# GAVILON GRAIN, LLC

# PERMIT CONDITION REVISION APPLICATION

FACILITY LOCATED AT: 1327 US HWY 60-84 CLOVIS, NM 88101

APPLICATION SUBMITTED TO: AIR QUALITY BUREAU – PERMITS SECTION NEW MEXICO ENVIRONMENT DEPARTMENT 525 CAMINO DE LOS MARQUEZ SUITE 1 SANTA FE, NEW MEXICO 87505

APPLICATION DATE: JUNE 19, 2018



#### Prepared for:



Gavilon Grain, LLC 1327 US Highway 60-84 Clovis, New Mexico 88101

Phone: 575.762.2946

Web: http://www.gavilon.com/

#### Prepared by:



Air Regulations Consulting, LLC 128 N 13<sup>th</sup> Street, Suite 1003 Lincoln, NE 68508

Phone: 402.817.7887

Web: http://www.airregconsulting.com/

#### 1 PERMIT REVISION APPLICATION SUBMITTAL AND APPROVAL

Title: AIR POLLUTION CONTROL CONSTRUCTION PERMIT REVISION APPLICATION

Organization: Gavilon Grain, LLC (Gavilon)

Facility: West Clovis Animal Feed Manufacturing Facility (Clovis Facility)

Revision Date: June 19, 2018, Rev. 02

Approval:

**Gavilon Grain, LLC** 

Brian Wanzenried, Director of Environmental Date

Brian Carleton, Vice President of Operations

Date

Air Regulations Consulting, LLC

Eric Sturm, Owner, Lead Consultant

06/19/2018

Date

#### 2 TABLE OF CONTENTS

#### **SECTION**

1	PERM	IIT REVISION APPLICATION SUBMITTAL AND APPROVAL	, III
2	TABLE	E OF CONTENTS	. IV
3	INTRO	DDUCTION	5
4	FACIL	ITY BACKGROUND	6
5	SPECI	FIC REVISION DICUSSION	7
	5.1	Operating Hour Limitations:	7
	5.2	Coarse Material:	7
	5.3	Brock Dustmaster System:	8
	5.4	Grain Coolers:	8
	5.5	T-20a Tarp & Unit 21a Outdoor Transport:	9
	5.6	Natural Gas Sulfur Content:	9
	5.7	Survey for Unpermitted Equipment:	10
	5.8	Daily Averages:	10
	5.9	Haul Road Distances and Maps:	11
	5.10	Mineral Oil Droplet Size:	11
	5 11	Structure Inspection:	12

## **APPENDICES**

Appendix A – NMED Forms

Appendix B – Redline Permit/Suggested Language

#### 3 INTRODUCTION

Gavilon Grain, LLC (Gavilon), doing business as the Peavey Company, owns and operates an animal feed manufacturing facility near Clovis, New Mexico (West Clovis Facility). This facility receives grain, primarily corn and milo, to be ground or flaked and sold for animal feed or further feed processing. The facility also receives dried distiller's grains (DDG) and other agricultural materials which are used as feed or feed supplements. Primary operations at the facility are receiving, handling, storing, milling, flaking, and loadout. Additionally, there is a small natural gas-fired boiler used on site used for flaking. Gavilon applies white mineral oil to control emissions from received grain and has additional control devices such as enclosures, cyclones, and a baghouse.

In 2017 Gavilon submitted an application to construct a Commodity Barn to centralize storage of flaked grain, ground corn, and generic feed products. As part of this application, Gavilon also requested revisions to certain permit conditions which would not change potential to emit. The New Mexico Environment Department determined it would be too complex to issue within the required timeline for a technical permit revision. The Commodity Barn was therefore authorized as a technical revision in permit 2910M1R6, and Gavilon is now submitting a separate significant permit revision application to clean up the permit and remove requirements which are incorrect, vague, or unnecessary.

#### 4 FACILITY BACKGROUND

Gavilon's West Clovis Animal Feed Manufacturing Facility was constructed in the early 1970's. Due to the historical nature of the facility, the first New Source Review (NSR) permit issued was 2910M1, issued December 28, 2010. Currently this permit is revised as 2910M1R6. Gavilon is not required to obtain an operating permit and is not major for Title V or the Prevention of Significant Deterioration Program.

This facility was last modeled in 2010 for Permit 2910M1. As part of this modeling, limits were placed on hours of operation for several receiving and loadout emission units as well as one haul road segment. As demonstrated by modeling conducted for this permit revision, these limits are not necessary and removal is one of the permit revisions discussed further below.

As further discussed in Section 13 of NMED Form UA3, The West Clovis Facility is not subject to Code of Federal Regulations Title 40 Part 60, Subpart DD – Standards of Performance for Grain Elevators, due to both the specific exemption for animal food manufacturers and total permanent grain storage capacity.

#### 5 SPECIFIC REVISION DICUSSION

#### 5.1 Removal of Deprecated Emission Units

The Commodity Barn centralized storage and loadout of ground and flaked grain products. Previously multiple barns were used for this purpose. To simplify the application and processing for permit 2910M1R6, Gavilon retained authorization for emission units which would no longer be operated, minimizing the number of revisions needed. As part of this application, Gavilon is identifying that units 4, 5, 15, 28, 28a, 28b, 29, 29a, 29b, 30, 30a, and 30b can be removed from the permit. These are a flaked corn loadout conveyor, flaked milo loadout conveyer, ground grain loadout, ground corn storage barn, flaked corn barn, and flaked milo barn.

#### 5.2 **Operating Hour Limitations:**

Currently, conditions A502 requires that Units 7a, 7b, 8, and 21 do not operate between 1 and 4 am and the haul road segment for grain receiving cannot be used between 12 am and 8 am. Gavilon understands that these restrictions were based upon a previous modeling analysis. Therefore, a new modeling analysis for the facility has been provided to demonstrate that the operating hour restrictions are not needed as the facility is currently constructed. Gavilon is therefore requesting that operating hour restrictions be removed.

#### **5.3** Coarse Material:

Currently Clovis is required to use "coarse material" to control emissions for Units 8, 19, and 21 by Condition A105. However, this requirement should be entirely removed from the permit. No control credit is being provided over the emission factors used for other grain handling processes, and therefore material properties are not an actual method or device providing control of emissions.

Additionally, coarse material is not a qualitative property without additional information and is therefore unenforceable by nature. What is coarse for ground material might be considered very fine for raw grain or feed products. Therefore, this should be removed from Table A105.

#### 5.4 **Brock Dustmaster System:**

Condition A105 requires Unit 12 to be controlled by a "Brock Dustmaster system." This receiving pit is controlled by choke feeding and an automatic baffle system, but it isn't clearly designated as any specific product or design which can be verified on site. Gavilon is requesting that this control be listed as "Choke Feeding and Pit Baffles" rather than "Brock Dustmaster." Choke feeding is industry standard technique that minimizes damage to incoming grain by preventing a long material drop onto moving conveying equipment. As a secondary benefit, choke feeding also significantly reduces emissions, especially when combined with pit baffles or other design features which limit the amount of air movement which occurs.

This flexibility is already allowed by condition A502 B and A509 B. Using an industry-standard description rather than brand name would be more comprehensible for both facility employees and an inspector. Similarly, the weekly inspections required for this system in A509 B monitoring (referenced improperly as A508 in condition A502) are not necessary. Choke feeding is a regular practice for operators, and the baffles do not suffer enough wear and tear that might necessitate regular maintenance and repair.

#### 5.5 **Grain Coolers:**

The Flakers with associated coolers, Units 2 and 3, currently have cyclones listed as required control devices. However, the cyclones are part of the coolers themselves rather than separate control devices. The cyclonic action is designed to recover product (flaked grain) which might otherwise be entrained in the high speed air used for the cooling process. These cyclones are designed and operated as an inherent part of the process itself, not as a control device to reduce emissions

As currently described, it might appear that an additional cyclone is necessary in the system to control emissions from cooling. Therefore, Units 2 and 3 should be removed from the list of equipment required to be controlled by a cyclone in Table 105. Additionally, condition A503 and A509 (improperly referenced as A508 in condition A509) should be significantly revised to

remove requirements for cyclones on flaking. Suggested edits are included in the redline permit in Appendix B.

#### 5.6 <u>T-20a Tarp & Unit 21a Outdoor Transport:</u>

There is a requirement that a tarp be used to control Unit 20a, which is outdated. Unit 20a was originally an outdoor DDG storage pile, where a tarp was appropriate. However, permit 2910M1R4 authorized construction which moved the pile indoors into Unit 20, DDG Storage Barn #2. Therefore, a tarp is no longer needed because the enclosure provides capture. Additionally, Condition A507 C and A507 E for the outdoor storage pile are no longer necessary because DDG Barn #2 became fully operational.

#### 5.7 Natural Gas Sulfur Content:

For Unit 6, the natural-gas fired boiler, Condition A110 requires Gavilon to maintain records of a current contract or fuel gas analysis specifying the allowable sulfur is equal to or less than the limits used to define natural gas for Code of Federal Regulations Title 40 Part 60 (40 CFR 60) Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants (NSPS KKK). This boiler is fired on pipeline-quality natural gas and there is no need to repeatedly demonstrate the sulfur content of this fuel. This boiler, and the facility, are not subject to NSPS KKK.

The boiler is subject to 40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (Subpart Dc), which has its own definition of natural gas which sets no sulfur limits. Additionally, the permit limit is equivalent to a sulfur concentration 100 times greater than that used by the US EPA Compilation of Air Pollution Emission Factors (AP-42) Chapter 1.4 for natural gas combustion. The US EPA gives this emission factor an A rating, only noting that a mass balance approach should be used for "unprocessed" natural gas. Gavilon is buying processed natural gas for a small boiler, and there is no reason to believe sulfur content will ever be a concern from this source or that a limit should be necessary

for PTE. An appropriate definition for natural gas from Subpart Dc should be used, and recordkeeping specifically to demonstrate sulfur content should be removed.

#### 5.8 Survey for Unpermitted Equipment:

Condition A113 currently requires that Gavilon conduct a survey at least monthly for additional sources of emissions which have not been permitted. Such a survey is unnecessarily burdensome, is not necessary as an enforceable permit limit, and does not actually provide a compliance demonstration for applicable requirements. Gavilon must meet state regulations regarding construction of new sources whether or not there is any requirement in the permit.

Gavilon is cognizant and respectful of New Mexico's permitting requirements, as demonstrated by this application and previous permitting actions. However, these requirements are only valid when a project will be undertaken, and therefore there is no authority to require a constant negative demonstration. Condition A113 should be removed.

#### 5.9 **Daily Averages:**

Multiple conditions require that Gavilon calculate a daily average throughput for specific equipment, such as receiving, grain distribution, flaking, etc. This is a monumental amount of record generation which provides little or no benefit. If there is ever a concern with the hourly capacity of a specific piece of equipment or process, the NMED can always request additional documentation from Gavilon. There are many ways equipment capacity might be demonstrated, such as manufacturer documentation, nameplate, or a one-time site-specific throughput measurement. Or, if necessary, production records could be audited after the fact for indications that design capacity is not accurate.

As structured, these conditions require approximately 8,000 calculations per year to demonstrate fixed mechanical and operational properties. For much of the facility these have not changed since the 1970's, and if capacities ever do change it will likely require a permit revision and notification to the NMED.

#### 5.10 Haul Road Distances and Maps:

Condition A507 requires that haul road segments be physically measured at least once every 365 days. This is entirely unnecessary. Haul road distances will not regularly change, unless the site is reconfigured, and these distances can be easily checked using available satellite imagery. More importantly, the Clovis facility is not one of the source categories required to count fugitive emissions towards major source thresholds. It is not a named source category listed in New Mexico Administrative Code Title 20 Chapter 2 §20.2.70.7 R.(2).

Furthermore, Gavilon is unnecessarily required to provide all truck drivers with maps of the haul road segments, post signs directing to specific receiving and loadout areas, and keep maintenance records of signs designating haul road segments. These requirements have nothing to do with protecting air quality. As noted above, Gavilon does not count haul road emissions toward major source thresholds, and signs will not increase or decrease the distance a truck driver chooses to travel. Gavilon has to manage traffic flow for safety and logistical concerns, but these requirements are in no way related to the specific authority granted by New Mexico Administrative Code Chapter 2.

#### 5.11 Mineral Oil Droplet Size:

Condition A508 A.5. requires that the mineral oil application system spray droplets which are at least 20 microns in diameter. There is no practical method of demonstrating compliance with this requirement, and no evidence that it is necessary to restrict droplet size. Gavilon uses an industry-typical application method common at grain elevators across the country. This equipment was designed by the manufacturer to disperse mineral oil into grain as consistently and efficiently as possible, such that it will absorb uniformly into the grain and minimize oversaturated areas or loss of mineral oil outside of the grain itself.

The mean droplet size for this equipment is significantly greater than 20 microns, but every nozzle will create some distribution of particle sizes. There is no way to create a guaranteed lower cutoff size which 100% of droplets will exceed. This can be best seen in regulatory actions for surface

coating, which uses spray application of liquids. When the USEPA promulgates requirements for spraying of paints, such as 40 CFR Part 63 Subpart HHHHHH, it does not specify a minimum droplet size to ensure that very fine mists are not used. Instead, the requirements are to use spray gun technologies which tend to create larger droplets, such as high volume low pressure (HVLP) systems.

The mineral oil application system used at Gavilon is a design which would minimize very fine droplets. However, placing a strict size limit is inappropriate and unnecessary. Therefore, this restriction should be removed. The requirements that the system be properly operated and maintained are sufficient to ensure reasonably large droplets.

#### 5.12 **Structure Inspection:**

Inspection of structures required by A509 E is overreaching and unnecessary. Gavilon must maintain these buildings for worker safety and product quality. It isn't necessary to require a fixed schedule and recordkeeping for these practices within the air permit. In particular, these enclosures are used to meet the US Food and Drug Administration's Current Good Manufacturing Practices regulations by excluding pests and preventing cross-contamination of materials.

One concern is the permit creates the expectation that structures will be inspected only once every six months, repairs will be undertaken for ambient air quality protection purposes, and the repairs will be documented as being directly for air quality compliance. The reality is that building maintenance is undertaken whenever a problem is discovered for reasons primarily unrelated to the air permit. Elevator staff is always on the lookout for potential structural issues, which will be repaired as they arise for safety or to protect the quality of the grain itself.

Gavilon is therefore proposing a more general monitoring requirement of "The permittee shall ensure routine observations and checks are sufficient to maintain the integrity of the structure & minimize openings/gaps." For recordkeeping, Gavilon is suggesting a more general "The permittee shall maintain records of maintenance conducted on storage barns in response to potential excess emissions events."

# APPENDIX A NMED Forms

# NMED Section 1

#### **Mail Application To:**

New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505

Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb



For Department use only:

AIRS No.:

# **Universal Air Quality Permit Application**

#### Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. For NOI applications, submit the entire UA1, UA2, and UA3 applications on a single CD (no copies are needed). For NOIs, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required.

This application is submitted as (check all that apply):   Request for a No Permit Required Determination (no fee)
☐ <b>Updating</b> an application currently under NMED review. Include this page and all pages that are being updated (no fee required).
Construction Status: ☐ Not Constructed ■ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility
Minor Source: ☐ a NOI 20.2.73 NMAC ■ 20.2.72 NMAC application or revision ☐ 20.2.72.300 NMAC Streamline application
Title V Source: ☐ Title V (new) ☐ Title V renewal ☐ TV minor mod. ☐ TV significant mod. TV Acid Rain: ☐ New ☐ Renewal
PSD Major Source: ☐ PSD major source (new) ☐ minor modification to a PSD source ☐ a PSD major modification
Acknowledgements:
☑ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR
applications have no fees.
☑\$500 NSR application Filing Fee enclosed OR □ The full permit fee associated with 10 fee points (required w/ streamlin
applications).
☑ Check No.: 100925 in the amount of \$500
☑ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched
(except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.
☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for
50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with
the Small Business Certification Form for your company.
☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not
qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business
certification form go to https://www.env.nm.gov/aqb/sbap/small_business_criteria.html ).
Citation: Please provide the low level citation under which this application is being submitted: 20.2.72.219.D.1.a NMAC
(e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is
20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

# Section 1 – Facility Information AI # if known (see 1st | Undating

Sec	tion 1-A: Company Information	3 to 5 #s of permit IDEA ID No.): <b>3537</b>	Permit/NOI #: <b>2910M1R5</b>
1	Facility Name: Gavilon Grain, LLC	Plant primary SIC Cod	e (4 digits): <b>5153</b>
1	Gavion Grain, EDC	Plant NAIC code (6 dig	gits): 311119
a	Facility Street Address (If no facility street address, provide directions from 1327 US Hwy 60-84, Clovis, New Mexico 88101	n a prominent landmark)	:
2	Plant Operator Company Name: Gavilon Grain, LLC	Phone/Fax: 575.762.29	46
a	Plant Operator Address: 1327 US Hwy 60-84, Clovis, New Mexico 88101		

b	Plant Operator's New Mexico Corporate ID or Tax ID: 3351020							
3	Plant Owner(s) name(s): Gavilon Grain, LLC	Phone/Fax: 402.889.4070/ 402.221.0213						
a	Plant Owner(s) Mailing Address(s): 1331 Capital Avenue, Omaha, Nebraska 68102							
4	Bill To (Company): Gavilon Grain, LLC	Phone/Fax: 402.889.4070/ 402.221.0213						
a	Mailing Address: 1331 Capital Avenue, Omaha, Nebraska 68102	E-mail: N/A						
5	<ul> <li>✓ Preparer: Eric Sturm – Air Regulations Consulting, LLC</li> <li>✓ Consultant: Eric Sturm – Air Regulations Consulting, LLC</li> </ul>	Phone/Fax: 402.817.7887/ 855.792.5366						
a	Mailing Address: 128 N 13th Street, Suite 1003, Lincoln, NE 68508	E-mail: eric@airregulationconsulting.com						
6	Plant Operator Contact: Gavilon Grain, LLC	Phone/Fax: 402.889.4070/ 402.221.0213						
a	Address: 1331 Capital Avenue, Omaha, Nebraska 68102	E-mail: Brian.Wanzenried@gavilon.com						
7	Air Permit Contact: Eric Sturm	Title: Owner, Lead Consultant						
a	E-mail: eric@airregulationconsulting.com	Phone/Fax: 402.817.7887/ 855.792.5366						
b	Mailing Address: 128 N 13th Street, Suite 1003, Lincoln, NE 68508							

**Section 1-B: Current Facility Status** 

	Section 1-D. Current racinty Status									
1.a	Has this facility already been constructed? <b>☑</b> Yes □ No	1.b If yes to question 1.a, is it currently operating in New Mexico?    ✓ Yes □ No								
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application?  ✓ Yes □ No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application?  ✓ Yes □ No								
3	Is the facility currently shut down? ☐ Yes ☑ No	If yes, give month and year of shut down (MM/YY): N/A								
4	Was this facility constructed before 8/31/1972 and continuously operated s	since 1972? ☑ Yes □ No								
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972?  ✓ Yes □No □N/A									
6	Does this facility have a Title V operating permit (20.2.70 NMAC)?  ☐ Yes ☑ No	If yes, the permit No. is: N/A								
7	Has this facility been issued a No Permit Required (NPR)?  ☐ Yes ☑ No	If yes, the NPR No. is: N/A								
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☑ No	If yes, the NOI No. is: N/A								
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)?  ✓ Yes □ No	If yes, the permit No. is: 2910M1R5								
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)?  ☐ Yes ☑ No	If yes, the register No. is: N/A								

Section 1-C: Facility Input Capacity & Production Rate

The state of the s										
1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)									
a	Current	Hourly: 55,000 Bushels	Daily: 475,000 Bushels	Annually: 21,000,000 Bushels						
b	Proposed	Hourly: 55,000 Bushels	Daily: 475,000 Bushels	Annually: 21,000,000 Bushels						
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)									
a	Current	Hourly: Please See UA2 & Section 20	Daily: Please See UA2 & Section 20	Annually: Please See UA2 & Section 20						
b	Proposed Hourly: Please See UA2 & Section 20 Daily: Please See UA2 & Section 20 Annually: Please See UA2 & Section 2									

