environmental Protection Agency
EU.....Emission Unit
fps.....feet per second
ft.....feet
GACT.....Generally Available Control Technology
GHG.....Greenhouse Gas
gpm.....gallons per minute
gr.....grains
GWP.....Global Warming Potential
HAP.....Hazardous Air Pollutant
hr.....hour
hp.....horsepower
lb.....pound
lbs/hr.....pounds per hour
MACT.....Maximum Achievable Control Technology
$\mu g/m^3$.....micrograms per cubic meter
m/s.....meters per second
Mgal.....1,000 gallons
MW.....megawatt
MHDR.....maximum hourly design rate
MMBtu.....Million British thermal units
MMCF.....million cubic feet
MSDS.....Material Safety Data Sheet
NAAQS.....National Ambient Air Quality Standards
NESHAPs National Emissions Standards for Hazardous Air Pollutants
NO_x.....nitrogen oxides
NSPS.....New Source Performance Standards
NSR.....New Source Review
PM.....particulate matter
$PM_{2.5}$.....particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10}.....particulate matter less than 10 microns in aerodynamic diameter
ppm.....parts per million
PSD.....Prevention of Significant Deterioration
PTE.....potential to emit
RACT.....Reasonable Available Control Technology
RAL.....Risk Assessment Level
SCC.....Source Classification Code
scfm.....standard cubic feet per minute
SDS.....Safety Data Sheet
SIC.....Standard Industrial Classification
SIP.....State Implementation Plan
SMAL.....Screening Model Action Levels
SO_x.....sulfur oxides
SO_2.....sulfur dioxide
SSM.....Startup, Shutdown & Malfunction
tph.....tons per hour
tpy.....tons per year
VMT.....vehicle miles traveled
VOC.....Volatile Organic Compound

PTE (tpy)

Pollutant		Existing	Application	Conditioned
PM		N/A	1490.95	46.11
PM10		N/A	485.00	<15.0
PM2.5		N/A	67.37	2.08
Sox		N/A	N/A	N/A
Nox		N/A	N/A	N/A
VOC		N/A	N/A	N/A
CO		N/A	N/A	N/A
HAP		N/A	N/A	N/A

GRAIN

	Emission point	Description	Process: Hopper Truck %	Process: Straight Truck %	Process: Rail %	Process: Barge %	MHDR true (tons)	MHDR annual (tons)	Control Device	Capture Efficiency %	PM Removal Eff %	PM10 Removal Eff %	PM2.5 Removal Eff%	Hours per Year
Receiving	EP 1a	Grain Receiving	100%	0%			600	300						8760
	EP 1b	Grain Receiving	0%	100%			600	300						8760
Shipping	EP 4	Shipping	100%				600	600						8760
Process Equipment	EP 2	Leg Grain Handling	Headhouse & Internal Handling (legs, belts, distributors, scale, etc.) - 30200530				600	600						8760
	EP 3	Bin Vents (2)	Storage Bin Vents - 30200540				600	600						8760
	EP 5	Haul Roads (see Haul Roads tab)												

mhdr is 600 tph. 300 was used to correct the pte due to 50/50 split on truck type

Emission point	PM Emission Factor (lb/ton)	PM10 Emission Factor (lb/ton)	PM2.5 Emission Factor (lb/ton)	Emission Factor SCC	Available PM lb/hr	Available PM10 lb/hr	Available PM2.5 lb/hr	PM Emissions (tpy)	PM10 Emissions (tpy)	PM2.5 Emissions (tpy)
EP 1a	0.035	0.0078	0.0013	30200552	10.5	2.34	0.39	45.99	10.25	1.71
EP 1b	0.18	0.059	0.01	30200551	54	17.7	3	236.52	77.53	13.14
EP 4	0.0860	0.0290	0.0049	30200560	51.6	17.4	2.94	226.01	76.21	12.88
EP 2	0.0610	0.0340	0.0058	30200530	36.60000	20.40000	3.48000	160.31	89.35	15.24
EP 3	0.0250	0.0063	0.0011	30200540	15.00000	3.78000	0.66000	65.70	16.56	2.89
EP5								756.43	215.10	21.51
							Totals	1490.951	484.996	67.369

