

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2215-AR-1 AFIN: 18-00881

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Consolidated Grain and Barge Co.  
896 S. Walker Avenue  
West Memphis, Arkansas 72301

3. PERMIT WRITER:

John Mazurkiewicz

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Grain and Field Bean Merchant Wholesalers  
NAICS Code: 424510

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
5/16/2019	Modification	Increase permitted grain and propane throughput at the Grain Dryer #1 and 2 (SN-05 and SN-06)

6. REVIEWER'S NOTES:

The facility emits HAPs related to incomplete combustion of propane; limits for these pollutants have been included in the permit.

Total allowable emissions for PM and PM<sub>10</sub> are not correctly represented in the initial permit. The facility wide emission rates for PM and PM<sub>10</sub> were permitted at 44.9 lb/hr and 13.1 lb/hr respectively.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

On January 22, 2019, Consolidated Grain and Barge Co. submitted a request for consideration under ADEQ's Environmental Self-Disclosure Incentive Policy. The submission indicates the facility violated annual PM and PM<sub>10</sub> emission limits for the Grain Dryer #1 and 2 (SN-05 and SN-06) in Specific Conditions #1 and 2 of the existing permit (Permit#: 2215-A). On June 6, 2019 a CAO (LIS No. 19-055) was executed addressing the self-disclosure and violation.

The facility was last inspected on October 9, 2018. No violations or areas of concern were noted. A review of ECHO revealed no violations in the last twelve quarters.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? No  
If yes, were GHG emission increases significant? N/A

b) Is the facility categorized as a major source for PSD? No

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD. N/A

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
None		

10. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? No

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? N/A  
If not, explain why.

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

c) H<sub>2</sub>S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H<sub>2</sub>S Standards? Yes

If exempt, explain: The facility does not emit hydrogen sulfide.

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	AP-42-9.9.1-1	PM: 0.025 lb/ton PM <sub>10</sub> : 0.0063 lb/ton	None	N/A	TPY based on annual throughput
02	AP-42-9.9.1-1	PM: 0.025 lb/ton PM <sub>10</sub> : 0.0063 lb/ton	None	N/A	
03	AP-42-9.9.1-1	PM: 0.025 lb/ton PM <sub>10</sub> : 0.0063 lb/ton	None	N/A	
04	AP-42-9.9.1-1	PM: 0.025 lb/ton PM <sub>10</sub> : 0.0063 lb/ton	None	N/A	
05	AP-42-9.9.1-1 & 1.5-1	Grain Elevators: PM: 0.22 lb/ton PM <sub>10</sub> : 0.055 lb/ton Fuel Combustion: PM/ PM <sub>10</sub> : 0.0007	None	N/A	TPY based on propane usage of 300,000 gallons of propane  2,340 hr/yr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		lb/gal SO <sub>2</sub> : 0.0015 lb/gal NO <sub>x</sub> : 0.013 lb/gal VOC: 0.001 lb/gal CO: 0.0075 lb/gal			
06	AP-42-9.9.1-1 & 1.5-1	Grain Elevators: PM: 0.22 lb/ton PM <sub>10</sub> : 0.055 lb/ton Fuel Combustion: PM/ PM <sub>10</sub> : 0.0007 lb/gal SO <sub>2</sub> : 0.0015 lb/gal NO <sub>x</sub> : 0.013 lb/gal VOC: 0.001 lb/gal CO: 0.0075 lb/gal	None	N/A	TPY based on propane usage of 300,000 gallons of propane  2,340 hr/yr
07	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With a 90% collection efficiency	Filter System	98%	TPY based on annual throughput
08	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With a 90% collection efficiency	Filter System	98%	
09	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With a 90% collection efficiency	Filter System	98%	
10	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With a 90% collection efficiency	Filter System	98%	
07	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With 10% fugitive emissions	None	None	TPY based on annual throughput

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
08a	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With 10% fugitive emissions	None	None	
09a	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With 10% fugitive emissions	None	None	
10a	AP-42-9.9.1-1	Straight Truck: 0.18 lb/ton PM 0.059 lb/ton PM <sub>10</sub> With 10% fugitive emissions	None	None	
11	AP-42-9.9.1-1	PM: 0.061 lb/ton PM <sub>10</sub> : 0.034 lb/ton	Fully enclosed	99%	Annual Throughput: 42,000,000 bushels
12	AP-42-9.9.1-1	PM: 0.016 lb/ton PM <sub>10</sub> : 0.004 lb/ton	Telescopic Spout	50%	Annual Throughput: 41,000,000 bushels
13	AP-42-9.9.1-1	PM: 0.086 lb/ton PM <sub>10</sub> : 0.029 lb/ton	Loadout Socks	50%	Annual Throughput: 1,000,000

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
None				

15. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
None				

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
05 & 06	Annual propane usage	300,000 gal (both sources combined)	Monthly	N
	Annual throughput of grain	10,000,000 bushels	Monthly	N
07, 08, 09 & 10	Annual throughput of grain	42,000,000 bushels	Monthly	N
12	Annual throughput of grain	41,000,000 bushels	Monthly	N
13	Annual throughput of grain	1,000,000 bushels	Monthly	N

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
05 and 06	20%	Reg.19.503	Observation
01-04 and 11-13	20%	Reg.18.501	Observation
07, 08, 09, 10	Dust Filter System: 10%	Reg.18.501	Observation
	Fugitives: 20%	Reg. 19.503	Observation

18. DELETED CONDITIONS:

Former SC	Justification for removal
	None

19. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						HAPs	
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Single	Total	
None									

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20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
2215-A





## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Minor Source

Revised 03-11-16

Consolidated Grain and Barge Co.

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			Old Permit		New Permit
\$/ton factor	23.93	Permit Predominant Air Contaminant	52.4		64.9
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	12.5		
Minimum Initial Fee \$	500				
Check if Administrative Amendment	<input type="checkbox"/>	Permit Fee \$			400
		Annual Chargeable Emissions (tpy)			64.9

Pollutant (tpy)	Old Permit	New Permit	Change
PM	52.4	64.9	12.5
PM <sub>10</sub>	14.8	18	3.2
PM <sub>2.5</sub>	0	0	0
SO <sub>2</sub>	0.1	0.3	0.2
VOC	0.1	0.2	0.1
CO	0.7	1.2	0.5
NO <sub>x</sub>	1.2	2	0.8
Total HAPs	0	0.15	0.15