**Section 1-D: Facility Location Information** 

		1	T 1: 2N	Communication Communication	E1(C) 4 221					
1	Section: 15	Range: 35E	Township: 2N	County: Curry	Elevation (ft): <b>4,321</b>					
2	UTM Zone:	☐ 12 or <b>☑</b> 13		Datum: □ NAD 27 ☑NAD 83 □ WGS 84						
a	UTM E (in meter	rs, to nearest 10 meters	s): <b>660,452</b>	UTM N (in meters, to nearest 10 meters):	3,808,291					
b	AND Latitude	(deg., min., sec.):	34°, 24', 12.7"	Longitude (deg., min., sec.): 103°,	15', 15.6"					
3	Name and zip o	code of nearest Ne	ew Mexico town: Clovis, 8	88101						
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): Drive west on Hwy 60/84, facility on left past Wheaton St.									
5	The facility is < 0.25 miles from city limits of Clovis, ~ 2.75 miles west of city center									
6	Status of land at facility (check one): ☑ Private ☐ Indian/Pueblo ☐ Federal BLM ☐ Federal Forest Service ☐ Other(specify)									
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: <b>Clovis, Cannon AFB, Curry and Roosevelt Counties</b>									
8	20.2.72 NMAC applications only: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <a href="https://www.env.nm.gov/aqb/modeling/class1areas.html">www.env.nm.gov/aqb/modeling/class1areas.html</a> )?  ✓ Yes ☐ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Texas, 20 km									
9	Name nearest C	Class I area: Salt (	Creek Wilderness							
10	Shortest distance	ce (in km) from fa	cility boundary to the bour	ndary of the nearest Class I area (to the	e nearest 10 meters): 140 km					
11				ions (AO is defined as the plant site i est residence, school or occupied structure)						
	Method(s) used	I to delineate the I	Restricted Area: Fence							
12	"Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.									
13	Does the owner  ☐ Yes ☑ No A portable statione location or	r/operator intend to o lonary source is no that can be re-ins	o operate this source as a pot a mobile source, such as talled at various locations,	oortable stationary source as defined in an automobile, but a source that can such as a hot mix asphalt plant that is	in 20.2.72.7.X NMAC? be installed permanently at					
14	'	• 1	nction with other air regul nit number (if known) of the	ated parties on the same property? ne other facility? <b>N/A</b>	☑ No ☐ Yes					

Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

		-	,	1 0			. /			
1	Facility <b>maximum</b> operating (hou day	<u>urs</u> ): <b>24</b>	$(\frac{\text{days}}{\text{week}}):7$		$(\frac{\text{weeks}}{\text{year}})$ : 52	( <u>hours</u> ): <b>8,760</b>				
2	Facility's maximum daily operation	ng schedule (if less	s than $24 \frac{\text{hours}}{\text{day}}$ )?	Start: N/A	□AM □PM	End: N/A	□AM □PM			
3	Month and year of anticipated start of construction: N/A – No Construction Associated with Revision									
4	Month and year of anticipated construction completion: N/A – No Construction Associated with Revision									
5	Month and year of anticipated startup of new or modified facility: N/A – No Construction Associated with Revision									
6	Will this facility operate at this si	te for more than on	ie year?	Yes □ No						

**Section 1-F: Other Facility Information** 

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related
1	to this facility? $\square$ Yes $\square$ No If yes, specify: N/A

a	If yes, NOV date or description of issue: N/A  NOV Tracking No: N/A								
b	Is this application in response to any issue listed in 1-F, 1 or 1a above?   Yes  No If Yes, provide the 1c & 1d info below:								
c	C Document Title: N/A Date: N/A Requirement # (or page # and paragraph #): N/A								
d	Provide the required text to be inserted in this permit: N/A								
2	Is air quality dispersion modeling or modeling waiver being	g submitted with this	applicatio	n? <b>☑</b> Yes □ No □ <b>N</b> / <b>A</b>					
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? ☐ Yes ☑ No								
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☑ Yes ☐ No								
a	If Yes, what type of source? $\Box$ Major ( $\Box \ge 10$ tpy of any single HAP OR $\Box \ge 25$ tpy of any combination of HAPS) OR $\Box$ Minor ( $\Box$ <0 tpy of any single HAP AND $\Box$ <0 tpy of any combination of HAPS)								
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? □ Yes ☑ No								
	If yes, include the name of company providing commercial	electric power to the	facility: N	N/A					
a	Commercial power is purchased from a commercial utility site for the sole purpose of the user.	company, which spe	cifically d	loes not include power generated on					
C									

# Section 1-G: Streamline Application (This section applies to 20.2.72.300 NMAC Streamline applications only) 1 □ I have filled out Section 18, "Addendum for Streamline Applications." ☑ N/A (This is not a Streamline application.)

20.2.7	4/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMA	C (Title V))	,,				
1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): <b>N/A</b>		Phone: N/A				
a	R.O. Title: N/A	R.O. e-mail: N/A					
b	R. O. Address: <b>N/A</b>						
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): <b>N/A</b>		Phone: N/A				
a	A. R.O. Title: <b>N/A</b>	A. R.O. e-mail: <b>N</b> /A	A				
b	A. R. O. Address: N/A						
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): N/A						
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): N/A						
a	Address of Parent Company: N/A						
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.): <b>N/A</b>						
6	Telephone numbers & names of the owners' agents and site contact	ts familiar with plan	t operations: N/A				
7	Affected Programs to include Other States, local air pollution cont. Will the property on which the facility is proposed to be constructed states, local pollution control programs, and Indian tribes and puebones and provide the distances in kilometers: N/A	d or operated be clos	ser than 80 km (50 miles) from other				

# **Section 1-I – Submittal Requirements**

Each 20.2.73 NMAC (**NOI**), a 20.2.70 NMAC (**Title V**), a 20.2.72 NMAC (**NSR** minor source), or 20.2.74 NMAC (**PSD**) application package shall consist of the following:

#### **Hard Copy Submittal Requirements:**

- 1) One hard copy original signed and notarized application package printed double sided 'head-to-toe' 2-hole punched as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use numbered tab separators in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This <u>copy</u> does not need to be 2-hole punched, but must be double sided. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically on compact disk(s) (CD). For permit application submittals, two CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a single CD submittal.
- 4) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver OR** one additional electronic copy of the air dispersion modeling including the input and output files. The dispersion modeling <u>summary report</u> <u>only</u> should be submitted as hard copy(ies) unless otherwise indicated by the Bureau. The complete dispersion modeling study, including all input/output files, should be submitted electronically as part of the electronic submittal.
- 5) If subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
  - a. one additional CD copy for US EPA,
  - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
  - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

#### Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted in duplicate (2 separate CDs). A single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc,), submit these items in hard copy format with the number of additional hard copies corresponding to the number of CD copies required. We must be able to review the formulas and inputs that calculated the emissions.
- 3) It is preferred that this application form be submitted as 3 electronic files (2 MSWord docs: Universal Application section 1 and Universal Application section 3-19) and 1 Excel file of the tables (Universal Application section 2) on the CD(s). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The electronic file names shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the core permit number (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the section # (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the header information throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision # (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. The footer information should not be modified by the applicant.

# NMED Section 2

# **Table 2-A: Regulated Emission Sources**

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number <sup>1</sup>	Other Identifier	Source Description	Make	Model#	Serial #	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup> Date of Construction/ Reconstruction <sup>2</sup>	Controlled by Unit # Emissions vented to Stack #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	Ignition Type (CI, SI, 4SLB, 4SRB,	Replacing Unit No.
1	GRNCLN_1	Flaker Grain Cleaner				70 tons/hr	394,000 tons/yr	~1985			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
2	FLAKR_2	Grain Flaker (24" x 56" roller)	Ferrel-Ross			25 tons/hr	394,000 tons/yr	~1998			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
3	FLAKR_3	Grain Flaker (24" x 48" roller)	PMS			20 tons/hr	combined for both flakers	~1995			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
4	FLKFD_4	Flaked Grain Loadout Conveyor (corn)				100 tons/hr	458,000 tons/yr	~1985			<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li><li>Unit</li></ul>	N/A	
5	FLKFD_5	Flaked Grain Loadout Conveyor (milo)				100 tons/hr	combined for both units	2002			<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li><li>Unit</li></ul>	N/A	
6	BOIL_6	Boiler	Williams & Davis	600-777	9667	18.9 MMBtu/hr		1999/2000			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
7a	TRKREC_7	Grain Receiving Pit (Truck)		Field Fab		168 tons/hr	280,000 tons/yr	~1970			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
7b	TRKREC_7	Grain Receiving Pit (Truck)		Field Fab		336 tons/hr	280,000 tons/yr	~1970			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
8	HEAD_8	Headhouse (includes enclosed cleaner)		Field Fab		360 tons/hr	560,000 tons/yr	~1970			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
9	BVMN_9	Storage Bin Vents (main elevator)		Field Fab		NA	560,000 tons/yr	~1970			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
10	BVMN_10	Storage Bin Vents (elevator annex)		Field Fab		NA	560,000 tons/yr	~1970			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
11a	TRK_11a	Whole Grain Loadout		Field Fab		140 tons/hr	28,000 tons/yr	~1970			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
11b	TRK_11b	Whole Grain Loadout		Field Fab		420 tons/hr	560,000 tons/yr	2003			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
12	SHUT_12	Grain Receiving Pit (Rail)		Field Fab		1,400 tons/hr	560,000 tons/yr	2003			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
13		Hammermill #1				20 tons/hr	350,400				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
14		Hammermill #2				20 tons/hr	tons/yr combined				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	

Unit Number <sup>1</sup>	Other Identifier	Source Description	Make	Model#	Serial#	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup> Date of Construction/ Reconstruction <sup>2</sup>	Controlled by Unit # Emissions vented to Stack #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	Ignition Type (CI, SI, 4SLB, 4SRB,	Replacing Unit No.
15	GRDGRN_ A	Ground Grain Loadout				150 tons/hr	350,400 tons/yr				<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li><li>Unit</li></ul>	N/A	
16	GRDTRK_ B	Ground Grain Receiving Pit (truck) at Temporary Rail Loadout				100 tons/hr	35,000 tons/yr				<ul> <li>Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ Replacement</li> <li>Unit</li> </ul>	N/A	
17	GRDRAL_ C	Temporary Ground Grain Railcar Loadout				100 tons/hr	35,000 tons/yr				<ul> <li>Existing (unchanged) □ To be Removed</li> <li>□ New/Additional □ Replacement</li> <li>Unit</li> </ul>	N/A	
18	DDGTRK_ D	DDG Loadout #1				280 tons/hr	240,000 tons/yr				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
19	DDGTRK_ E	DDG Loadout #2				280 tons/hr	240,000 tons/yr				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
20		DDG Barn #2									<ul> <li>Existing (unchanged) □ To be Removed</li> <li>□ New/Additional □ Replacement</li> <li>Unit</li> </ul>	N/A	
21		DDG Truck Loading Inside DDG Barn #2					50,000 tons/yr				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
25		Truck Traffic Fugitive Dust Emissions				DDG Plant DDG Base	ing - 0.27 n ship - 0.45 n ship - 0.28 - 0.39 - 0.34 #2 Base-0.12				Existing (unchanged)     New/Additional     Unit     To Be Modified     To be Removed     Replacement     To be Replaced     To be Replaced	N/A	
26		DDG Barn									<ul> <li>Existing (unchanged)</li> <li>□ New/Additional</li> <li>□ Replacement</li> <li>Unit</li> </ul>	N/A	
26a		DDG Barn - transfer to barn storage pile				400 tons/hr	240,000 tons/yr				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
26b		DDG Barn - transfer to loadout reclaim pit				280 tons/hr	240,000 tons/yr				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
27		Whole Corn Barn									Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
27a		Whole Corn Barn - transfer to barn storage pile				112 tons/hr	115,000 tons/yr				<ul> <li>Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ Replacement</li> <li>Unit</li> </ul>	N/A	
27b		Whole Corn Barn - transfer to reclaim pit				60 tons/hr	115,000 tons/yr				<ul> <li>Existing (unchanged) □ To be Removed</li> <li>□ New/Additional □ Replacement</li> <li>Unit</li> </ul>	N/A	

Unit Number <sup>1</sup>	Other Identifier	Source Description	Make	Model#	Serial#	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup> Date of Construction/ Reconstruction <sup>2</sup>	Controlled by Unit # Emissions vented to Stack #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	Ignition Type (CI, SI, 4SLB, 4SRB,	Replacing Unit No.
28		Ground Corn Barn									<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li><li>Unit</li></ul>	N/A	
28a		Transfer to Ground Corn Barn or Commodity Barn storage pile				40 tons/hr	350,400				□ Existing (unchanged) • To be Removed □ New/Additional □ Replacement Unit	N/A	
28b		Ground Corn Barn - transfer to loadout reclaim pit				150 tons/hr	tons/yr				□ To Be Modified □ To be Replaced □ Existing (unchanged) • To be Removed □ New/Additional □ Replacement Unit	N/A	
29		Flaked Corn Barn									<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li><li>Unit</li></ul>	N/A	
29a		Transfer to Flaked Corn Barn or Commodity Barn storage pile				45 tons/hr	197,000 tons/yr				□ Existing (unchanged) • To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced	N/A	
29b		Flaked Corn Barn - transfer to loadout reclaim pit				100 tons/hr	229,000 tons/yr				□ Existing (unchanged) • To be Removed □ New/Additional □ Replacement Unit	N/A	
30		Flaked Milo Barn									<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li><li>Unit</li></ul>	N/A	
30a		Transfer to Flaked Milo Barn or Commodity Barn storage pile				45 tons/hr	197,000 tons/yr				□ Existing (unchanged) • To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced	N/A	
30b		Flaked Milo Barn - transfer to loadout reclaim pit				100 tons/hr	229,000 tons/yr				<ul><li>□ Existing (unchanged)</li><li>□ New/Additional</li><li>□ Replacement</li></ul>	N/A	
31		Fines Shed									Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
32		Fines Auger				1.5 tons/hr	1,825 tons/yr				Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
33		Commodity Barn					350,400 tons/year	2017/2018			Existing (unchanged) □ To be Removed     New/Additional □ Replacement Unit	N/A	
33a		Transfer to Commodity Barn Reclaim Pit				100 tons/hr	ground corn; 394,200 tons/year flaked corn & milo; 30,000	2017/2018			- Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced	N/A	
33b		Commodity Barn Loadout				100 tons/hr	tons/year feed materials	2017/2018			□ To Be Modified □ To be Replaced ■ Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced	N/A	

Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

<sup>&</sup>lt;sup>2</sup> Specify dates required to determine regulatory applicability.

<sup>&</sup>lt;sup>3</sup> To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

<sup>4&</sup>quot;4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

## Table 2-B: Insignificant Activities (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb\_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at

http://www.env.nm.gov/aqb/forms/InsignificantListTitleV.pdf. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form. List Specific 20.2.72.202 NMAC Exemption Model No. Max Capacity Manufacture (e.g. 20.2.72.202.B.5) /Reconstruction<sup>2</sup> **Unit Number Source Description** Manufacturer For Each Piece of Equipment, Check Onc Date of Installation Insignificant Activity citation (e.g. IA List Serial No. **Capacity Units** Item #1.a) /Construction<sup>2</sup> Existing (unchanged) To be Removed New/Additional Replacement Unit Not Applicable. To Be Modified ☐ To be Replaced Existing (unchanged) ☐ To be Removed New/Additional ☐ Replacement Unit ☐ To be Replaced To Be Modified Existing (unchanged) ☐ To be Removed New/Additional ☐ Replacement Unit To Be Modified ☐ To be Replaced Existing (unchanged) ☐ To be Removed ☐ Replacement Unit New/Additional ☐ To be Replaced To Be Modified Existing (unchanged) ☐ To be Removed ☐ Replacement Unit New/Additional To Be Modified ☐ To be Replaced Existing (unchanged) ☐ To be Removed New/Additional ☐ Replacement Unit To Be Modified ☐ To be Replaced Existing (unchanged) ☐ To be Removed ☐ Replacement Unit New/Additional To Be Modified ☐ To be Replaced ☐ To be Removed Existing (unchanged) New/Additional ☐ Replacement Unit To Be Modified ☐ To be Replaced ☐ To be Removed Existing (unchanged) New/Additional ☐ Replacement Unit To Be Modified ☐ To be Replaced Existing (unchanged) ☐ To be Removed New/Additional ☐ Replacement Unit ☐ To be Replaced To Be Modified Existing (unchanged) ☐ To be Removed New/Additional ☐ Replacement Unit

To Be Modified

☐ To be Replaced

<sup>&</sup>lt;sup>1</sup> Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

<sup>&</sup>lt;sup>2</sup> Specify date(s) required to determine regulatory applicability.

Gavilon Grain, LLC Gavilon Clovis Animal Feed Facility Application Date: June 2018 Revision # 1

# **Table 2-C: Emissions Control Equipment**

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
	Please See Permit and Previou	us Applications	for Existing Units - No Change in Es	timated Control Efficiency		
<sup>1</sup> List each con	trol device on a separate line. For each control device, list all em	ission units co	ontrolled by the control device.			

#### **Table 2-D:** Maximum Emissions (under normal operating conditions)

☐ This Table was intentionally left blank because it would be identical to Table 2-E.

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

TI '4 NI	N	Ox	C	0	VO	C	SC	Ox	TS	$SP^2$	PM	$10^2$	PM	2.5 <sup>2</sup>	Н	$_{2}S$	Lea	ad
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1	-		ı	-	-	-	-	-	10.50	45.99	2.66	11.65	0.45	1.96	-	-	1	-
2	-	-	-	-	-	-	-	-	7.50	32.85	3.75	16.43	0.63	2.77	-	-	-	-
3	-	-	-	-	-	-	-	-	6.00	26.28	3.00	13.14	0.51	2.21	-	-	-	-
6	1.85	8.12	1.56	6.82	1.02E-01	0.45	1.11E-02	4.87E-02	3.52E-02	0.15	0.14	0.62	0.14	0.62	-	-	9.26E-06	4.1E-05
7a	-	-	-	-	-	-	-	-	2.86	12.51	0.42	1.84	7.07E-02	0.31	-	-	-	-
7b	-	-	-	-	-	-	-	-	5.71	25.02	0.84	3.68	0.14	0.62	-	-	-	-
8	-	-	-	-	-	-	-	-	8.54	37.41	4.76	20.85	0.81	3.56	-	-	-	-
9	-	-	-	-	-	-	-	-	1.60	7.00	0.40	1.76	7.03E-02	0.31	-	-	-	-
10	-	-	-	-	-	-	-	-	1.60	7.00	0.40	1.76	7.03E-02	0.31	-	-	-	-
11a	-	-	-	-	-	-	-	-	0.46	2.02	0.11	0.49	1.89E-02	8.26E-02	-	-	-	-
11b	-	-	1	-	-	-	-	-	1.39	6.07	0.34	1.47	5.66E-02	0.25	-	-	-	-
12	-	-	1	-	-	-	1	1	23.80	104.24	3.50	15.33	0.59	2.58	-	-	1	-
13	-	-	-	-	-	-	-	-	2.68	11.74	1.34	5.87	0.23	0.99	-	-	-	-
14	-	-	1	-	-	-	-	-	2.68	11.74	1.34	5.87	0.23	0.99	-	-	1	-
16	-	-	-	-	-	-	-	-	1.70	7.45	0.25	1.10	4.21E-02	0.18	-	-	-	-
17	-	-	1	-	-	-	-	-	0.33	1.45	8.00E-02	0.35	1.35E-02	5.90E-02	-	-	-	-
18	-	-	1	-	-	-	1	1	0.46	2.02	0.11	0.49	1.89E-02	8.26E-02	-	-	1	-
19	-	-	1	-	-	-	1	1	0.46	2.02	0.11	0.49	1.89E-02	8.26E-02	-	-	1	-
20	-	-	ı	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-
21	-	-	-	-	-	-	-	-	0.50	2.17	0.12	0.53	2.02E-02	8.85E-02	-	-	-	-
25	-	-	ı	-	-	-	1	-	12.10	52.98	2.96	12.95	2.96E-01	1.30	1	-	1	-
26	-	-	ı	-	-	-	1	-	-	-	1	-	-	-	1	-	1	-
26a	-	-	ı	-	-	-	1	-	1.32	5.78	0.32	1.40	4.00E-02	0.18	1	-	1	-
26b	-	-	1	-	ı	1	ı	ı	0.92	4.05	0.22	0.98	2.80E-02	0.12	ı	1	1	-
27	-	-	-	-	=	-	-	-	-	-	-	-	-	-	-	-	-	-
27a	-	-	-	-	=	-	-	-	0.13	0.58	3.20E-02	0.14	4.00E-03	0.02	-	-	-	-
27b	-	-	ı	-	-	-	-	-	0.20	0.87	4.80E-02	0.21	6.00E-03	0.03	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	-	-	1	-	-	-	-	-	4.95E-03	2.17E-02	1.20E-03	5.26E-03	1.50E-04	6.57E-04	-	-	-	-
33a	-	-	1	-	-	-	-	-	0.23	1.01	5.60E-02	0.25	7.00E-03	3.07E-02	-	-	-	-
33b	-	-	-	-	-	-	-	-	0.23	1.01	5.60E-02	0.25	7.00E-03	3.07E-02	-	-	-	-
Totals	1.85	8.12	1.56	6.82	0.10	0.45	0.01	0.05	93.93	411.43	27.37	119.89	4.51	19.75	-	-	9.26E-06	4.1E-05

<sup>&</sup>lt;sup>2</sup> Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

# **Table 2-E: Requested Allowable Emissions**

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E<sup>-4</sup>).