	Composite PM10	Production Limit (tons)	Production Limit (bushels)
Grain	0.184549335	162558.158	5418605.27

Activity Description	MHDR (tons/hr)	(trips/hr)	Truck Types: Hopper	Straight	type	type	We*	Wf*
hopper receiving	300.0	15.000	100%				10	30
straight receiving	300.0	15.000		100%			10	30
shipping	600.0	30.000	100%				10	30
		0.000					0	0
		0.000					0	0
		0.000					0	0
		0.000					0	0
		0.000					0	0
		0.000					0	0

Truck Type	We (tons)	Wf (tons)
Hopper	10	30
Straight	10	30
type		
type		

truck type row must sum to 100% per each activity

1=empty
2=full
3=both

Road Segment ID		1	2	3	4	5	6	7	8	9	10	11	12		
D one way (feet)		1200													
D one way (miles)		0.227	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Activities: hopper receiving		3													
straight receiving		3													
shipping		3													
	0														
	0														
	0														
	0														
	0														
	0														

W'		1	2	3	4	5	6	7	8	9	10	11	12		
hopper receiving		5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
straight receiving		5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
shipping		10.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W		20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface		Unpaved	Paved	Paved	Paved	Unpaved	Unpaved	Unpaved	Unpaved	Unpaved	Unpaved	Unpaved	Unpaved	Unpaved	Unpaved

		1	2	3	4	5	6	7	8	9	10	11	12		
E(PM2.5) (lbs/VMT):		0.25279	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E(PM10) (lbs/VMT):		2.52789	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E(PM30) (lbs/VMT):		8.88961	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Eext(PM2.5) (lbs/VMT):		0.18007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Eext(PM10) (lbs/VMT):		1.80069	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Eext(PM30) (lbs/VMT):		6.33233	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MHDR': hopper receiving		6.818182	0	0	0	0	0	0	0	0	0	0	0	0	0
straight receiving		6.818182	0	0	0	0	0	0	0	0	0	0	0	0	0
shipping		13.63636	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MHDR	27.27273	0	0	0	0	0	0	0	0	0	0	0	0	0

PTE (lb/hr)

PTE PM2.5 (lb/hr)	6.894232	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM10 (lb/hr)	68.94232	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM30 (lb/hr)	242.444	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM2.5 (lb/hr) w/ rain	4.91096	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM10 (lb/hr) w/ rain	49.1096	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM30 (lb/hr) w/ rain	172.6998	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM2.5 (tons/yr)	30.19674	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM10 (tons/yr)	301.9674	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM30 (tons/yr)	1061.905	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM2.5 (tons/yr) w/ rain	21.51001	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM10 (tons/yr) w/ rain	215.1001	0	0	0	0	0	0	0	0	0	0	0	0
PTE PM30 (tons/yr) w/ rain	756.4252	0	0	0	0	0	0	0	0	0	0	0	0

PTE (tons/yr)

Totals

	PM	PM10	PM2.5
hopper receiving	43.17495	12.2774	1.22774
straight receiving	43.17495	12.2774	1.22774
shipping	86.3499	24.5548	2.45548
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
Sum PTE (lb/hr)	172.6998	49.1096	4.91096
SUM PTE Grain (tpy)	756.4252	215.1001	21.51001
	0	0	0
	0	0	0
SUM PTE total (tpy)	756.4252	215.1001	21.51001

Conrtol Efficiency %

Haul Road BMP's	PM	PM10	PM2.5
No Control	0	0	0

Chemical surfactant will be applied to the unpaved haul roads

Haul Road BMP's	Conrtol Efficiency % PM	PM10	PM2.5
No Control	0	0	0
Undocumented Watering	50	50	22.22222
Documented Watering	90	90	40

Missouri Department of dnr.mo.gov
NATURAL RESOURCES
Eric R. Greitens, Governor Carol S. Comer, Director

DEC 2 0 2017

Mr. Earl Haller
General Manager
Pilot Grove Cooperative Elevator Inc.
10154 Martinsville Road
Boonville, MO 65233

RE: New Source Review Permit - Project Number: 2017-07-052

Dear Mr. Haller:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your operating permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Chad Stephenson, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:csj

Enclosures

c: Northeast Regional Office
PAMS File: 2017-07-052

Permit Number: 122017-009