Unit No	N(	Ox	C	O	VO	C	S	Ox	TS	SP <sup>1</sup>	PM	110 <sup>1</sup>	PM	2.5 <sup>1</sup>	$\mathbf{H}_{2}$	$_2$ S	Le	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1	-		-	-	-	-	-	-	1.05	2.96	0.27	0.75	0.04	0.13	-	-	-	-
2	-	-	-	-	-	-	-	-	3.75	29.55	1.88	14.78	0.32	2.49	-	-	-	-
3	-	-	-	-	-	-	-	-	3.00	29.33	1.50	14.78	0.25	2.49	-	-	-	-
6	1.85	8.12	1.56	6.82	0.10	0.45	1.11E-02	4.87E-02	3.52E-02	0.15	0.14	0.62	0.14	0.62	-	-	9.26E-06	4.06E-05
7a	-	-	-	-	-	-	-	-	0.57	0.48	8.40E-02	7.00E-02	1.41E-02	1.18E-02	-	-	-	-
7b	-	-	-	-	-	-	-	-	1.14	0.48	0.17	7.00E-02	2.83E-02	1.18E-02	-	-	-	-
8	-	-	-	-	-	-	-	-	2.22E-02	4.44E-02	1.24E-02	2.48E-02	2.11E-03	4.22E-03	-	-	-	-
9	-	-	-	-	-	-	-	-	0.32	1.40	8.05E-02	0.35	1.41E-02	6.16E-02	-	-	-	-
10	-	-	-	-	-	-	-	-	0.32	1.40	8.05E-02	0.35	1.41E-02	6.16E-02	-	-	-	-
11a	-	-	-	-	-	-	-	-	9.24E-02	9.24E-03	2.24E-02	2.24E-03	3.77E-03	3.77E-04	-	-	-	-
11b	-	-	-	-	-	-	-	-	0.28	0.18	6.72E-02	4.48E-02	1.13E-02	7.55E-03	-	-	-	-
12	-	-	-	-	-	-	-	-	2.38	0.48	0.35	7.00E-02	5.89E-02	1.18E-02	-	-	-	-
13	-	-	-	-	-	-	-	-	0.27	2.35	0.13	1.17	2.26E-02	0.20	-	-	-	-
14	-	-	-	-	-	-	-	-	0.27	2.33	0.13	1.17	2.26E-02	0.20	-	-	-	-
16	-	-	-	-	-	-	-	-	0.34	5.95E-02	0.05	8.75E-03	8.42E-03	1.47E-03	-	-	-	-
17	-	-	-	-	-	-	-	-	0.07	1.16E-02	0.02	2.80E-03	2.69E-03	4.72E-04	-	-	-	-
18	-	-	-	-	-	-	-	-	0.46	0.40	0.11	0.10	1.89E-02	1.62E-02	-	-	-	-
19	-	-	-	-	-	-	-	-	0.46	0.40	0.11	0.10	1.89E-02	1.62E-02	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	9.90E-02	1.65E-02	2.40E-02	4.00E-03	4.04E-03	6.74E-04	-	-	-	-
25	-	-	-	-	-	-	-	-	1.67	7.32	0.41	1.79	4.09E-02	1.79E-01	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26a	-	-	-	-	-	-	-	-	0.92	0.28	0.22	0.07	2.80E-02	8.40E-03	-	-	-	-
26b	-	-	-	-	-	-	-	-	0.65	0.28	0.16	0.07	1.96E-02	8.40E-03	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27a	-	-	-	-	-	-	-	-	1.85E-02	2.66E-02	4.48E-03	6.44E-03	5.60E-04	8.05E-04	-	-	-	-
27b	_	-	-	-	-	_	-	-	2.77E-02	2.66E-02	6.72E-03	6.44E-03	8.40E-04	8.05E-04	-		-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-	9.90E-04	6.02E-04	9.90E-04	1.46E-04	3.00E-05	1.83E-05	-	-	-	-
33 33a	-	-	-	-	-	-	-	-	0.22	- 0.57	- 5 60E 02	0.14	7 00E 02	- 1 72E 02	-	-	-	-
33b	-	-	-	-	-	-	-	_	0.23	0.57 0.57	5.60E-02 5.60E-02	0.14 0.14	7.00E-03 7.00E-03	1.73E-02 1.73E-02	_	-	-	-
Totals	1.85	8.12	1.56	6.82	0.10	0.45	0.01	0.05	18.68	49.42	6.14	20.72	1.10	3.87	-	-	9.26E-06	

<sup>&</sup>lt;sup>1</sup> Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

#### Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

√ This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scehduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanations of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine our predictable startup, shutdown or scheduled maintenance (SSM)<sup>1</sup>, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications

(https://www.env.nm.gov/aqb/permit/aqb\_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

(https://www	env.nm.go	ov/aqb/per	mit/aqb_p	ol.html) for	more deta	ailed instru	ictions. Ni	umbers sha	ll be expre	essed to at	least 2 dec	imal point	s (e.g. 0.41	, 1.41, or	1.41E-4).			
(https://www	N		C		V(	OC	S	Ox	TS	SP <sup>2</sup>	PM		PM	$2.5^{2}$	Н	$_{2}S$	Le	ead
Cint No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Not Applica	ble.																	
																		$\Box$
Totals																		
= = ••••		I															1	

<sup>&</sup>lt;sup>1</sup> **For instance**, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

<sup>&</sup>lt;sup>1</sup> Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

Gavilon Grain, LLC Gavilon Clovis Animal Feed Facility Application Date: June 2018 Revision # 1

# **Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks**

√ I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the "-" symbol and on significant figures.

	Serving Unit	N	Ox	C	O	V	OC	S	Ox	T	SP	PM	110	PM	12.5	$\Box$ H <sub>2</sub> S o	r 🗆 Lead
Stack No.	Number(s) from Table 2-A	lb/hr	ton/yr	lb/hr	ton/yr												
Not Applicab																	
																	$oxed{oxed}$
	Totals:																

## **Table 2-H: Stack Exit Conditions**

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

Stack	Serving Unit Number(s)	Orientation (H-Horizontal	Rain Caps	Height Above	Temp.	Flow	Rate	Moisture by	Velocity	Inside
Number	from Table 2-A	V=Vertical)	(Yes or No)	Ground (ft)	<b>(F)</b>	(acfs)	(dscfs)	Volume (%)	(ft/sec)	Diameter (ft)
Not Applicable	e. No New Stacks Added									

Gavilon Grain, LLC Gavilon Clovis Animal Feed Facility Application Date: June 2018 Revision # 1

## Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

	Unit No.(s)	Total		Provide Name Here	Pollutant	Provide I Name Here	Pollutant	Provide I Name Here HAP or		Name Here		Name Here		Name Here		Provide Name Here HAP or		Name Here	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
No New Stac	eks Added																		
Tot	als:																		

Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

	Fuel Type (low sulfur Diesel,	Fuel Source: purchased commercial,		Speci	fy Units		
Unit No.	ultra low sulfur diesel, Natural Gas, Coal,)	pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
6	Natural Gas	Pipeline Quality Natural Gas	~985 Btu/scf	Up to 18.9 MMBtu	Up to 165,564 MMBtu	N/A	N/A

### Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

					Vapor	Average Stora	age Conditions	Max Storag	ge Conditions
Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Molecular Weight (lb/lb*mol)	Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
Not Applicab	ole.								

## **Table 2-L: Tank Data**

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2- LR below)	Roof Type (refer to Table 2- LR below)		acity	Diameter (M)	Vapor Space	Co (from Ta	olor ble VI-C)	Paint Condition (from Table VI-	Annual Throughput (gal/yr)	Turn- overs
			LK below)	LK below)	(bbl)	$(M^3)$		( <b>M</b> )	Roof	Shell	C)	(gai/yr)	(per year)
Not Applica	ble.												

# **Table 2-L2: Liquid Storage Tank Data Codes Reference Table**

		<u> </u>				
Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Rive	Roof, Shell Color	Paint Condition	
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
					MG: Medium Gray	

Note:  $1.00 \text{ bbl} = 0.159 \text{ M}^3 = 42.0 \text{ gal}$ 

OT: Other (specify)

BL: Black

Table 2-M: Materials Processed and Produced (Use additional sheets as necessary.)

Material Processed				Material Produced				
Description	<b>Chemical Composition</b>	Phase (Gas, Liquid, or Solid)			Chemical Composition	Phase	Quantity (specify units)	
Not Applicable.								

# **Table 2-N: CEM Equipment**

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
Not Applicable.									

## **Table 2-O: Parametric Emissions Measurement Equipment**

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
Not Applical	ble.							

#### **Table 2-P: Greenhouse Gas Emissions**

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box  $\Box$  By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr²						<b>Total GHG</b> Mass Basis ton/yr <sup>4</sup>	
Unit No.	GWPs 1	1	298	25	22,800	footnote 3							
6	mass GHG	9,684	0.02	0.18	-	-						9,684	9,694
	CO <sub>2</sub> e	9,684	5.44	4.56	-	-							
	mass GHG												j <del></del>
	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG											1	1
	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG											1	
	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG									<u> </u>		1	
	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG											+	
	CO <sub>2</sub> e mass GHG												
	CO <sub>2</sub> e												
	mass GHG												
	CO <sub>2</sub> e				-					1	-		
	mass GHG												
	CO <sub>2</sub> e												
	mass GHG												
	CO2e												
	mass GHG												
Total	CO <sub>2</sub> e												
						din Table A 1 of 4							

TGWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

<sup>&</sup>lt;sup>2</sup> For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

<sup>&</sup>lt;sup>3</sup> For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

<sup>&</sup>lt;sup>4</sup> Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

<sup>&</sup>lt;sup>5</sup> CO<sub>2</sub>e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

# Gavilon Peavey Grain West - Clovis, NM Particulate Matter Emissions

Unit	Source Description	Operating	Prod	uction Rate		Emission Factor			ι	Jncontrolled Em	ission Rates		
No.		Hours	Hour	Annual	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>
1	Flaker Grain Cleaner <sup>a</sup>	8,760 hr/yr	70 ton/hr	394,000 ton/yr	0.075 lb/ton	0.0190 lb/ton	0.0032 lb/ton	10.50 lb/hr	2.66 lb/hr	0.45 lb/hr	29.55 tpy	7.49 tpy	1.26 tpy
2	Grain Flaker (24" x 56" roller) 1, 2, b	8,760 hr/yr	25 ton/hr	394,000 ton/yr	0.150 lb/ton	0.075 lb/ton	0.0126 lb/ton	7.50 lb/hr	3.75 lb/hr	0.63 lb/hr	59.10 tpy	29.55 tpy	4.98 tpy
3	Grain Flaker (24" x 48" roller) <sup>1, 2, b</sup>	8,760 hr/yr	20 ton/hr	, ,	0.150 lb/ton	0.075 lb/ton	0.0126 lb/ton	6.00 lb/hr	3.00 lb/hr	0.51 lb/hr		, ,	
6	Boiler	8,760 hr/yr	19 MMBtu/hr	165,564 MMBtu/yr				0.04 lb/hr	0.14 lb/hr	0.14 lb/hr	0.15 tpy	0.62 tpy	0.62 tpy
7a	Grain Receiving Pit (Truck) <sup>e</sup>	8,760 hr/yr	168 ton/hr	280,000 ton/yr	0.017 lb/ton	0.0025 lb/ton	0.0004 lb/ton	2.86 lb/hr	0.42 lb/hr	0.07 lb/hr	2.38 tpy	0.35 tpy	0.06 tpy
7b	Grain Receiving Pit (Truck) <sup>e</sup>	8,760 hr/yr	336 ton/hr	280,000 ton/yr	0.017 lb/ton	0.0025 lb/ton	0.0004 lb/ton	5.71 lb/hr	0.84 lb/hr	0.14 lb/hr	2.38 tpy	0.35 tpy	0.06 tpy
8	Headhouse (includes enclosed cleaner) <sup>f</sup>	8,760 hr/yr	140 ton/hr	560,000 ton/yr	0.061 lb/ton	0.034 lb/ton	0.0058 lb/ton	8.54 lb/hr	4.76 lb/hr	0.81 lb/hr	17.08 tpy	9.52 tpy	1.62 tpy
9	Storage Bin Vents (main elevator) <sup>g</sup>	8,760 hr/yr	N/A	560,000 ton/yr	0.025 lb/ton	0.0063 lb/ton	0.0011 lb/ton	1.60 lb/hr	0.40 lb/hr	0.07 lb/hr	7.00 tpy	1.76 tpy	0.31 tpy
10	Storage Bin Vents (elevator annex) <sup>g</sup>	8,760 hr/yr	N/A	560,000 ton/yr	0.025 lb/ton	0.0063 lb/ton	0.0011 lb/ton	1.60 lb/hr	0.40 lb/hr	0.07 lb/hr	7.00 tpy	1.76 tpy	0.31 tpy
11a	Whole Grain Loadout <sup>c</sup>	8,760 hr/yr	140 ton/hr	28,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.46 lb/hr	0.11 lb/hr	0.02 lb/hr	0.05 tpy	0.01 tpy	0.00 tpy
11b	Whole Grain Loadout <sup>c</sup>	8,760 hr/yr	420 ton/hr	560,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	1.39 lb/hr	0.34 lb/hr	0.06 lb/hr	0.92 tpy	0.22 tpy	0.04 tpy
12	Grain Receiving Pit (Rail) <sup>e</sup>	8,760 hr/yr	1,400 ton/hr	560,000 ton/yr	0.017 lb/ton	0.0025 lb/ton	0.0004 lb/ton	23.80 lb/hr	3.50 lb/hr	0.59 lb/hr	4.76 tpy	0.70 tpy	0.12 tpy
13	Hammermill <sup>2, 3, h</sup>	8,760 hr/yr	20 ton/hr	250 400 ton hir	0.134 lb/ton	0.067 lb/ton	0.0113 lb/ton	2.68 lb/hr	1.34 lb/hr	0.23 lb/hr	23.48 tpy	11.74 tpy	1 00 tov
14	Hammermill <sup>2, 3, h</sup>	8,760 hr/yr	20 ton/hr	350,400 ton/yr	0.134 lb/ton	0.067 lb/ton	0.0113 lb/ton	2.68 lb/hr	1.34 lb/hr	0.23 lb/hr	23.46 ιμγ	11.74 τργ	1.98 tpy
16	Ground Grain Receiving Pit (truck) at Temporary Rail Loadout <sup>2, e</sup>	8,760 hr/yr	100.0 ton/hr	35,000 ton/yr	0.0170 lb/ton	0.0025 lb/ton	0.0004 lb/ton	1.70 lb/hr	0.25 lb/hr	0.04 lb/hr	0.30 tpy	0.04 tpy	0.01 tpy
17	Temporary Ground Grain Railcar Loadout <sup>2, c</sup>	8,760 hr/yr	100.0 ton/hr	35,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.33 lb/hr	0.08 lb/hr	0.01 lb/hr	0.06 tpy	0.01 tpy	0.00 tpy
18	DDG Loadout #1 <sup>2, c</sup>	8,760 hr/yr	140.0 ton/hr	240,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.46 lb/hr	0.11 lb/hr	0.02 lb/hr	0.40 tpy	0.10 tpy	0.02 tpy
19	DDG Loadout #2 <sup>2, c</sup>	8,760 hr/yr	140.0 ton/hr	240,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.46 lb/hr	0.11 lb/hr	0.02 lb/hr	0.40 tpy	0.10 tpy	0.02 tpy
20	DDG Barn #2	8,760 hr/yr											
21	DDG Truck Loading Inside DDG Barn #2	8,760 hr/yr	150.0 ton/hr	50,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.50 lb/hr	0.12 lb/hr	0.02 lb/hr	0.08 tpy	0.02 tpy	0.00 tpy
25	Truck Traffic Fugitive Dust Emissions J	8,760 hr/yr	1		J	J	,	12.10 lb/hr	2.96 lb/hr	0.30 lb/hr	52.98 tpy	12.95 tpy	1.30 tpy
26 26a	DDG Barn <sup>6</sup> DDG Barn - transfer to barn storage pile	8,760 hr/yr	400.0 ton/hr	240,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	1.320 lb/hr	0.320 lb/hr	0.040 lb/hr	0.396 tpy	0.096 tpy	0.012 tpy
26b	DDG Barn - transfer to loadout reclaim pit		280.0 ton/hr	240,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.924 lb/hr	0.320 lb/lil 0.224 lb/hr	0.040 lb/lll 0.028 lb/hr	0.396 tpy	0.096 tpy	0.012 tpy 0.012 tpy
27	Whole Corn Barn <sup>6</sup>	8,760 hr/yr	280.0 (01)/11	240,000 (01) yi	0.0033 10/1011	0.0008 15/1011	0.0001 15/1011	0.324 10/111	0.224 10/111	0.028 10/111	0.530 τργ	0.030 τργ	0.012 τργ
	Whole Corn Barn - transfer to barn storage pile		40.0 ton/hr	115,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.132 lb/hr	0.032 lb/hr	0.004 lb/hr	0.190 tpy	0.046 tpy	0.006 tpy
27b	Whole Corn Barn - transfer to reclaim pit		60.0 ton/hr	115,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.198 lb/hr	0.048 lb/hr	0.006 lb/hr	0.190 tpy	0.046 tpy	0.006 tpy
31	Fines Shed	8,760 hr/yr	,	, ,,	•		,	,		•	. ,		.,
32	Fines Auger <sup>6</sup>		1.5 ton/hr	1,825.0 ton/hr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.005 lb/hr	0.001 lb/hr	0.000 lb/hr	0.003 tpy	0.001 tpy	0.000 tpy
33	Commodity Barn												
		Ground Corn		350,400 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton			_	0.578 tpy	0.140 tpy	0.018 tpy
33a	Transfer to Commodity Barn Reclaim Pit	iked Corn & M	100.0 ton/hr	394,200 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton		0.080 lb/hr	0.010 lb/hr	0.650 tpy	0.158 tpy	0.020 tpy
		Feed Materials		30,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton				0.050 tpy	0.012 tpy	0.002 tpy
		Ground Corn		350,400 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton				0.578 tpy	0.140 tpy	0.018 tpy
33b	•	iked Corn & M		394,200 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton	0.330 lb/hr	0.080 lb/hr	lb/hr 0.010 lb/hr	0.650 tpy	0.158 tpy	0.020 tpy
		Feed Materials		30,000 ton/yr	0.0033 lb/ton	0.0008 lb/ton	0.0001 lb/ton				0.050 tpy	0.012 tpy	0.002 tpy

# Gavilon Peavey Grain West - Clovis, NM Particulate Matter Emissions

Unit	Source Description	Fuela	sions Control & Efficiency <sup>4, 5</sup>			Controlled Er	nission Rates			Emission Factor Source
No.	Source Description	Emis	sions Control & Efficiency	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	Emission ractor source
1	Flaker Grain Cleaner <sup>a</sup>	80 %	white mineral oil + cyclone @ 50% already in emission factor	1.050 lb/hr	0.266 lb/hr	0.045 lb/hr	2.955 tpy	0.749 tpy	0.126 tpy	AP-42 Section 9.9.1 Table 1-1 (cyclone controlled EF, so EF multiplied by 2 because 50% control assumed for cyclone)
2	Grain Flaker (24" x 56" roller) 1,2,b	0 %	50% for cyclone - already in emission factor	3.750 lb/hr	1.875 lb/hr	0.316 lb/hr	29.55 tpy	14.78 tpy	2.488 tpy	AP-42 Section 9.9.1 Table 1-2 (grain milling - flaker) cyclone control assumed
3	Grain Flaker (24" x 48" roller) <sup>1, 2, b</sup>	0 %		3.000 lb/hr	1.500 lb/hr	0.253 lb/hr				
6	Boiler			0.035 lb/hr	0.141 lb/hr	0.141 lb/hr	0.154 lb/hr	0.617 lb/hr	0.617 lb/hr	AP-42 Section 1.4
7a	Grain Receiving Pit (Truck) <sup>e</sup>	80 %	baghouse	0.571 lb/hr	0.084 lb/hr	0.014 lb/hr	0.476 tpy	0.070 tpy	0.012 tpy	AP-42 Section 9.9.1 Table 1-1 (grain receiving - straight truck)
7b	Grain Receiving Pit (Truck) <sup>e</sup>	80 %	baghouse	1.142 lb/hr	0.168 lb/hr	0.028 lb/hr	0.476 tpy	0.070 tpy	0.012 tpy	AP-42 Section 9.9.1 Table 1-1 (grain receiving - straight truck)
8	Headhouse (includes enclosed cleaner) <sup>f</sup>	99.74 %	Baghouse and white mineral oil	0.022 lb/hr	0.012 lb/hr	0.002 lb/hr	0.044 tpy	0.025 tpy	0.004 tpy	AP-42 Section 9.9.1 Table 1-1 (headhouse)
9	Storage Bin Vents (main elevator) <sup>g</sup>	80 %	white mineral oil	0.320 lb/hr	0.081 lb/hr	0.014 lb/hr	1.400 tpy	0.353 tpy	0.062 tpy	AP-42 Section 9.9.1 Table 1-1 (storage bin vent)
10	Storage Bin Vents (elevator annex) <sup>g</sup>	80 %	white mineral oil	0.320 lb/hr	0.081 lb/hr	0.014 lb/hr	1.400 tpy	0.353 tpy	0.062 tpy	AP-42 Section 9.9.1 Table 1-1 (storage bin vent)
11a	Whole Grain Loadout <sup>c</sup>	80 %	white mineral oil	0.092 lb/hr	0.022 lb/hr	0.004 lb/hr	0.009 tpy	0.002 tpy	0.000 tpy	AP-42 Section 9.9.1 Table 1-1 (grain shipping - truck)
11b	Whole Grain Loadout <sup>c</sup>	80 %	white mineral oil	0.277 lb/hr	0.067 lb/hr	0.011 lb/hr	0.185 tpy	0.045 tpy	0.008 tpy	AP-42 Section 9.9.1 Table 1-1 (grain shipping - truck)
12	Grain Receiving Pit (Rail) <sup>e</sup>	90 %	Brock Dustmaster 90% control	2.380 lb/hr	0.350 lb/hr	0.059 lb/hr	0.476 tpy	0.070 tpy	0.012 tpy	AP-42 Section 9.9.1 Table 1-1 (grain receiving - railcar)
13	Hammermill <sup>2, 3, h</sup>	90 %	white mineral oil and cyclone combination	0.268 lb/hr	0.134 lb/hr	0.023 lb/hr	2.348 tpy	1.174 tpy	0.198 tpy	AP-42 Section 9.9.1 Table 1-2 (grain milling - hammermill)
14	Hammermill <sup>2, 3, h</sup>	90 %	white mineral oil and cyclone combination	0.268 lb/hr	0.134 lb/hr	0.023 lb/hr	2.5 15 tpy	1.17 1 (p)	0.130 τργ	AP-42 Section 9.9.1 Table 1-2 (grain milling - hammermill)
16	Ground Grain Receiving Pit (truck) at Temporary Rail Loadout <sup>2, e</sup>	80 %	white mineral oil	0.340 lb/hr	0.050 lb/hr	0.008 lb/hr	0.060 tpy	0.009 tpy	0.001 tpy	AP-42 Section 9.9.1 Table 1-2 (animal feed - grain receiving)
17	Temporary Ground Grain Railcar Loadout <sup>2, c</sup>	80 %	white mineral oil	0.066 lb/hr	0.016 lb/hr	0.003 lb/hr	0.012 tpy	0.003 tpy	0.0005 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
18	DDG Loadout #1 <sup>2, c</sup>	0 %		0.462 lb/hr	0.112 lb/hr	0.019 lb/hr	0.396 tpy	0.096 tpy	0.016 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
19	DDG Loadout #2 <sup>2, c</sup>	0 %		0.462 lb/hr	0.112 lb/hr	0.019 lb/hr	0.396 tpy	0.096 tpy	0.016 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
20	DDG Barn #2									
21	DDG Truck Loading Inside DDG Barn #2	80 %	enclosure	0.099 lb/hr	0.024 lb/hr	0.004 lb/hr	0.017 tpy	0.004 tpy	0.001 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
25	Truck Traffic Fugitive Dust Emissions <sup>j</sup>	various	see Application Addendum	1.67 lb/hr	0.41 lb/hr	0.04 lb/hr	7.32 tpy	1.79 tpy	0.18 tpy	
26	DDG Barn <sup>6</sup>									
26a	DDG Barn - transfer to barn storage pile	0 %	30 %	0.924 lb/hr	0.224 lb/hr	0.028 lb/hr	0.277 tpy	0.067 tpy	0.008 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
26b	DDG Barn - transfer to loadout reclaim pit	0 %	30 %	0.647 lb/hr	0.157 lb/hr	0.020 lb/hr	0.277 tpy	0.067 tpy	0.008 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
27	Whole Corn Barn <sup>6</sup>									
27a	Whole Corn Barn - transfer to barn storage pile	80 %	30 %	0.018 lb/hr	0.004 lb/hr	0.001 lb/hr	0.027 tpy	0.006 tpy	0.001 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
27b	Whole Corn Barn - transfer to reclaim pit	80 %	30 %	0.028 lb/hr	0.007 lb/hr	0.001 lb/hr	0.027 tpy	0.006 tpy	0.001 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
31	Fines Shed									
32	Fines Auger <sup>6</sup>	80 %	0 %	0.001 lb/hr	0.000 lb/hr	0.000 lb/hr	0.001 tpy	0.000 tpy	0.000 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
33	Commodity Barn									
		80 %	30 %				0.081 tpy	0.020 tpy	0.002 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
33a	Transfer to Commodity Barn Reclaim Pit	0 %	30 %	0.231 lb/hr	0.056 lb/hr	0.007 lb/hr	0.455 tpy	0.110 tpy	0.014 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
		0 %	30 %				0.035 tpy	0.008 tpy	0.001 tpy	
		80 %	30 %			<u> </u>	0.081 tpy	0.020 tpy	0.002 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
33b	Commodity Barn Loadout	0 %	30 %	0.231 lb/hr	0.056 lb/hr	0.007 lb/hr	0.455 tpy			AP-42 Section 9.9.1 Table 1-2 (feed shipping)
		0 %	30 %				0.035 tpy	0.008 tpy	0.001 tpy	AP-42 Section 9.9.1 Table 1-2 (feed shipping)
			Total	18.676 lb/hr	6.142 lb/hr	1.103 lb/hr	49.422 tpy	20.723 tpy	3.867 tpy	

#### **Gavilon Peavey Grain West - Clovis, NM Natural Gas PTE Calculations**

18.9 MMBtu/hr Boiler Heat Input: Natural Gas Heating Value: 1,020 MMBtu/10<sup>6</sup> SCF

### Combined natural gas combustion emissions

Combined natural gas combas	Natural			
	Gas		PTE	PTE
Pollutant	Emission	Units	(lbs/hr)	(tpy)
	Factor <sup>[1]</sup>		(103/111)	(tpy)
TSP/PM (Filterable)	1.90		3.52E-02	0.15
PM <sub>10</sub>	7.60		0.14	0.62
PM <sub>2.5</sub>	7.60		0.14	0.62
SO <sub>2</sub>	0.60	lb/10 <sup>6</sup> SCF	1.11E-02	4.87E-02
NO <sub>x</sub>	100.00	10/10 001	1.85	8.12
CO	84.00		1.56	6.82
VOC	5.50		0.10	0.82
Hazardous Air Pollutants (HAF			0.10	0.45
Benzene	2.10E-03		3.89E-05	1.70E-04
Dichlorobenzene	1.20E-03		2.22E-05	9.74E-05
Formaldehyde	7.50E-02		1.39E-03	6.09E-03
Hexane	1.80		3.34E-02	0.15
Lead Compounds	5.00E-04		9.26E-06	4.06E-05
Naphthalene	6.10E-04		1.13E-05	4.95E-05
Polycyclic Organic Matter	8.82E-05		1.63E-06	7.16E-06
Toluene	3.40E-03		6.30E-05	2.76E-04
Arsenic Compounds	2.00E-04	lb/10 <sup>6</sup> SCF	3.71E-06	1.62E-05
Beryllium Compounds	1.20E-05		2.22E-07	9.74E-07
Cadmium Compounds	1.10E-03		2.04E-05	8.93E-05
Chromium Compounds	1.40E-03		2.59E-05	1.14E-04
Cobalt Compounds	8.40E-05		1.56E-06	6.82E-06
Manganese Compounds	3.80E-04		7.04E-06	3.08E-05
Mercury Compounds	2.60E-04		4.82E-06	2.11E-05
Nickel Compounds	2.10E-03		3.89E-05	1.70E-04
Selenium Compounds	2.40E-05		4.45E-07	1.95E-06
Total HAPs			3.50E-02	0.15
Greenhouse Gases <sup>[2]</sup>				
CO <sub>2</sub>	116.98		2,211	9,684
CH <sub>4</sub>	2.20E-03	lb/MMBtu	4.17E-02	0.18
N <sub>2</sub> O	2.20E-04		4.17E-03	1.83E-02
GHGs (mass basis)			2,211	9,684
GHGs (CO <sub>2</sub> e)			2,213	9,694

<sup>&</sup>lt;sup>[1]</sup>AP-42 Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4 (6/1998) for all emission factors except greenhouse gases. <sup>[2]</sup>Greenhouse Gases Emission Factors from 40 CFR 98 Tables A-1 C-1 and C-2.

Emission factors converted from kg/MMBtu to lb/MMBtu.

Vehicle Use Profile	Tons Received/Hauled			Truck Weights			Round Trips Trips			Vehicle Miles Traveled	
	Annual	Daily	hr/day	Empty	Full	Capacity	Distance	Annually	Daily	Annually	Daily
Grain Received Onsite	280,000 tpy	767 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.40 miles	11,200 trips/yr	31 trips/day	4,469 vmt/yr	12.2 vmt/day
Flaked/Ground Grain Hauled Off	30,000 tpy	82 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.36 miles	1,200 trips/yr	3 trips/day	426 vmt/yr	1.2 vmt/day
Feed Materials Receiving	30,000 tpy	82 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.36 miles	1,200 trips/yr	3 trips/day	426 vmt/yr	1.2 vmt/day
Feed Materials Shipping	30,000 tpy	82 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.36 miles	1,200 trips/yr	3 trips/day	426 vmt/yr	1.2 vmt/day
DDG Barn 1 Asphalt Emulsifier Segr	480,000 tpy	1,315 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.42 miles	19,200 trips/yr	53 trips/day	8,127 vmt/yr	22.3 vmt/day
DDG Barn 1 Basecourse Segment	480,000 tpy	1,315 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.30 miles	19,200 trips/yr	53 trips/day	5,818 vmt/yr	15.9 vmt/day
DDG Barn 2 Asphalt Emulsifier Segr	50,000 tpy	137 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.35 miles	2,000 trips/yr	5 trips/day	701 vmt/yr	1.9 vmt/day
DDG Barn #2 Barn BC Segment	50,000 tpy	137 tpd	24 hr/day	17.5 tons	42.5 tons	25.0 tons	0.24 miles	2,000 trips/yr	5 trips/day	473 vmt/yr	1.3 vmt/day

EF Parameters	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	Source
<b>k</b> = particle size multjplier	4.90	1.50	0.15	AP-42 Table 13.2.2-2
s = silt content of road surface	3.9 %	3.9 %	3.9 %	4th bullet down. For New Mexico, the silt content is 3.9%
a = empirical constant	0.70	0.90	0.90	AP-42 Table 13.2.2-2
W = weight of truck	30.0 tons	30.0 tons	30.0 tons	Avg. weight of Vehicle
<b>b</b> = empirical constant	0.45	0.45	0.45	AP-42 Table 13.2.2-2
<b>p</b> = # of days with precipitation/yr	60	60	60	AP-42 Figure 13.2.2-1
E = Emission Factor (lbs/VMT):	5.25 lb/vmt	1.28 lb/vmt	0.13 lb/vmt	$E = k * (s/12)^a * (W/3)^b * [(365 - p)/(365)]$

Vehicle Use Profile	Uncontrolled Emission Rates			Dust Control		Controlled Emission Rates						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	Туре	Efficiency	ı	PM	PI	<b>M</b> <sub>10</sub>	F	PM <sub>2.5</sub>	
	2.68 lb/hr	0.66 lb/hr	0.07 lb/hr			0.268 lb/hr	0.0338 g/sec	0.066 lb/hr	0.0083 g/sec	0.007 lb/hr	0.0008 g/sec	
Grain Received Onsite	64.3 lb/day	15.7 lb/day	1.6 lb/day	Asphalt Emulsifier	90.0 %	6.43 lb/day	0.0338 g/sec	1.57 lb/day	0.0083 g/sec	0.16 lb/day	0.0008 g/sec	
	11.7 tpy	2.9 tpy	0.29 tpy			1.17 tpy	0.0338 g/sec	0.29 tpy	0.0083 g/sec	0.03 tpy	0.0008 g/sec	
Flaked/Ground Grain Hauled Off	6.1 lb/day	1.5 lb/day	0.1 lb/day	Asphalt Emulsifier	90.0 %	0.61 lb/day	0.0032 g/sec	0.15 lb/day	0.0008 g/sec	0.01 lb/day	0.0001 g/sec	
Tranca/Ground Grain Fradica Gri	1.1 tpy	0.3 tpy	0.03 tpy	Asphalt Emdisiner	30.0 70	0.11 tpy	0.0032 g/sec	0.03 tpy	0.0008 g/sec	0.00 tpy	0.0001 g/sec	
				1		•						
Feed Materials Receiving	6.1 lb/day	1.5 lb/day	0.1 lb/day	Asphalt Emulsifier	90.0 %	0.61 lb/day	0.0032 g/sec	0.15 lb/day	0.0008 g/sec	0.01 lb/day	0.0001 g/sec	
r cod Materials Receiving	1.1 tpy	0.3 tpy	0.03 tpy	Asphalt Emdisiner	30.0 70	0.11 tpy	0.0032 g/sec	0.03 tpy	0.0008 g/sec	0.00 tpy	0.0001 g/sec	
Feed Materials Shipping	6.1 lb/day	1.5 lb/day	0.1 lb/day	Asphalt Emulsifier	90.0 %	0.61 lb/day	0.0032 g/sec	0.15 lb/day	0.0008 g/sec	0.01 lb/day	0.0001 g/sec	
r ccd Materials Oripping	1.1 tpy	0.3 tpy	0.03 tpy	Aspiral Emulsino	30.0 70	0.11 tpy	0.0032 g/sec	0.03 tpy	0.0008 g/sec	0.00 tpy	0.0001 g/sec	
										•		
DDG Barn 1 Asphalt Emulsifier Segr	117.0 lb/day	28.6 lb/day	2.9 lb/day	Asphalt Emulsifier	90.0 %	11.70 lb/day	0.0614 g/sec	2.86 lb/day	0.0150 g/sec	0.29 lb/day	0.0015 g/sec	
220 Zam : Aspinan Zimaiomor Gogi	21.4 tpy	5.2 tpy	0.52 tpy	7 topriait Erriaiomer		2.14 tpy	0.0614 g/sec	0.52 tpy	0.0150 g/sec	0.05 tpy	0.0015 g/sec	
DDG Barn 1 Basecourse Segment	83.8 lb/day	20.5 lb/day	2.0 lb/day	Base Course	80.0 %	16.75 lb/day	0.0879 g/sec	4.10 lb/day	0.0215 g/sec	0.41 lb/day	0.0022 g/sec	
220 Zam : Zaccouaios Goginona	15.3 tpy	3.7 tpy	0.37 tpy		00.0 /0	3.06 tpy	0.0879 g/sec	0.75 tpy	0.0215 g/sec	0.07 tpy	0.0022 g/sec	
								-				
DDG Barn 2 Asphalt Emulsifier Segr	10.1 lb/day	2.5 lb/day	0.2 lb/day	Asphalt Emulsifier	90.0 %	2.02 lb/day	0.0106 g/sec	0.49 lb/day	0.0026 g/sec	0.05 lb/day	0.0003 g/sec	
220 Barri 2 Moprian Emaionior Cogr	1.8 tpy	0.5 tpy	0.05 tpy	Thopsall Emalones	00.0 70	0.37 tpy	0.0106 g/sec	0.09 tpy	0.0026 g/sec	0.01 tpy	0.0003 g/sec	
											·	
	0.28 lb/hr	0.07 lb/hr	0.01 lb/hr			0.057 lb/hr	0.0072 g/sec	0.014 lb/hr	0.0017 g/sec	0.001 lb/hr	0.0002 g/sec	
DDG Barn #2 Barn BC Segment	6.8 lb/day	1.7 lb/day	0.2 lb/day	Base Course	80.0 %	1.36 lb/day	0.0072 g/sec	0.33 lb/day	0.0017 g/sec	0.03 lb/day	0.0002 g/sec	
	1.2 tpy	0.3 tpy	0.03 tpy			0.25 tpy	0.0072 g/sec	0.06 tpy	0.0017 g/sec	0.01 tpy	0.0002 g/sec	
Totals	12.10 lb/hr	2.96 lb/hr	0.30 lb/hr		Totals	7.32 tpy	1.67 lb/hr	1.79 tpy	0.41 lb/hr	0.18 tpy	0.04 lb/hr	
. Otalo	52.98 tpy	12.95 tpy	1.30 tpy									

Worst-Case Scenario: Gavilon has the capacity to receive a total of 560,000 tons per year thorugh the headhouse, but only 280,000 tons per year through truck receiving pits. Additionally, the facility can transfer 30,000 tons of feed materials through the commodity barn.

The worst case for haul road emissions is receiving and shipping DDG from Barn 1 and 2 at maximum capacity (530,000 tons) and then shipping 30,000 tons of flaked/ground grain and 30,000 tons of feed materials from the commodity barn. The whole corn truck loadout would not be able to operate if gavilon is operating truck receiving at maximum capacity, as the trucks would physically interfere.

# Gavilon Peavey Grain West - Clovis, NM Grain Handling PTE Calculation Footnotes and information

- <sup>1</sup> No mineral oil control grain is heated and as a result, mineral oil removed. 80% control in permit is incorrect. Cyclone controls only for the flaker.
- <sup>2</sup> Emission factor for PM<sub>2.5</sub> is scaled to the ratio of PM<sub>2.5</sub> to PM<sub>10</sub> of 17% based on flaker grain cleaner emission factors from Table 9.9.1-1
- <sup>3</sup> The hammermills are controlled via cyclone. The control efficiency is already accounted for in the emission factor. However, in addition to the cyclone control, an additional 80% control is added for the application of mineral oil, which accounts for 90% total control. Therefore the controlled emission factor is multiplied by 2 to account for the 50% control of cyclone to represent an uncontrolled emission factor.
- <sup>4</sup> For barns, enclosure control efficiency 30% included in PTE for all barn enclosures, per NMED guidance (Sandy Spoon email 03/18/2010). 80% control for oil.
- <sup>5</sup> whole corn barn and ground corn barn uncontrolled includes 80% control for oil required by the permit to be applied to incoming grain
- <sup>6</sup> rate of flaked corn and milo transfer to barns is limited by permit to total flaker limit of 394,000 tons per year; or 197,000 tons per year each for flaked corn and flaked milo ground corn transfers are limited by permit to total hammermill capacity and ground grain loadout limit of 350,400 tons per year rate of DDG loadout is limited by the capacity of equipment and DDG flow characteristics. DDG loadout by rail is slower than corn loadout rate of fines production is assumed 5 tons per day maximum; 2 tons per day is typical whole corn barn holds 11,500 tons and is generally filled once or twice a year. Annual capacity assumes the barn is filled 10 times per year.

#### **Source of Emission Factors**

- <sup>a</sup> Emission factor (EF) from AP42 Section 9.9.1, Table 9.9.1-1: Grain cleaning (cyclone controlled). EF multiplied by 2 for uncontrolled emissions because 50% controlled assumed for cyclone.
- <sup>b</sup> EF from AP42 Section 9.9.1, Table 9.9.1-2: Grain milling Flaker (cyclone controlled).
- <sup>c</sup> EF from AP42 Section 9.9.1, Table 9.9.1-2: Feed shipping.
- <sup>d</sup> EF from AP42 Section 1.4, Table 1.4-2.
- <sup>e</sup> EF from AP42 Section 9.9.1, Table 9.9.1-2: Animal Feed Mills Grain receiving.
- <sup>f</sup> EF from AP42 Section 9.9.1, Table 9.9.1-1: Headhouse.
- g EF from AP42 Section 9.9.1, Table 9.9.1-1: Storage bin (vent).
- h EF from AP42 Section 9.9.1. Table 9.9.1-2: Grain milling hammermill (cyclone controlled).
- <sup>1</sup> From Air Pollution Engineering Manual Section 4 Fugitive Emissions, Storage-Pile Wind Erosion Equation 4

$$E = 1.7 * (s/1.5) * [(365 - p)/(235)] * (f/15) = 4.9 lb/day/acre$$

2.0% = s - silt content % assumed

60 days = p - number of days w/ $\geq$  0.01 inch of precipitation per year (from Figure 13.2.2-1 of AP42)

25.0 % = f - percentage of time that the unobstructed wind speed exceeds 12 mph - assumed

#### **Sample Emission Calculations**

Uncontrolle	e <u>d</u>	<u>Uncontrolle</u>	<u>d</u>
Grain Flakers & Hammermills	(lb / ton) (ton / hr ) / [(100 - 50) / 100] = lb/hr	All Other Sources	(lb / ton) (ton / hr) = lb/hr
	(lb / ton) (ton / yr ) (ton / 2000 lb) / [(100 - 50) / 100] = tpy	(except flakers,	(lb / ton) (ton / yr ) (ton / 2000 lb) = tpy
Boiler	(lb / MMBtu) (MMBtu / hr) [(100 - % control) / 100] = lb/hr	hammermills &	
	(lb / MMBtu) (MMBtu / yr) [(100 - % control) / 100] = tpy	boilers)	

<sup>&</sup>lt;sup>1</sup> Truck Traffic Emissions from AP42 Section 13.2.2. See Addendum for calculation details

k See Addendum for modeled emission rates

### **Application Summary**

The <u>Application Summary</u> shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM): Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app\_form.html) for more detailed instructions on SSM emissions.

\_\_\_\_\_

Gavilon Grain, LLC (Gavilon), doing business as the Peavey Company, owns and operates an animal feed manufacturing facility near Clovis, New Mexico (Clovis Facility). This facility receives grain, primarily corn and, milo, to be ground or flaked and sold for feed production. The facility also receives and dried distiller's grains (DDG), and sells it for feed production. Primary operations at the facility are receiving, handling, storing, and shipping this material. Additionally, there are grain cleaners, flakers, hammermills, and a small natural gas-fired boiler used on site. Gavilon applies white mineral oil to control emissions from all received grain and has additional control devices such as enclosures, cyclones, and a baghouse.

Gavilon is submitting this application to revise and remove certain permit requirements which were previously deemed too complex to be included in a minor permit revision. The West Clovis Facility is not co-located with any other source and will continue to be a minor source for both Title V and the Prevention of Significant Deterioration program. This application is being submitted as a significant permit revision under 20.2.72.219.D.1.a NMAC.

#### **Project:**

There is no construction associated with this permitting action.

#### **General Change in Potential To Emit (PTE):**

This permitting action reduces both hourly and annual nonfugitive PTE by removing equipment which is no longer in use after the installation of the Commodity Barn and recalculating haul road distances for the current layout. Gavilon is not one of the stationary source categories listed in NMAC 20.2.501 Table 1 which is required to count fugitive emissions towards major source thresholds.

Gavilon is submitting haul road calculations showing greater annual emissions from haul roads, due to a more conservative approach to emissions for modeling purposes. This is not representative of an increase in actual emissions and does not represent a realistic use of roads at the facility.

#### Startup, Shutdown, and Maintenance:

Emission factors for grain processes are sufficient to account for startup and shutdown events, which do not significantly increase emissions. Planned maintenance of grain handling equipment is conducted with equipment off, for safety and practicality reasons.

For a very small natural-gas boiler, AP-42 emission factors are overly conservative for modern burner and system design. Additionally, combustion in a boiler is typically ramped up or down for planned startup, shutdown, or maintenance events to reduce thermal shock to systems. Due to these factors, the hourly emission rate calculated for the boiler under full load is

Form-Section 4 last revised: 8/15/2011 Section 4, Page 1 Saved Date: January 31, 2017

representative of emissions during these events. Even if emissions were to increase on a pound per MMBTU basis, the reduced firing rate and overly-conservative emission factors will ensure emissions calculations are representative of these events.

## **Process Flow Sheet**

A process flow sheet and/or block diagram indicating the individual equipment, all emission points and types of contro
applied to those points. The unit numbering system should be consistent throughout this application.

Please see previous applications for process flow diagrams. No physical modifications are being made to the facility and the only emission unit changes are removal of equipment which is no longer in use at the site.

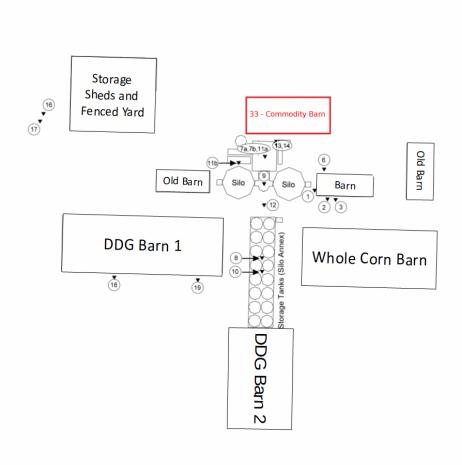
### **Plot Plan Drawn To Scale**

A <u>plot plan drawn to scale</u> showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

This section contains a plot plan showing existing emission points and buildings located around the new Commodity Barn (Unit 33) at the Gavilon West Clovis, New Mexico Animal Feed Manufacturing Facility.

The following legend identifies the emission points:

Source ID	Description
1	Flaker Grain Cleaner
2	Grain Flaker (24" x 56" roller)
3	Grain Flaker (24" x 48" roller)
6	Boiler
7a	Grain receiving pit (truck)
7b	Grain receiving pit (truck)
8	Headhouse (includes enclosed cleaner)
9	Storage bin vents (main elevator)
10	Storage bin vents (elevator annex)
11a	whole grain load out station (truck)
11b	whole grain load out station (truck)
12	Grain receiving pit (rail)
13	Hammermill
14	Hammermill
16	Ground grain receiving pit (truck) at temporary rail load out
17	Temporary ground grain railcar load out
18	DDG load out conveyor
19	DDG load out conveyor
33	Commodity Barn



Saved Date: January 31, 2017

### **All Calculations**

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app\_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

**Glycol Dehydrator Calculations**: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

- 1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
- 2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

#### **Significant Figures:**

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

- **B.** At least 5 significant figures shall be retained in all intermediate calculations.
- C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:
  - (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
  - (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; and
  - (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
  - (4) The final result of the calculation shall be expressed in the units of the standard.

**Control Devices:** In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

Form-Section 6 last revised: 5/3/16 Section 6, Page 1 Saved Date: July 12, 2017

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Please see form UA2 for emissions calculations. The only changes in emissions calculations from previous permitting actions has been to modify haul road distances for the new layout and to remove emissions from deprecated units. Overall this has reduced facility PTE.

Haul road emissions have been recalculated using significantly more conservative and physically impossible throughputs to ensure modeling fully demonstrates compliance with state ambient air quality standards. Previously, a realistic distribution of material loadout has been used. The most recent analysis assumes that Gavilon might use the two DDG barns at maximum capacity, because they have both the longest haul road distances and segments which receive less control credit.

The remaining receiving capacity is then assigned to the commodity barn. This is more conservative than assuming whole corn loadout because truck receiving and whole corn loadout occur in the same general location and it would not be possible to simultaneously receive grain via truck at maximum capacity and load it out at the same time.

### Section 6.a

### **Green House Gas Emissions**

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

**Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC)** applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

#### **Calculating GHG Emissions:**

- 1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e emissions from your facility.
- 2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
- 3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
- **4.** Report GHG mass and GHG CO<sub>2</sub>e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
- **5.** All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
- 6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following  $\sqrt{\phantom{0}}$  By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

#### **Sources for Calculating GHG Emissions:**

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/
- 40 CFR 98 <u>Mandatory Green House Gas Reporting</u> except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

#### **Global Warming Potentials (GWP):**

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO<sub>2</sub> over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. (20.2.70.7 NMAC, 20.2.74.7 NMAC). You may also find GHGs defined in 40 CFR 86.1818-12(a).

#### **Metric to Short Ton Conversion:**

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Form-Section 6 last revised: 5/3/16 Section 6, Page 3 Saved Date: July 12, 2017

### **Information Used To Determine Emissions**

#### Information Used to Determine Emissions shall include the following:

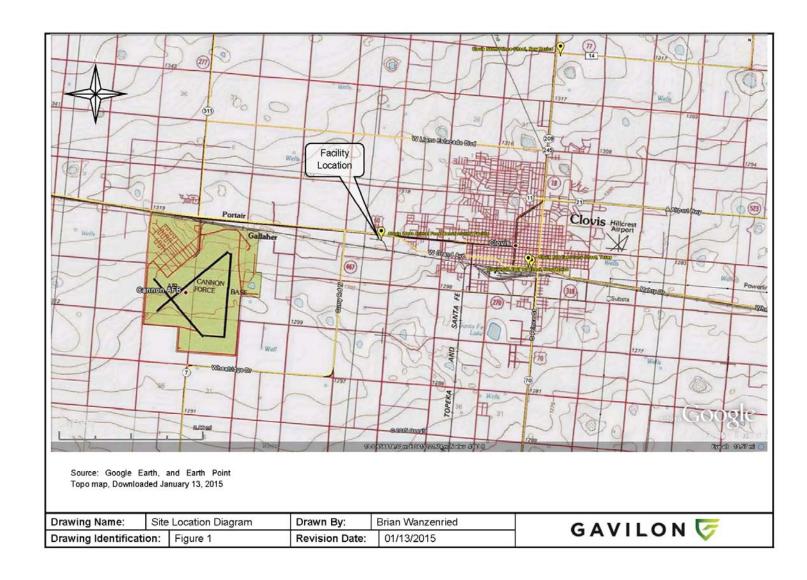
☐ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation. ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.  $\sqrt{}$  If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations. ☐ If an older version of AP-42 is used, include a complete copy of the section. ☐ If an EPA document or other material is referenced, include a complete copy. ☐ Fuel specifications sheet. ☐ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

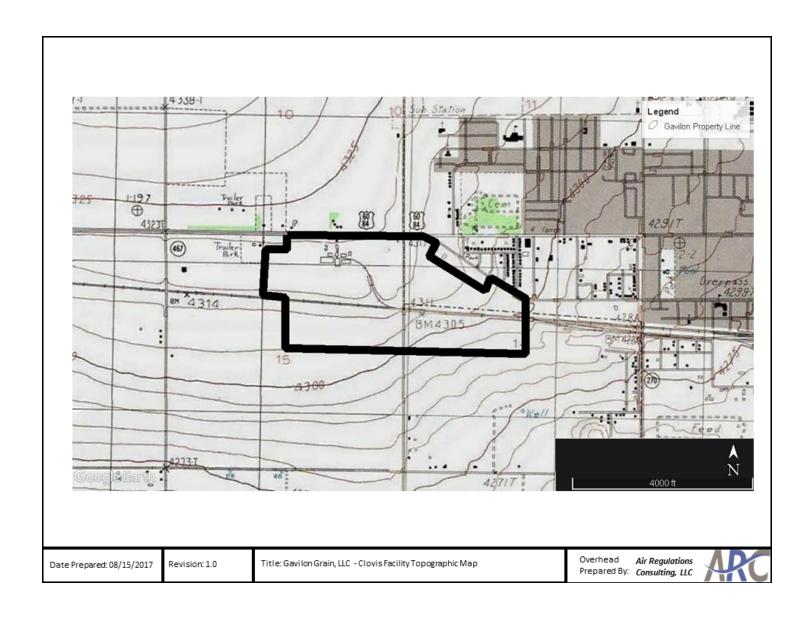
Current AP-42 used to calculate emissions. Please see the attached NMED form UA2 for emissions calculations and citations.

# Map(s)

<u>A map</u> such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north		
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads		
Topographic features of the area	Facility property boundaries		
The name of the map	The area which will be restricted to public access		
A graphical scale			





Saved Date: January 31, 2017

### **Proof of Public Notice**

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC) (This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

√ I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"
This document provides detailed instructions about public notice requirements for various permitting actions.
It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and Significant Permit Revision public notices must include all items in this list.

**Technical Revision** public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

- 1. ☑ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
- 2. A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g. post office, library, grocery, etc.)
- 3. **☑** A copy of the property tax record (20.2.72.203.B NMAC).
- 4. A sample of the letters sent to the owners of record.
- 5. ☑ A sample of the letters sent to counties, municipalities, and Indian tribes.
- 6. A sample of the public notice posted and a verification of the local postings.
- 7. Z A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
- 8. Z A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
- 9. A copy of the <u>classified or legal</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 10. ☑ A copy of the <u>display</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 11. A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.

### Written Description of the Routine Operations of the Facility

A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

For details of existing facility operations, please see previous applications and permits. This permit revision will allow the facility to expand operating hours but will not change the underlying operations.

On a short-term basis, Gavilon Clovis is bottlenecked by mechanical capacity of receiving, material handling, and loadout equipment. This equipment will not be changed, and therefore the facility will not be debottlenecked. On an annual basis, throughput limits restrict the total amount of material transferred. These limits will not be changed. While Gavilon will be able to operate more hours in any individual day, there will be no change in capacity on an hourly or annual basis.

#### **Source Determination**

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, <u>Single Source Determination Guidance</u>, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

**A.** Identify the emission sources evaluated in this section (list and describe): There are no emitting or NMED registered facilities within a mile radius of the Clovis Facility.

#### B. Apply the 3 criteria for determining a single source:

<u>SIC</u> <u>Code</u>: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, <u>OR</u> surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

 $\Box$  Yes  $\sqrt{N_0}$  (N/A)

<u>Common Ownership or Control</u>: Surrounding or associated sources are under common ownership or control as this source.

 $\square$  Yes  $\sqrt{No}$  (N/A)

<u>Contiguous</u> <u>or Adjacent</u>: Surrounding or associated sources are contiguous or adjacent with this source.

 $\Box$  Yes  $\sqrt{N_0}$  (N/A)

#### C. Make a determination:

- √ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check AT LEAST ONE of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.
- ☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

# Section 12.A PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

	TD1 *	C	٠.	•
Α.	This	tac1	l1fv	15.
	11110	Iuci	,	10.

$\sqrt{}$	a minor PSD source before and after this modification (if so, delete C and D below).
	a major PSD source before this modification. This modification will make this a PSD minor source.
	an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
	an existing PSD Major Source that has had a major modification requiring a BACT analysis
	a new PSD Major Source after this modification.

B. This facility is not one of the listed 20.2.74.501 Table I – PSD Source Categories. The "project" emissions for this modification are not significant because they are less than the significance thresholds in 20.2.74.502 Table 2. The "project" emissions listed below do only result from changes described in this permit application, thus no emissions from other revisions or modifications, past or future to this facility should be aggregated with this modification. Also, specifically discuss whether this project results in "de-bottlenecking", or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

a. NOx: 0 TPY
 b. CO: 0 TPY
 c. VOC: 0 TPY
 d. SOx: 0TPY

e. TSP (PM): -1.41 TPY Nonfugitive (no haul roads)

f. PM10: -0.34 TPY Nonfugitive (no haul roads)

g. PM2.5: -0.05 TPY Nonfugitive (no haul roads)

h. Fluorides: 0 TPY
i. Lead: 0 TPY

i. Sulfur compounds (listed in Table 2): 0 TPY

k. GHG: 0 TPY

No debottlenecking will occur for the existing sections of the facility because grain throughput limits and material receiving/handling/shipping capacity remain unchanged.

### **Determination of State & Federal Air Quality Regulations**

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

#### **Required Information for Specific Equipment:**

For regulations that apply to specific source types, in the 'Justification' column provide any information needed to determine if the regulation does or does not apply. For example, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

#### Required Information for Regulations that Apply to the Entire Facility:

See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

#### Regulatory Citations for Regulations That Do Not, but Could Apply:

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example, if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

#### **Regulatory Citations for Emission Standards:**

For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. Here are examples: a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

#### Federally Enforceable Conditions:

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVENT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.


EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: http://cfpub.epa.gov/adi/

#### STATE REGULATIONS:

Form-Section 13 last revised: 10/04/16 Section 13, Page 2 Saved Date: January 31, 2017

STATE		Applies?	Unit(s)	JUSTIFICATION:
REGU- LATIONS CITATION	Title	Enter Yes or No	or Facility	(You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	Gavilon produces particulate matter and is required to obtain a permit under 20.2.72 NMAC and does not fully qualify for the Limitation of Applicability in 20.2.3.9 NMAC.
20.2.7 NMAC	Excess Emissions	Yes	Facility	Gavilon is subject to the requirements of 20.2.72 NMAC and 20.2.73 NMAC. Therefore, Gavilon is subject as stated in 20.2.7.108.A.(2) NMAC.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No		All external combustion equipment at Gavilon has a heat input of less than 1,000,000 million British Thermal Units per year (MMBtu/yr) listed in 20.2.33.108 NMAC. The boiler has a heat input rating of 18.9 MMBtu per hour, and therefore would have a maximum heat input of 165,564 MMBtu/yr operating at maximum capacity for 8,760 hours.
				Gavilon does not have any stationary oil-burning equipment.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	No		All combustion equipment at Gavilon has a heat input of less than 1,000,000 million British Thermal Units per year (MMBtu/yr) listed in 20.2.33.108 NMAC. The boiler has a heat input rating of 18.9 MMBtu per hour, and therefore would have a maximum heat input of 165,564 MMBtu/yr operating at maximum capacity for 8,760 hours.
20.2.33 NMAC	Natural Gas Processing Plant – Sulfur	No		Gavilon is not a Natural Gas Processing Plant.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	N/A - Repealed
20.2.38 NMAC	Hydrocarbon Storage Facility	N/A	N/A	Gavilon is a grain elevator with no hydrocarbon storage equipment.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	N/A	N/A	Gavilon is a grain elevator with no sulfur recovery equipment.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes		The boiler is stationary combustion equipment which is not subject to any other specific particulate matter or opacity limitation which would take precedence over 20.2.61.109 NMAC.
20.2.70 NMAC	Operating Permits	No		Potential to emit for Gavilon is less than 100 tons per year (tpy) for particulate matter with an aerodynamic diameter of less than 10 micros and less than 2.5 micros (PM <sub>10</sub> and PM <sub>2.5</sub> ), oxides of nitrogen (NO <sub>x</sub> ), sulfur dioxide (SO <sub>2</sub> ), carbon monoxide (CO), and volatile organic compounds (VOC). Potential emissions of hazardous air pollutants (HAP) are less than 10 tpy for any individual HAP and 25 tpy for total HAP. Gavilon does not have, and is not required to seek, a permit under 20.2.79 NMAC and is not required to obtain a Title V permit under any regulation.
				Gavilon is not required to count fugitive emissions because it is not one of the source categories listed in 20.2.70.7(2)(a) through (aa). In particular, Gavilon does not meet the definition of a grain terminal elevator or grain storage elevator for 40 CFR Part 60 Subpart DD (Grain Elevators), which was promulgated prior to August 7, 1980.
20.2.71 NMAC	Operating Permit Fees	No		Gavilon is not subject to 20.2.70 NMAC and is not required to obtain an operating permit.
20.2.72 NMAC	Construction Permits	Yes	Facility	Gavilon predates the New Mexico construction permit program; however, modifications have occurred which triggered construction permit requirements under 202.72 NMAC. Facility potential emissions rate (PER) would exceed 25 tpy for PM <sub>10</sub> and PM <sub>2.5</sub> without construction permit limits.

Saved Date: January 31, 2017

Form-Section 13 last revised: 10/04/16 Section 13, Page 3

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:  (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	Gavilon predates the New Mexico construction permit program; however, modifications have occurred which triggered NOI requirements under 202.73 NMAC. Facility potential emissions rate (PER) would exceed 10 tpy for PM <sub>10</sub> and PM <sub>2.5</sub> without construction permit limits.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No		Potential facility-wide emissions do not exceed the Prevention of Significant Deterioration thresholds and potential emissions for this modification alone are also less than these thresholds. Gavilon is subject to 250 tpy thresholds because it does not fit any source category listed in 20.2.74.501 NMAC Table 1.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This construction permit revision application is being filed to meet the requirements of 20.2.72 NMAC, therefore construction permit fees apply.
20.2.77 NMAC	New Source Performance	Yes	Unit 6	The boiler is subject to 40 CFR Part 60 Subpart Dc (Small Industrial/Commercial/Institutional Steam Generating Units) because it is a natural gas-fired steam generating unit with a heat input capacity of 18.9 MMBtu/hr constructed after June 9, 1989. Because it is subject to Subpart Dc, it is also subject to Subpart A (General Provisions). The boiler is not subject to Subarts D, Da, or Db because the heat input capacity is less than 100 MMBtu/hr.  Gavilon is not subject to Subpart DD (Grain Elevators) because Gavilon is an animal feed manufacturer, which is specifically excluded from the definition of grain terminal elevators and Gavilon does not meet the definition of a grain storage elevator. Although Gavilon does grind corn, it is not used for human consumption.
20.2.78 NMAC	Emission Standards for HAPS	No		Gavilon does not emit any of the specific pollutants (benzene, radon, radionuclides, arsenic, asbestos, mercury, beryllium, vinyl chloride, etc.) or meet any of the source categories subject to 40 CFR Part 61. The only source of HAP at Gavilon is the boiler.
20.2.79 NMAC	Permits – Nonattainment Areas	No		Gavilon is not located in a nonattainment area and does not have the potential to emit greater than the appropriate major source thresholds.
20.2.80 NMAC	Stack Heights	No		Gavilon is not subject to stack height requirements in Construction Permit 2910M1R4 placed under the authority of 20.2.80 NMAC. Additionally, new equipment installed as part of this project will not trigger modeling requirements or have stacks designed to increase emission plume release height.
20.2.82 NMAC	MACT Standards for source categories of HAPS	No		No equipment at Gavilon is subject to a requirement under 40 CFR Part 63. Gavilon is an area source of HAP because potential emissions of any individual HAP are less than 10 tpy and potential emissions of total HAP are less than 25 tpy.  The only source of HAP at Gavilon is the boiler, which is not subject to 40 CFR Part 63 Subpart JJJJJJ (Boilers – Area Sources) because it meets the definition of a gas-fired boiler in 40 CFR Part 63.11237. Gas-fired boilers are specifically excluded from Subpart JJJJJJ. 40 CFR Part 63 Subpart DDDDD (Boilers and Process Heaters – Major Sources) does not apply because Gavilon is not a major

Form-Section 13 last revised: 10/04/16 Section 13, Page 4 Saved Date: January 31, 2017

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:  (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
				Gavilon is not subject to 40 CFR Part 63 Subpart DDDDDDD (Prepared Feeds Manufacturing). As specified in 40 CFR Part 63.11619, affected facilities for this subpart are area-source prepared feeds manufacturing facilities that uses a material containing chromium or manganese
				All materials used for manufacturing at Gavilon contain less than 0.1 % chromium and 1.0% manganese by weight. These are the definitions of "Material containing chromium" and "material containing manganese" listed in 40 CFR Part 63.11627. Corn and grain typically do not contain chromium and contain only traces of magnesium. The material unloaded or transloaded at the new Unit 33 will also be well below the thresholds to trigger Subpart DDDDDDD.

#### FEDERAL REGULATIONS

FEDERAL REGULATIONS					
FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:	
40 CFR 50	NAAQS	Yes	Facility	Gavilon is subject to 20.2.72 NMAC, and therefore is subject to these requirements.	
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Unit 6	The boiler is subject to 40 CFR Part 60 Subpart Dc, and therefore is also subject to Subpart A.	
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No		The heat input capacity of the boiler is less than 250 MMBtu/hr, as specified in 40 CFR Part 60.40Da(a)(1).	
NSPS 40 CFR60.40b Subpart Db	Industrial- Commercial- Institutional Steam Generating Units	No		The heat input capacity of the boiler is less than 100 MMBtu/hr, as specified in 40 CFR Part 60.40b(a).	
NSPS 40 CFR60.40c Subpart Dc	Small Industrial- Commercial- Institutional Steam Generating Units	Yes	Unit 6	The heat input capacity of the boiler is between 10 and 100 MMBtu/hr and it was constructed after June 9, 1989, as described in 40 CFR Part 60.40c(a). It meets the definition of a steam generating unit found in 40 CFR Part 60.41c. Therefore, it is subject to Subpart Dc. The boiler does not meet any of the exemptions or scenarios listed in 40 CFR Part 60.40c(c) through (i).  The boiler has a heat input capacity of 18.9 MMBtu/hr and it is exclusively fired on natural gas.	

Form-Section 13 last revised: 10/04/16 Section 13, Page 5 Saved Date: January 31, 2017

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No		There are no petroleum storage tanks at Gavilon.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No		There are no storage vessels greater than 75 cubic meters at Gavilon.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No		There are no stationary gas-fired turbines at Gavilon.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No		Gavilon is not an onshore gas plant.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	No		Gavilon is not a natural gas processing facility.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No		No equipment at Gavilon would meet the definition of an affected facility contained in this Subpart.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which	No		No equipment at Gavilon would meet the definition of an affected facility contained in this Subpart.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Construction, Modification or Reconstruction Commenced After September 18, 2015			
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No		Gavilon does not have a stationary engine.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No		Gavilon does not have a stationary engine.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No		Gavilon does not have any electric generating units.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No		Gavilon does not have any electric generating units.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No		Gavilon is not a landfill.
NSPS 40 CFR 60, Subpart DD	Standards of Performance for Grain Elevators	No		As specified in 40 CFR Part 60.300(a) and (b), Subpart DD applies to grain terminal elevators and grain storage elevators which are constructed, reconstructed, or modified after August 3, 1978. Gavilon was constructed prior to this date, but has added receiving and conveying equipment which would likely be considered a modification if Gavilon were subject to Subpart DD.  However, Gavilon does not meet the definition of a "grain terminal elevator" or "grain storage elevator" listed in 40 CFR Part 50.301. Gavilon has a permanent storage capacity less than 2.5 million bushels and is an animal food manufacturer, and therefore the facility is not a grain terminal elevator. Gavilon does not have a wheat flour mill, wet corn mill, dry corn mill for human consumption, rice mill, or soybean extraction plant. Therefore, the facility is not a grain storage elevator. Although the facility does have a dry corn mill, no material is produced for human consumption.
NESHAP 40 CFR 61 Subpart A	General Provisions	No		No subpart of 40 CFR Part 61 applies to Gavilon.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No		Gavilon does not T process mercury ore to recover mercury, use mercury chlor- alkali cells to produce chlorine gas and alkali metal hydroxide, or incinerate or dry wastewater treatment plant sludge

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No		There are no pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers or similar equipment in VOC service at Gavilon.
MACT 40 CFR 63, Subpart A	General Provisions	No		No subparts of 40 CFR Part 63 apply to Gavilon.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No		Gavilon does not produce oil or natural gas.
MACT 40 CFR 63 Subpart HHH	Natural Gas Transmission and Storage Facilities	No		Gavilon does not supply natural gas and is an area source of HAP
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No		Gavilon is an area source of HAP.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No		Gavilon is not a major source of HAP and does not have coal or oil fired steam generating units.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	No		Gavilon does not have any stationary engines.
40 CFR Part 63 Subpart JJJJJJ	Industrial, Commercial, and Institutional Boilers at Area sources	No		Part 63 Subpart JJJJJJ does not apply to the boiler because it meets the definition of a gas-fired boiler in 40 CFR Part 63.11237. Gas-fired boilers are specifically excluded from Subpart JJJJJJ.
40 CFR Part 63 Subpart DDDDDDD	Prepared Feeds Manufacturing	No		As specified in 40 CFR Part 63.11619, affected facilities for this subpart are area- source prepared feeds manufacturing facilities that uses a material containing chromium or manganese.  All materials used at Gavilon contain less than 0.1 % chromium and 1.0%

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				manganese by weight. These are the definitions of "Material containing chromium" and "material containing manganese" listed in 40 CFR Part 63.11627. Corn and grain typically do not contain chromium and contain only traces of magnesium. The material unloaded or transloaded at the new Unit 33 will also be well below the thresholds to trigger Subpart DDDDDDD.
40 CFR 64	Compliance Assurance Monitoring	No		Facility does not have, and is not required to obtain, a Title V operating permit.
40 CFR 68	Chemical Accident Prevention	No		Facility does not store any chemicals listed in 40 CFR Part 68.130 in excess of the applicable threshold.
Title IV – Acid Rain 40 CFR 72	Acid Rain	No		Facility does not generate electricity.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No		Facility does not generate electricity.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No		Facility does not generate electricity.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No		Facility does not generate electricity.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No		Facility does not engage in any operations using, or that may release, ozone depleting chemicals.

# **Section 14**

# **Operational Plan to Mitigate Emissions**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

	<b>Title V Sources</b> (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an <b>Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies</b> defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
√	NSR (20.2.72 NMAC), PSD (20.2.74 NMAC) & Nonattainment (20.2.79 NMAC) Sources: By checking this box and certifying this application the permittee certifies that it has developed an Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
	<b>Title V</b> (20.2.70 NMAC), <b>NSR</b> (20.2.72 NMAC), <b>PSD</b> (20.2.74 NMAC) & <b>Nonattainment</b> (20.2.79 NMAC) <b>Sources:</b> By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

## **Section 15**

## **Alternative Operating Scenarios**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: <a href="https://www.env.nm.gov/aqb/permit/aqb\_pol.html">https://www.env.nm.gov/aqb/permit/aqb\_pol.html</a>. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title "Construction Scenarios", specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

#### **Alternative Operating Scenarios**

Depending upon demand, Gavilon will handle differing amounts of DDG, grain, and feed products. Additionally, demand will influence how much material is flaked or ground in any particular year. The reported throughputs and accepted limits are designed to be conservative maximums for each emission unit or product. Therefore, in any given year, combined material throughputs will generally be significantly less than the sum of all limits and what is conservatively assumed for PTE calculations.

#### **Construction Scenarios:**

There are no alternative construction scenarios for this permit because there will be no construction.

## **Section 16**

## **Air Dispersion Modeling**

- Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (<a href="http://www.env.nm.gov/aqb/permit/app\_form.html">http://www.env.nm.gov/aqb/permit/app\_form.html</a>) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC).	
See #1 above. <b>Note:</b> Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3	l
above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit	ı
replacements.	
Other: Revision of Limit Related to Modeling, therefore new modeling submitted for the	X
pollutants impacted	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application	ı
(20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4),	ı
20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling	ı
Guidelines.	İ

# Check each box that applies: □ See attached, approved modeling waiver for all pollutants from the facility. □ See attached, approved modeling waiver for some pollutants from the facility. □ Attached in Universal Application Form 4 (UA4) is a modeling report for all pollutants from the facility. √ Attached in UA4 is a modeling report for some pollutants from the facility. □ No modeling is required.

# **Section 17**

# **Compliance Test History**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below
provides an example.

There is no applicable compliance test history for Gavilon.

# Sections 18 & 19 Not Applicable -Streamline or Title V Applications Only

# **Section 20**

#### **Other Relevant Information**

<u>Other relevant information</u>. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

Please see enclosed write-up, analysis, forms, and redline permit.

Form-Section 22 last revised: 3/7/2016 Saved Date: January 31, 2017

# Section 21 Not Applicable – Landfill Only

# **Section 22: Certification**

Company Name:	
I,, her and as accurate as possible, to the best of my know	reby certify that the information and data submitted in this application are true vledge and professional expertise and experience.
Signed this day of	, upon my oath or affirmation, before a notary of the State of
*Signature	Date
Printed Name	Title
Scribed and sworn before me on this day of	<u> </u>
My authorization as a notary of the State of	expires on the
day of	
Notary's Signature	Date
Notary's Printed Name	

\*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.

Form-Section 22 last revised: 3/7/2016 Saved Date: January 31, 2017

# **Universal Application 4**

## **Air Dispersion Modeling Report**

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

16-	16-A: Identification					
1	Name of facility: Gavilon Grain, LLC - Clovis					
2	Name of company: Gavilon Grain, LLC					
3	Current Permit number: 2910M1R6					
4	Name of applicant's modeler: Air Regulations Consulting, LLC – Will Adler					
5	Phone number of modeler: 307.751.1212					
6	E-mail of modeler: will@airregconsulting.com					

16-	16-B: Brief						
	Why is the modeling being done? Other (describe below)						
1	This facility was last modeled in 2010 for Permit 2910M1. As part of this modeling, limits were placed on hours of operation for several receiving and loadout emission units as well as one haul road segment. These limits are not necessary, and removal is part of the application.						
2	Describe the permit changes relevant to the modeling. Requested revisions include removing hourly restrictions on haul roads which were based upon previous modeling.						
3	What geodetic datum was used in the modeling? NAD83						
4	How long will the facility be at this location? N/A – Permanent Facility						

5	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?  Yes No X							
6	Identify the Air Quality Control Region (AQCR) in which the facility is located: 155							
7	List the PSD baseline dates for this region (minor or major, as appropriate). <b>Minor PM</b> <sub>10</sub> – 2/20/1979, <b>Minor PM</b> <sub>2.5</sub> – 11/13/2013							
8	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).  N/A							
9	Is the facility located in a non-attainment area? If so, describe.  No							
10	Describe any special modeling requirements, such as streamline permit requirements. N/A							

16-C: Modeling History of Facility										
1	Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQS), and PSD increments modeled. (Do not include modeling waivers).									
	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments						
	СО									
	$NO_2$									
	$SO_2$									
	$H_2S$									
	PM2.5	2910M1	12/28/2010							
	PM10	2910M1	12/28/2010							
	TSP	2910M1	12/28/2010							
	Lead									
	Ozone (PSD only)									
	NM Toxic Air Pollutants (20.2.72.402.NMAC)									

16-D: Modeling performed for this application										
1	For each pollutant, indicate the modeling performed and submitted with this application.  Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.									
Pollutant ROI Cumulative analysis Culpability analysis Waiver approved emitted change										
	CO	N/A	N/A	N/A	N/A	Not Changed				
	$NO_2$	N/A	N/A	N/A	N/A	Not Changed				
	SO <sub>2</sub>	N/A	N/A	N/A	N/A	Not Changed				
	$H_2S$	N/A	N/A	N/A	N/A	Not Emitted				
	PM2.5	Yes	Yes	N/A	N/A					
	PM10	Yes	Yes	N/A	N/A					
	TSP	Yes	Yes	N/A	N/A					
	Lead	N/A	N/A	N/A	N/A	Not Changed				
	Ozone	N/A	N/A	N/A	N/A	Not Changed				

State air toxic(s) (20.2.72.402 NMAC)	N/A	N/A	N/A	N/A	Not Changed

#### 16-E: New Mexico toxic air pollutants modeling

List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application.

No toxic air pollutants were modeled.

1

1

1

List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.

below, it required.								
Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor			
N/A	N/A	N/A	N/A	N/A	N/A			
N/A	N/A	N/A	N/A	N/A	N/A			

## 16-F: Modeling options

What model(s) were used for the modeling? Why?

Both significant and cumulative impact modeling will be conducted using the latest version (18081) of the AMS/EPA Regulatory Model (AERMOD). The Lakes Environmental Software AERMOD View for Windows modeling manager will be used to prepare the input files and manage processing. Environmental Protection Agency (EPA) recommended defaults will be used.

What model options were used and why were they considered appropriate to the application? **All regulatory default.** 

## **16-G:** Surrounding source modeling

If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the unmerged list of sources to describe the changes.

Modifications were made to the inventory that was provided. Most changes were to the Concrete Batch Plants, Asplant Plants and similar to update emission rates to match permitting thresholds. Please see Section 16-G-3 for the changes.

Da	Date of surrounding source retrieval. May 14, 2018 via Eric Peters									
A	QB Source ID	Description of Corrections								
13	,	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
27	,	Updated Source Location to UTM Coordinates: $X = 663450.36m$ , $Y = 3805352.60m$ . This was done to match correct location.								
3		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
4		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
5		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
6		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
7		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
8		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
9		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
10	)	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
11		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
12	;	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
14	ļ	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
15	7	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
16		Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
17	,	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
18	}	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
19	)	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
20	)	Removed from Nearby source file since this is one of the Gavilon Grain, LLC Clovis sources.								
1		Updated Lateral Dimension to 162.79m. Updated emission rates to PM2.5 = $0.57 \text{ g/s}$ , TSP = $3.01 \text{ g/s}$ , and PM10 = $2.26 \text{ g/s}$ to match CP thresholds for the facility.								
23		Updated Lateral Dimension to 162.79m. Updated emission rates to PM2.5 = 0.57 g/s, TSP = 3.01 g/s, and PM10 = 2.26 g/s to match CP thresholds for the facility.								
76		Updated Lateral Dimension to 162.79m. Updated emission rates to PM2.5 = 0.57 g/s, TSP = 3.01 g/s, and PM10 = 2.26 g/s to match CP thresholds for the facility.								
77	,	Updated Lateral Dimension to 162.79m. Updated emission rates to PM2.5 = 0.57 g/s, TSP = 3.01 g/s, and PM10 = 2.26 g/s to match CP thresholds for the facility.								

188	Updated Lateral Dimension to 162.79m. Updated emission rates to PM2.5 = 0.57 g/s, TSP = 3.01 g/s, and PM10 = 2.26 g/s to match CP thresholds for the facility.
196	Updated Lateral Dimension to 162.79m. Updated emission rates to PM2.5 = 0.57 g/s, TSP = 3.01 g/s, and PM10 = 2.26 g/s to match CP thresholds for the facility.

16-	H: Building and structure downwash		
1	How many buildings are present at the facility? 23 Buildings	BLD_1 BLD_2 BLD_3 BLD_4 BLD_5 BLD_9 BLD_10 BLD_11 BLD_12 BLD_13 BLD_14 BLD_15A BLD_15B BLD_16 BLD_17A BLD_17B BLD_17B BLD_18A BLD_18B BLD_19A BLD_19A BLD_19B CONBLD_1 CONBLD_2 COMBARN_1	
2	How many above ground storage tanks are present at the facility?	Zero	
3	Was building downwash modeled for all buildings?	Yes X	No
4	If not, explain why.		
5	Building comments		

## 16-I: Receptors and modeled property boundary

1

"Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility.

	Describe the fence or other physical barrier at the facility that defines the restricted area.  Gavilon Clovis owns a large property which is blocked by a combination of fencing, commercial railroad tracks, and landscaping/terrain features which discourage trespassing. Property is laid out to be clearly not for publicly use.							
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?	Yes	No X					
3	Are restricted area boundary coordinates included in the modeling files?	Yes X	No					
4	Describe the receptor grids and their spacing. The grid will contain receptors with 50-meter spacing around the fence line and from the fence line out to at least 500 meters, 100-meter spacing from the 500 meters beyond the fence line out to at least 1,000 meters, and 500-meter spacing from 1,000 meters beyond the fence line out to at least 5,000 meters.							
5	Describe receptor spacing along the fence line. 50 meter spacing							
6	Describe the PSD Class I area receptors. N/A							

16-	16-J: Sensitive areas								
1	Are there schools or hospitals or other sensitive areas near the facility?  This information is optional (and purposely undefined), but may help determine issues related to public notice.	Yes	No X						
2	If so, describe. N/A								
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes	No X						

16	-K: Modeling Scenarios						
	Identify, define, and describe all modeling scenarios. Examples and Examples are strates, times of day, times of year, simultaneous or alternate etc. Alternative operating scenarios should correspond to a described in Section 15 of the Universal Application (UA3)	operation of old and new equipall parts of the Universal Applica	ment during transition periods,				
Only the worst-case modeling scenario is used, which assumes that the maximum amount of truck recand the maximum theoretical receiving/shipment of dried distiller's grains (DDG) occurs. This produce emissions which are much greater than the facility could ever realistically produce, due to traffic intersite.							
	Additionally, all traditional grain handling equipment, mills, and flakers are also assumed to be operating at maximum capacity, which would not be possible if the facility dedicated service to only DDG.						
2	Which scenario produces the highest concentrations? Why? The worst-case is maximized haul road emissions, which create the single greatest modeling impact in TSP (the pollutant closest to NMAAQS).						
3	Were emission factor sets used to limit emission rates or hours of operation?	Yes	No X				

	(This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)											
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.)  Sources: N/A											
	Hour of Day	Factor	Hour of Day	Factor								
	1		13									
	2		14									
	3		15									
	4		16									
	5		17									
	6		18									
5	7		19									
	8		20									
	9		21									
	10		22									
	11		23									
	12		24									
	If hourly, variable emission rates were used that were not described above, describe them here: N/A											
6	Were different emission rates used for short-term and annual modeling?					and	Yes			No X		
7	If yes, describe. N/A											

16-	16-L: NO <sub>2</sub> Modeling			
	Which types of NO <sub>2</sub> modeling were used? <b>N/A</b> Check all that apply.			
	100% NO <sub>X</sub> to NO <sub>2</sub> conversion			
1	ARM			
	PVMRM			
	OLM			
	ARM2			
	Other:			

2	Describe the NO <sub>2</sub> modeling. <b>N/A</b>
3	In-stack NO <sub>2</sub> /NO <sub>X</sub> ratio(s) used in modeling. N/A
4	Equilibrium NO <sub>2</sub> /NO <sub>X</sub> ratio(s) used in modeling. N/A
5	Describe/justify the use of the ratios chosen. N/A
6	Describe the design value used for each averaging period modeled. <b>N/A</b> 1-hour: Choose an item.

	Select the pollutants for which plume depletion modeling was used. N/A			
1	PM2.5			
	PM10			
	TSP			
	None			
2	Describe the particle size distributions used. N/A Include the source of information. N/A			
3	Was secondary PM modeled for PM2.5? Only required for PSD major modifications that are significant for NOx and/or SOx. Optional for minor sources, but allows use of high eighth high.	Yes	No X	

16-	16-N: Setback Distances and Source Classification				
1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location. N/A				
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling. <b>N/A</b>				
3	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match?	Yes X	No		
4	Provide a cross-reference table between unit numbers if they do not match. It's ok to place the easier formatting. N/A	table below see	ction 16-N for		
5	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match?	Yes X	No		
6	If not, explain why.				
7	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?	Yes	No X		
8	Which units consume increment for which pollutants?  All of the units will consume increment.				

9	PSD increment description for sources.  (for unusual cases, i.e., baseline unit expanded emissions after baseline date).  - All sources after baseline date.		
10	Are all the actual installation dates included in Table 2A of the application form, as required?  This is necessary to verify the accuracy of PSD increment modeling.	Yes X	No
11	If not please explain how increment consumption status is determined for the missing installation equipment does not have specific installation dates. No records were available.	on dates. Some	of the

16-	16-O: Flare Modeling					
1	For each flare or flaring scenario, complete the following					
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)		
	N/A	N/A	N/A	N/A		

16-	16-P: Volume and Related Sources					
1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines?	Yes	No X			
2	If the dimensions of volume sources are different from standard dimensions in the AQB Modeling Guidelines, describe how the dimensions were determined. N/A					
3	Describe the determination of sigma-Y and sigma-Z for fugitive sources. For haul roads, the volume sources followed the NMED Modeling Guidelines document. The fugitive volume sources followed previous modeling submittals with release height of 19.03 meters, horizontal dimension of 24.79 meters, and vertical dimension of 17.7 meters.					
4	Describe how the volume sources are related to unit numbers.  Or say they are the same. The volume sources are the same as the unit numbers.					
5	Describe any open pits. N/A					
6	Describe emission units included in each open pit. N/A					

# 16-Q: Background Concentrations

1	Identify and justify the background concentrations used. The PM2.5 24-hour data is obtained from Table 18B of the NMAQB modeling guidelines. The Hobbs monitoring site is the nearest monitor to the Clovis facility. The PM2.5 Annual data is obtained from Table 18 of the NMAQB modeling guidelines.  The PM10 24-hour data is obtained from Table 20 of the NMAQB modeling guidelines. The Hobbs monitoring site is the nearest monitor to the Clovis facility. The TSP Annual data is obtained from Table 19 of the NMAQB modeling guidelines using the PM10 Annual data as substitute data.		
2	Were background concentrations refined to monthly or hourly values?	Yes X – Monthly per NMED Guidance	No

# Identify and justify the meteorological data set(s) used. Modeling will be conducted using Clovis meteorological data collected during 2005. The data will be obtained from the NMAQB web site. The profile base elevation will be set at 1,283 meters above mean sea level. The wind rose plot of the 2005 Clovis meteorological data show predominant flows from the south and southwest. The 2005 meteorological data set consisting of surface data from the Clovis Municipal Airport, KCVN meteorological site and upper air data from the NWS Amarillo, Texas station will be used to evaluate predicted impacts from various pollutants. 2 Discuss how missing data were handled, how stability class was determined, and how the data were processed, if the Bureau did not provide the data. N/A

16-	16-S: Terrain			
1	Was complex terrain used in the modeling? If no, describe why. No, the area around the facility is fairly flat.			
2	What was the source of the terrain data? <b>WebGIS</b>			

16-	16-T: Modeling Files					
	Describe the modeling files:					
1	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)			
	GAVILON_TSP_24_v1	TSP	ROI/SIA			

GAVILON_TSP_Month	TSP	ROI/SIA
GAVILON_TSP_ANNUAL_v1	TSP	ROI/SIA
GAVILON_PM10_24hr_v1	PM10	ROI/SIA
GAVILON_PM25_24hr_v1	PM2.5	ROI/SIA
GAVILION_PM25_ANNUAL_2005	PM2.5	ROI/SIA
GAVILON_TSP_24hr_2005	TSP	Cumulative
GAVILON_TSP_Month	TSP	Cumulative
GAVILON_TSP_ANNUAL_2005	TSP	Cumulative
GAVILON_PM10_24hr_2005	PM10	Cumulative
GAVILON_PM25_24hr	PM2.5	Cumulative
GAVILON_PM25_ANNUAL_2005	PM2.5	Cumulative
GAVILON_INC_PM10_24hr_2005	PM10	Increment
GAVILON_INC_PM10_Annual_200 5	PM10	Increment
GAVILON_INC_PM25_24hr_2005	PM2.5	Increment
GAVILON INC PM25 24hr 2005	PM2.5	Increment

16-	U: PSD New or Major Modification Applications		
1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis.  Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes	No N/A
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes	No N/A
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption. N/A		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC. <b>N/A</b>		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? N/A	<b>\</b>	

16-	16-V: Modeling Results							
1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant.							
2	Identify the maximum concentrations from the modeling analysis.							

Pollutant	Period	Facility Concentration (µg/m3)	Total Modeled Concentration (µg/m3)	Total Modeled Concentration (PPM)	Background Concentration	Cumulative Concentration	Standard	Value of Standard	Units of Standard, Background, and Total	Percent of Standard
TSP	24-hour	89.14	118.69	N/A	Monthly	148.99	150	NMAAQS	μg/m³	99.3%
TSP	Month	40.70	47.02	N/A	Monthly	71.67	90	NMAAQS	μg/m <sup>3</sup>	79.6%
TSP	Annual	26.03	32.36	N/A	21.28	53.64	60	NMAAQS	$\mu g/m^3$	89.4%
PM10	24-hour	28.62	65.01	N/A	Monthly	95.31	150	NAAQS	μg/m³	63.5%
PM2.5	24-hour	4.83	14.07	N/A	Monthly	26.98	35	NAAQS	$\mu g/m^3$	77.1%
PM2.5	Annual	1.47	5.08	N/A	5.81	10.89	12	NAAQS	$\mu g/m^3$	90.8%
PM10	24-hour	26.63	26.71	N/A	No	26.71	30	Increment	μg/m³	89.0%
PM10	Annual	8.93	9.60	N/A	No	9.60	17	Increment	μg/m <sup>3</sup>	56.5%
PM2.5	24-hour	4.827	4.829	N/A	No	4.83	9	Increment	μg/m³	53.7%
PM2.5	Annual	1.468	1.482	N/A	No	1.48	4	Increment	μg/m <sup>3</sup>	37.0%

16-W: Location of maximum concentrations								
1	Identify the locations of the maximum concentrations.							
Pollutant		Period UTM East (m)		UTM North (m)	Elevation (ft)	Distance (m)	Radius of Impact (ROI) (m)	
TSP		24-hour	660503.00	3808396.69	1317.90	Fenceline	4,428 meters	
TSP	-	Month	656155.77	3805172.69	1302.37	5,258 m	N/A	
TSP	SP Annual		660403.23	3808397.56	1318.53	Fenceline	1,446 meters	
PM10		24-hour	659705.77	3808372.69	1317.00	755 m	1,693 meters	
PM2.5		24-hour	659755.77	3808322.69	1316.71	692 m	971 meters	
PM2.5		Annual	659705.77	3808372.69	1317.00	755 m	503 meters	

#### 16-X: Summary/conclusions

A statement that modeling requirements have been satisfied and that the permit can be issued.

The air dispersion modeling results presented in this form and with this application demonstrate that the Gavilon Grain West Clovis facility emissions can operate on a 24 Hour / Day basis while maintaining clean air standards in the surrounding ambient air. The West Clovis facility will comply with all of the New Mexico and National Ambient Air Quality Standards.

# APPENDIX B Redline Permit/Suggested Language



SUSANA MARTINEZ GOVERNOR

JOHN A. SANCHEZ LIEUTENANT GOVERNOR

# New Mexico ENVIRONMENT DEPARTMENT

#### Air Quality Bureau

525 Camino de los Marquez, Suite 1 Santa Fe, NM 87505-1816 Phone (505) 476-4300 Fax (505) 476-4375 www.nmenv.state.nm.us/aqb



J. C. BORREGO DEPUTY SECRETARY

#### NEW SOURCE REVIEW PERMIT Issued under 20.2.72 NMAC

Certified Mail No: 7016 2140 0000 9826 9519

Return Receipt Requested

**NSR Permit No:** 

**Facility Name:** 

2910M1R6

West Clovis Animal Feed Manufacturing Facility

**Facility Owner/Operator:** 

**Mailing Address:** 

Gavilon Grain, LLC dba Peavey Company

1331 Capital Avenue Omaha, NE 68102-1000

TEMPO/IDEA ID No:

**AIRS No:** 

**Permitting Action:** 

**Source Classification:** 

**Facility Location:** 

County:

3537 - PRN20170003

35-009-0012

Technical Permit Revision

Synthetic Minor

34° 24' 12.7" N and 103° 15' 15.6" W

Curry

**Date** 

**Air Quality Bureau Contact** 

Main AQB Phone No.

Antonia Tallarico (505) 476-4300

Richard L. Goodyear, PE

**Bureau Chief** 

Air Quality Bureau

DEC - 1 2017

## TABLE OF CONTENTS

Part A FACILITY SPECIFIC REQUIREMENTS	
A101 Permit Duration (expiration)	
A102 Facility: Description	
A103 Facility: Applicable Regulations	
A104 Facility: Regulated Equipment	
A105 Facility: Control Equipment	
A106 Facility: Allowable Emissions	
A107 Facility Allowable Startup, Shutdown, and Maintenance (SSM) Emissions	
A108 Facility: Hours of Operation	
A109 Facility: Reporting Schedules - NA	
A110 Facility: Fuel Sulfur Requirements (as required)	
A111 Facility: 20.2.61 NMAC Opacity	
A112 Facility: Visible Emissions	11
A113 Facility: Survey to Identify Sources	12
A114 Alternative Operating Scenario – Not Required	13
A115 Compliance Plan – Not Required	13
EQUIPMENT SPECIFIC REQUIREMENTS	
Oil and Gas Industry — Not Required	
Construction Industry — Not Required — — — — — — — — — — — — — — — — — — —	
Power Generation Industry	
A400 Power Generation Industry - Not Required	13
Solid Waste Disposal (Landfills) Industry	
A500 Solid Waste Disposal (Landfills) Industry– Not Required	
Grain Processing Industry	

A502 Grain Receiving & Distribution (grain elevator)	13
A503 Flaked Grain Process (corn & milo)	16
A504 Ground Grain Process	20
A505 Whole Grain Handling (corn)	22
A506 Feed Materials	23
A507 Dried Distillers Grain (DDG) Handling	24
A508 Haul Roads	27
A509 Control Equipment	29
Part B GENERAL CONDITIONS	33
B101 Legal	33
B102 Authority	34
B103 Annual Fee	34
B104 Appeal Procedures	34
B105 Submittal of Reports and Certifications	35
B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations	35
B107 Startup, Shutdown, and Maintenance Operations	36
B108 General Monitoring Requirements	36
B109 General Recordkeeping Requirements	37
B110 General Reporting Requirements	38
B111 General Testing Requirements	39
B112 Compliance	42
B113 Permit Cancellation and Revocation	43
B114 Notification to Subsequent Owners	43
B115 Asbestos Demolition	43
Part C MISCELLANEOUS	

NCR	Permit No.	2910N	<b>M1R6</b>
11/21/	remin ino.	29 I U	vi i ix o

Pa	ge	4	of	47

C101 Definitions	44
C102 Acronyms	45

# PART A FACILITY SPECIFIC REQUIREMENTS

# **A100 Introduction**

- A. This permit, NSR 2910M1R6, supersedes all portions of Air Quality Permit 2910M1R4 issued on 04/16/2014, except the portion requiring compliance tests. Compliance test conditions from previous permits are still in effect, in addition to compliance test requirements contained in this permit.
- B. Fee Requirement: This permit is not effective until the Department receives the permit fee specified in the attached invoice. Pursuant to 20.2.75.12 NMAC, the permittee shall pay this invoice no later than thirty (30) days after the permit issue date (invoicing), unless the Department has granted an extension. The permit fee must be paid by this date regardless of the permittee's intended use or non-use of the permit or of the Department's cancellation of the permit. The permittee's failure to pay this fee when due will automatically void the permit and the Department may initiate enforcement action to collect the fee and assess a civil penalty for non-payment. The Department may initiate enforcement action for injunctive relief and civil penalties for any construction or operation of the equipment involving the revision if the permit fee is not paid by the due date.

# A101 Permit Duration (expiration)

A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

### **A102 Facility: Description**

- A. The function of the facility is to process grain by bulk unloading, milling, and loading grains for agricultural animal feed products.
- B. This facility is located at UTM Zone 13, UTMH 660,452 km, UTMV 3,808,291 km, in Township 2N, Range 35E, Section 15, approximately three miles west of Clovis, New Mexico in Curry County.
- C. The technical permit revision consists of adding a commodity barn (Unit 33) for storage of flaked and ground grain products as well as general feed materials.

D. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition, excluding exempt sources or activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	<b>Emissions (tons per year)</b>
Nitrogen Oxides (NOx)	8.1
Carbon Monoxide (CO)	6.8
Volatile Organic Compounds (VOC)	0.45
Sulfur Dioxide (SO <sub>2</sub> )	0.05
Total Suspended Particulates (TSP)	47.3
Particulate Matter less than 10 microns (PM <sub>10</sub> )	20.2
Particulate Matter less than 2.5 microns (PM <sub>2.5</sub> )	3.8

Table 102.B: Total Potential HAPS that exceed 1.0 ton per year - NA

# A103 Facility: Applicable Regulations

A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

**Table 103.A: Applicable Requirements** 

Applicable Requirements	Federally Enforceable	Entire Facility	Unit No.
20.2.3 NMAC Ambient Air Quality Standards	X	X	All
20.2.7 NMAC Excess Emissions	X	X	All
20.2.61 NMAC Smoke and Visible Emissions	X		Unit 6
20.2.72 NMAC Construction Permit	X	X	All
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	X	All
20.2.75 NMAC Construction Permit Fees	X	X	All
20.2.77 NMAC New Source Performance	X		Unit 6
40 CFR 50 National Ambient Air Quality Standards	X	X	All
Applicable Requirements	Federally Enforceable	Entire Facility	Unit No.
40 CFR 60, Subpart A, General Provisions	X		Unit 6
40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	X		Unit 6
NMED Settlement Agreement – Approved 11-8-10 (Supplemental Environmental Project - Units 20 & 21)	X	X	All

# A104 Facility: Regulated Equipment

A. Table 104.A lists all of the process equipment authorized for this facility. Emission units that were identified as exempt activities and/or equipment (as defined in 20.2.72.202 NMAC) are not regulated pursuant to the Act are not included.

**Table 104.A: Regulated Equipment List** 

Unit No.	Source Description	Make Model	Serial No.	Hourly Capacity	Annual Capacity	Manufacture Date	
1 (GRNCLN_1)	Grain Cleaner (Screener)	TBD	TBD	70 tons/hr	394,000 tons/yr	TBD	
2 (FLAKR_2)	Grain Flaker (24" x 56" roller)	Ferrel-Ross	Unknown	25 tons/hr	394,000 tons/yr (Total combined	~1998	
3 (FLAKR_3)	Grain Flaker (24" x 48" roller)	PMS	Unknown	20 tons/hr	for both units)	~1995	
4 (FLKFD_4)	Flaked Grain Loadout Conveyor (corn)	Unknown	Unknown	100 tons/hr	458,000 tons/yr (Total combined for both units)	~1985	
<del>5 (FLKFD_5)</del>	Flaked Grain Loadout Conveyor (milo)	Unknown	Unknown	100 tons/hr		03/2002	
6 (BOIL_6)	Boiler	Williams & Davis Model 600-777	9667	18.9 MMBtu/hr	165,564 MMBtu/yr	1999/2000	
7a (TRKREC_7a)	Grain receiving Pit (Truck)	Unknown Model Field Fab	Field Fab	168 tons/hr	280,000 tons/yr (Total combined	~1970	
7b (TRKREC_7b)	Grain receiving Pit (Truck)	Unknown Model Field Fab	Field Fab	336 tons/hr	for both units)	~1970	
8 (HEAD_8)	Headhouse	Unknown Model Field Fab	Field Fab	360 tons/hr	560,000 tons/yr	~1970	
9 (BVMN_9)	Storage Bin Vents (Main Elevator)	Unknown Model Field Fab	Field Fab	NA	560,000 tons/yr	~1970	
10 (BVMN_10)_	Storage Bin Vents (Elevator Annex)	Unknown Model Field Fab	Field Fab	NA	560,000 tons/yr	~1970	
11a (TRK_11a)	Whole Grain Loadout	Unknown Model Field Fab	Field Fab	140 tons/hr	28,000 tons/yr	~1970	

Unit No	Source	Source Make		Hourly	Annual	Manufacture
Unit No.	Description	Model	No.	Capacity	Capacity	Date
11b	Whole Grain	Unknown	Field Fab	420 tons/hr	560,000 tons/yr	06/2003
(TRK_11b)	Loadout	Model Field Fab				
12 (SHUT_12)	Grain Receiving Pit	Unknown	Field Fab	1,400 tons/hr	560,000 tons/yr	06/2003
	(Rail)	Model Field Fab				
13	Hammermill #1	Unknown	Unknown	20 tons/hr		Unknown

27a	Transfer to barn storage pile	Chkhowh	Olikilowii	112 wiis/iif	113,000 tons/yr	Clikilowii
Unit No.	Description Whole Corn Barn -	Unknown	No. Unknown	Hourly Capacity 112 tons/hr	Annual Capacity 115,000 tons/yr	Date Unknown
26b	DDG Barn #1 – Transfer to loadout reclaim pit	Unknown  Make Model	Unknown Serial	, ,		Unknown  Manufacture
26a	DDG Barn #1– Transfer to barn storage pile	Unknown	Unknown	400 tons/hr 240,000 tons/yr		Unknown
25	Truck Traffic (Haul Roads - all routes)	Unknown	Unknown	route:  1. Grain rece 2. Flaked Gra - 0.45 or 0.36 3. Ground Gra - 0.28 or 0.36 4. Feed Mate 0.36 5. Feed Mate 6. DDG Plan 7. DDG Base 8. DDG Calid 9. DDG Barr 0.12	Unknown	
21*	Loading Inside DDG Barn #2			Round Trip Length (miles) of each		
20*	DDG Barn #2 DDG Truck	Unknown Unknown	Unknown Unknown	500 tons/hr 150 tons/hr	50,000 tons/yr 50,000 tons/yr	TBD TBD
19 (GRDGRN_E)	DDG Loadout #2	Unknown	Unknown	280 tons/hr	240,000 tons/yr	Unknown
18 (GRDGRN_D)	Dried Distillers Grain (DDG) Loadout #1	Unknown	Unknown	280 tons/hr	240,000 tons/yr	Unknown
17 (GRDGRN_C)	Temporary Ground Grain Railcar Loadout	Unknown	Unknown	100 tons/hr	35,000 tons/yr	Unknown
16 (GRDGRN_B)	Ground Grain Receiving Pit (Truck) at Temporary Rail Loadout	Unknown	Unknown	100 tons/hr	35,000 tons/yr	Unknown
15 (GRDGRN_A)	Ground Grain Loadout	<del>Unknown</del>	Unknown	150 tons/hr	350,400 tons/yr	Unknown
14	Hammermill #2	Unknown	Unknown	20 tons/hr	350,400 tons/yr (Total combined for both units)	Unknown

	Whole Corn Barn -	Unknown	Unknown	60 tons/hr	115,000 tons/yr	Unknown
27b	Transfer to reclaim					
	pit					
	Ground Corn Barn	<del>Unknown</del>	<del>Unknown</del>	40 tons/hr	350,400 tons/yr	<del>Unknown</del>
<del>28a</del>	Transfer to barn					
	storage pile					
	Ground Corn Barn	Unknown	<del>Unknown</del>	150 tons/hr	350,400 tons/yr	Unknown
<del>28b</del>	Transfer to loadout					
	<del>reclaim pit</del>					
	Flaked Corn Barn	<del>Unknown</del>	Unknown	45 tons/hr	<del>197,000 tons/yr</del>	Unknown
<del>29a</del>	Transfer to barn					
	storage pile					
	Flaked Corn Barn	Unknown	Unknown	100 tons/hr	229,000 tons/yr	Unknown
<del>29b</del>	Transfer to loadout					
	reclaim pit					
	Flaked Milo Barn	<del>Unknown</del>	Unknown	45 tons/hr	<del>197,000 tons/yr</del>	Unknown
<del>30a</del>	Transfer to barn					
	storage pile					
	Flaked Milo Barn	Unknown	Unknown	100 tons/hr	229,000 tons/yr	<del>Unknown</del>
<del>30b</del>	Transfer to loadout					
	reclaim pit					
32	Fines Auger	Unknown	Unknown	1.5 tons/hr	1,825 tons/yr	Unknown
	Transfer to	NA	NA	100 tons/hr	774,600 tons/y	TBD <sup>1</sup>
33a	Commodity Barn					
	Reclaim Pit					
33b	Commodity Barn	NA	NA	100 tons/hr	774,600 tons/y	TBD <sup>1</sup>
	Loadout					

<sup>1.</sup> All TBD (to be determined) units must be evaluated for applicability to NSPS and MACT requirements.

# A105 Facility: Control Equipment

A. Table 105 lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 105: Control Equipment List:** 

		Pollutant	Control for Unit
Control Equipment Unit No.	Control Description	controlled	Number(s) <sup>1</sup>
MO-8, MO-9, MO-10, MO-11, MO-		PM	8, 9, 10, 11, 11a, 11b, <del>15,</del>
<del>15,</del> MO-16, & MO-17	White Mineral Oil	r IVI	16, & 17
<del>C-2, C-3,</del> C-13, C-14	Cyclone	PM	2, 3, 13, & 14
BD-12	Brock Dustmaster-Choke Feeding	PM	12
	& Pit Baffles		
MO & C-1, MO & C-13, MO & C-14	White Mineral Oil and Cyclone	PM	1, 13 & 14
MO & C-1, MO & C-13, MO & C-14	Combination		1, 13 & 14
CM-8, CM-19, & CM-21	Coarse Material	PM	<del>8, 19</del>

T-20	Tarp Covering	PM	<del>20a</del>
CE-4, CE-5, CE-20 & CE-21	Complete Enclosure (building with 4-sides, roof, & functional doors)	PM	<del>4, 5,</del> 20 & 21
AE-25	Asphalt Emulsifier / base course / caliche	PM	25
E-26 <del>, E-29</del> , E-30	Enclosure (building with 3-sides & roof)	PM	26, <del>29, 30</del>
MO & E-27; <del>MO &amp; E-28</del>	White Mineral Oil and Enclosure (3-sides & roof) Combination	PM	27 <del>&amp; 28</del>
MO & 8-BH	White Mineral Oil and Baghouse Combination	PM	8
7a-BH & 7b-BH	Baghouse	PM	7a & 7b
32	Enclosed Auger	PM	32
33	Enclosure (2 sides, roof, and material bays) for all materials. For ground corn, additionally, mineral oil.	PM	33

<sup>1</sup> Control for unit number refers to a unit number from the Regulated Equipment List

# A106 Facility: Allowable Emissions

A. The following table lists the emission units and their allowable emission limits. (40 CFR 50, 40 CFR 60, Subpart Dc, & 20.2.72.210.A and B.1 NMAC). **Table 106.A: Allowable Emissions** 

Unit No.	NO <sub>x1</sub>	NOx1	CO	CO	VOC	VOC	SO <sub>2</sub>	SO <sub>2</sub>	TSP	TSP	PM <sub>10</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>2.5</sub>
NO.	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
1	<b>-</b> <sup>2</sup>	-	-	-	-	-	ı	ı	1.1	3.0	0.27	0.75	0.045	0.13
2	-	-	-	-	-	-	-	-	3.75	20.55	1.88	14.70	<	2.40
3	-	-	-	-	-	-	-	-	3.00	29.55	1.50	14.78	<	2.49
4	_	1	_	1	_	_	1	1	4		4	4	¥	/
5	1	1	_	1	1	1	1	1	4	V	4	1	¥	V
6	1.9	8.1	1.6	6.8	<	<	<b>\</b>	<b>\</b>	<	<b>\</b>	<	<b>\</b>	<	<
7a	-	-	-	-	-	-	-	-	<	<	<	<	<	<
7b	-	-	-	-	-	-	-	-	1.1	/	<	/	<	/
8	-	-	-	-	-	-	-	ı	<	<	<	<	<	<
9 & 10	-	-	-	-	-	-	-	-	<	2.80	<	<	<	<

Unit No.	NOx1 pph	NOx1 tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy	PM <sub>2.5</sub> pph	PM <sub>2.5</sub> tpy
11a	-	-	-	-	-	-	-	-	<	<	<	<	<	<
11b	-	-	-	-	-	-	-	-	<	<	<	<	<	<
12	-	-	-	-	-	-	-	-	2.38	<	<	<	<	<
13 & 14	-	-	-	-	-	-	-	-	<	2.35	<	1.17	<	<
15	-	1	1	-	-	-	1	-	4	4	4	4	4	4
16	-	-	-	-	-	-	-	-	<	<	<	<	<	<
17	-	-	-	-	-	-	-	-	<	<	<	<	<	<
18 & 19	-	-	-	-	-	-	-	-	<	<	<	<	<	<
20	-	-	-	-	-	-	-	-	<	<	<	<	<	<
21	-	-	-	-	-	-	-	-	<	<	<	<	<	<
25	-	-	-	-	-	-	-	-	0.91	3.97	0.22	0.97	0.02	0.10
26a	-	-	-	-	-	-	-	-	<	<	<	<	<	<
26b	-	-	-	-	-	-	-	-	<	<	<	<	<	<
27a	-	-	-	-	-	-	-	-	<	<	<	<	<	<
27b	-	-	-	-	-	-	-	-	<	<	<	<	<	<
<del>28a</del>	-	-	-	_	_	_	-	_	<	4	4	4	4	4
<del>28b</del>	•	1	1	-	-	-	1	-	4	4	4	4	4	4
<del>29a</del>	-	-	-	_	_	_	-	_	<	4	4	4	4	4
<del>29b</del>	•	1	ı	-	-	-	ı	•	4	4	4	4	4	4
<del>30a</del>	-	-	_	_	_	_	_	_	<	4	4	4	4	4
<del>30b</del>	-	-	-	-	-	-	-	-	4	4	4	4	4	4
33a	-	-	-	-	-	-	-	-	0.23	0.57	0.06	0.14	0.007	0.02
33b	-	-	-	-	-	-	-	-	0.23	0.57	0.06	0.14	0.007	0.02

<sup>1</sup> Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>

<sup>2 &</sup>quot;-" indicates the application represented emissions of this pollutant are not expected.

<sup>3 &</sup>quot;<" indicates the application represented emissions are less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions.

<sup>4</sup> Total allowable emissions are for information and are not enforceable conditions.

### A107 Facility Allowable Startup, Shutdown, and Maintenance (SSM) Emissions

A. Separate allowable SSM emission limits are not required for this facility since the SSM emissions are predicted to be less than the limits established in Table 106A. The permittee shall maintain records in accordance with Condition B109.C.

# A108 Facility: Hours of Operation

A. This facility is authorized for continuous operation. Monitoring, recordkeeping, and reporting are not required to demonstrate compliance with continuous hours of operation.

### A109 Facility: Reporting Schedules - NA

### A110 Facility: Fuel Sulfur Requirements (as required)

#### A. Boiler – Unit 6

**Requirement:** All combustion emission units (Unit 6) shall combust natural gas only as defined in this permit in C101.E

**Monitoring:** NA

Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less. If fuel gas analysis is used, the analysis shall not be older than one year.

**Reporting:** NA

# A111 Facility: 20.2.61 NMAC Opacity

### A. Boiler – Unit 6

Requirement: Combustion units (Unit 6) shall not exceed 20% opacity.

**Monitoring:** Use of natural gas fuel constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC

**Recordkeeping:** The permittee shall record dates of any opacity measurements and the corresponding opacity readings in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

# **A112 Facility: Visible Emissions**

### A. Visible Emissions Limitation at Property Boundary

**Requirement:** The facility at the property boundary shall exhibit no more than seventy-five (75) seconds of visible emissions during any thirty (30) minute consecutive period.

### **Monitoring:**

- a) The permittee shall conduct opacity test observations in accordance with the procedures in 40 CFR 60, Appendix A, Reference Method 22 to demonstrate compliance with this condition.
- b) Opacity test observations shall be performed daily during active operations (e.g., receiving, loadout, etc.) and with the observer positioned on the property boundary located approximately north/northeast of the facility.
- c) The permittee shall implement corrective actions immediately after an exceedance of the visible emissions requirement.

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) The permittee shall record the date each opacity measurement is taken, the corresponding opacity readings, and all other data required on the field data sheet provided in Reference Method 22.
- b) The permittee shall record the date and description of any corrective actions that are completed in response to an opacity test result.

**Reporting:** The permittee shall report in accordance with Section B110.

# **A113 Facility: Survey to Identify Sources**

### A. Source Survey

Requirement: The permittee shall develop and implement a facility wide written source survey program that establishes procedures designed to identify any additional sources of emissions (such as roof duct leaks, material storage piles, etc.).

Monitoring: The permittee shall conduct facility-wide inspections at a minimum of once per month in accordance with the written source survey program in order to verify that no unpermitted sources exist or have appeared since permit issuance.

Recordkeeping: The permittee shall maintain records of the written source survey program and the inspections and maintenance activities that are conducted per this condition in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

# A114 Alternative Operating Scenario – Not Required

A115 Compliance Plan – Not Required

# **EQUIPMENT SPECIFIC REQUIREMENTS**

**OIL AND GAS INDUSTRY** 

A200 Oil and Gas Industry – Not Required

**CONSTRUCTION INDUSTRY** 

A300 Construction Industry - Not Required

**POWER GENERATION INDUSTRY** 

A400 Power Generation Industry - Not Required

SOLID WASTE DISPOSAL (LANDFILLS) INDUSTRY

A500 Solid Waste Disposal (Landfills) Industry- Not Required

**GRAIN PROCESSING INDUSTRY** 

### **A501 Grain Processing Operations at Animal Feed Mills**

A. This section has common equipment related to most grain processing operations conducted at animal feed mills with grain elevators.

# A502 Grain Receiving & Distribution (grain elevator)

A. Grain Delivered by Trucks into Grain Receiving Pits – Units 7a & 7b

# **Requirements:**

1. Units 7a and & 7b shall NOT operate between 1:00 a.m. and 4:00 a.m. as described in the permittee's modeling analysis.

- 2. Unit 7a (grain receiving pit truck) shall not exceed the following limits:
  - a) Hourly Throughput 168 tons per hour
  - b) Daily Throughput 3,360 tons per day
  - c) Annual Throughput 280,000 tons per year
- 3. Unit 7b (grain receiving pit truck) shall not exceed the following limits:
  - a) Hourly Throughput 336 tons per hour
  - b) Daily Throughput 6,720 tons per day
  - c) Annual Throughput 280,000 tons per year
- 4. During normal operations, grain unloading shall be conducted under choke loading conditions with the goal of preventing the freefall of grain into the receiving pit. Choke loading conditions are defined as maintaining an almost completely-filled receiving pit, with a sufficient head of material above the receiving opening to keep the pit full continuously. Therefore, operation of conveyors associated with the receiving shall not commence until the truck receiving pits are almost completely filled.
- 5. Mineral oil shall be applied to all grain received by truck before the grain enters the enclosed bucket conveyors (legs) that lead to the Headhouse. Refer to Condition A508 below for oil application requirements.
- 6. Within 180 days after the permit issuance date, a baghouse shall be installed on both grain receiving pits. Once tThe baghouse is installed, it shall be fully operational at all times when grain is being delivered into the receiving pits. Refer to Condition A508 below for additional baghouse requirements.

**Monitoring:** The permittee shall monitor the following for Units 7a & 7b:

- a) Refer to Condition A508 below for oil application monitoring
- b) Refer to Condition A508 below for baghouse monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year
- c) Record the times that Units 7a and Unit 7b operate.

### **Reporting:**

The permittee shall report in accordance with Section B110.

B. Grain Delivered by Railcars into Receiving Pit at Shuttle Train Unloading Facility – Unit 12

### **Requirement:**

- 1. The total volume of grain for Unit 12 (grain receiving pit rail) shall not exceed the following limits:
  - a) Hourly Throughput 1,400 tons per hour
  - b) Annual Throughput 560,000 tons per year
- 2. The railcar receiving bin shall be equipped with <u>operational pit baffles and utilize</u> <u>choke loading</u> choke loading dust control system or equivalent (such as that described in the manufacturers specifications for the Brock Dustmaster system provided in the permit application) that shall be operational at all times when grain is being delivered into the receiving pit at the rail shuttle unloading facility.
- 3. Mineral oil shall be applied to all grain (except DDGs) received by rail before the grain enters the enclosed bucket conveyors (legs) that lead to the Headhouse. Refer to Condition A508 below for oil application requirements.

**Monitoring:** The permittee shall monitor the following:

- a) Refer to Condition A508 below for choke loading dust control system monitoring
- b) Refer to Condition A508 below for oil application monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

C. Grain Distribution in Headhouse – Unit 8

#### **Requirement:**

- 1. Unit 8 shall NOT operate between 1:00 a.m. and 4:00 a.m. as described in the permittee's modeling analysis.
- 2. The total volume of grain for Unit 8 (Headhouse includes enclosed grain cleaner) shall not exceed the following limits:
  - a) Hourly Throughput 360 tons per hour
  - b) Daily Throughput –8,640 tons per day
  - c) Annual Throughput 560,000 tons per year
- 3. Only oiled grain shall be conveyed to the headhouse per Condition A502 A & B above.
- 4. Within 180 days after the permit issuance date, a baghouse shall be installed on the headhouse. Once tThe baghouse is installed, it shall be fully operational at all times when grain is being received into the headhouse. Refer to Condition A508 below for additional baghouse requirements.

Monitoring: None

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year
- c) Record the times that Unit 8 operates.

**Reporting:** The permittee shall report in accordance with Section B110.

D. Grain Storage in Main Elevator and Elevator Annex – Units 9 & 10

# **Requirement:**

- 1. The total volume of grain for Unit 9 (Storage Bin Vents main elevator) or Unit 10 (Storage Bin Vents elevator annex) shall not exceed the following limit for each unit:
  - a) Annual Throughput 560,000 tons per year

**Monitoring:** None

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

a) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

# A503 Flaked Grain Process (corn & milo)

A. Mechanical Grain Cleaner – Unit 1

# **Requirement:**

- 1. The total volume of grain for Unit 1 (Flaker Grain Cleaner) shall not exceed the following limits:
  - a) Hourly Throughput 70 tons per hour
  - b) Annual Throughput 394,000 tons per year
- 2. Within ninety (90) days after the permit issuance date, the grain cleaner shall be equipped with a cyclone that is fully operational. Once the cyclone is installed, it shall be fully operational whenever the cleaner is receiving grain. Refer to Condition A508 below for additional cyclone requirements.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for cyclone monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

B. Boiler for the Steam Chests - Unit 6

# Requirement:

- 1. Unit 6 (boiler) shall not exceed the following limits:
  - a) Hourly Heat Input Capacity 18.9 MM BTU per hour
  - b) Annual Heat Input Capacity 165,564 MM BTU per year
- 2. The boiler shall be operated in accordance with manufacturers specifications.

Unit 6 is subject to all applicable requirements 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

- 3. Refer to Condition A110 for fuel sulfur requirements for Unit 6.
- 4. Refer to Condition A111 for opacity requirements for Unit 6.

**Monitoring:** The permittee shall monitor the following:

a) Applicable monitoring requirements per 40 CFR 60, Subpart Dc

**Recordkeeping:** The permittee shall maintain records of each item described above in monitoring in accordance with Section B109 and 40 CFR 60, Subpart Dc.

**Reporting:** The permittee shall report in accordance with Section B110 and 40 CFR 60, Subpart Dc.

C. Grain Flakers (includes mechanical rollers & coolers) – Units 2 & 3

# **Requirement:**

- 1. Unit 2 (Grain Flaker 24" x 56" roller) shall not exceed the following limits:
  - a) Hourly Throughput 25 tons per hour
- 2. Unit 3 (Grain Flaker 24" x 48" roller) shall not exceed the following limits:
  - a) Hourly Throughput 20 tons per hour
- 3. The total combined volume of grain that can be processed by both Units 2 and 3 (Grain Flakers) shall not exceed the following annual limit:
  - a) Annual Throughput 394,000 tons per year
- 4. Each cooler associated with Unit 2 and Unit 3 shall be equipped with a cyclone that shall be fully operational whenever each cooler is receiving grain. Refer to Condition A508 below for additional cyclone requirements.

Monitoring: The permittee shall monitor the following:

a) Refer to Condition A508 below for cyclone monitoring NA

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

D. Flaked Corn Handling within the Storage Barn or the Commodity Barn – Units 29a,

29b or Units 33a, 33b

# Requirement:

- 1. The volume of grain transferred to the storage pile via front end loader (Unit 29a or 33a) inside the flaked corn barn shall not exceed the following limits:
  - a) Hourly Throughput 45 tons per hour
  - b) Annual Throughput 197,000 tons per year
- 2. The volume of grain transferred to the loadout reclaim pile via front end loader (Unit 29b or 33b) inside the flaked corn barn shall not exceed the following limits:
  - a) Hourly Throughput 100 tons per hour
  - b) Annual Throughput 229,000 tons per year
- 3. The Flaked Corn Barn structure shall meet the requirements in condition A508 below under control equipment.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, record the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

E. Flaked Milo Handling within the Storage Barn or the Commodity Barn—Units 30a, 30b, or Units 33a and 33b

### **Requirement:**

- 1. The volume of grain transferred to the storage pile via front end loader (Unit 30a or 33a) inside the flaked milo barn shall not exceed the following limits:
  - a) Hourly Throughput 45 tons per hour
  - b) Annual Throughput 197,000 tons per year
- 2. The volume of grain transferred to the loadout reclaim pile via front end loader (Unit 30b or 33b) inside the flaked mile barn shall not exceed the following limits:
  - a) Hourly Throughput 100 tons per hour
  - b) Annual Throughput 229,000 tons per year
- 3. The Flaked Milo Barn structure shall meet the requirements in condition A508 below under control equipment.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, record the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

# **Reporting:** The permittee shall report in accordance with Section B110.

F. Fines Handling with an Enclosed Auger (byproduct of flaking process)

# **Requirement:**

- 1. The volume of fines transferred to the storage pile via an enclosed auger shall not exceed the following limits:
  - a) Hourly Throughput 1.5 tons per hour
  - b) Annual Throughput 1,825 tons per year
- 2. The volume of fines loadout via enclosed auger to the ground corn storage barn (Unit 28) shall not exceed the following limits:
  - a) Hourly Throughput 1.5 tons per hour
  - b) Annual Throughput 1,825 tons per year

### **Monitoring:**

The permittee shall monitor the following:

- 1. Daily, monitor the throughput of the fines transferred by the auger; and
- 2. Monthly, monitor the enclosed auger for any leaks. If any leaks are found, the permittee shall repair the leaks within 7 days.

# **Recordkeeping:** The permittee shall record the following:

- 1. Daily, calculate the tons per hour throughout of the auger;
- 2. Monthly, calculate the monthly rolling 12-month total throughput of the auger; and
- 3. Monthly, the permittee shall maintain a record of each inspection of the enclosed auger, noting the date, time, and results of the inspection.

**Reporting:** The permittee shall report in accordance with Section B110.

G. Flaked Grain (corn & milo) Loadout via Conveyors into Trucks Units 4 & 5

#### Requirement:

- 1. Unit 4 (Corn Flaked Grain Loadout Conveyor) shall not exceed the following limits:
  - a) Hourly Throughput 100 tons per hour
- 2. Unit 5 (Milo Flaked Grain Loadout Conveyor) shall not exceed the following limits:
  - a) Hourly Throughput 100 tons per hour
- 3. The total combined volume of flaked grain loadout for Units 4 and 5 shall not exceed the following annual limit:
  - a) Annual Throughput 458,000 tons per year
- 4. Within 180 days after the permit issuance date, a<u>A</u>n enclosure shall be installed around the flaked corn and flaked milo loadout areas (Units CE-4 and CE-5). Each enclosure shall consist of a completely enclosed building (i.e., four sides, roof, and functional doors) that is large enough for trucks to enter/exit to conduct loadout activities. During loadout activities, the doors of each enclosure shall remain closed at all times.
- 5. Outdoor loadout of flaked corn and mile shall cease once the new enclosures become fully operational, but no later than 180 days after the permit issuance date.

### **Monitoring: None**

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput for each conveyor (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total combined throughput in tons per year

Reporting: The permittee shall report in accordance with Section B110.

### **A504 Ground Grain Process**

A. Hammermills for Ground Corn – Units 13 & 14

#### Requirement:

- 1. Each hammermill (Unit 13 & Unit 14) shall not exceed the following limits:
  - a) Hourly Throughput 20 tons per hour
- 2. The total combined volume of grain that can be processed by both hammermills shall not exceed the following limits:
  - a) Annual Throughput 350,400 tons per year
- 3. Each hammermill shall be equipped with a cyclone that shall be fully operational whenever each hammermill is receiving grain. Refer to Condition A508 below for additional cyclone requirements.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for cyclone monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput for <u>each</u> unit (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total combined throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

B. Ground Corn Handling within the Storage Barn or the Commodity Barn – Units 28a, 28b or Units 33a, 33b

### **Requirement:**

- 1. The volume of grain transferred to the storage pile via front end loader (Unit <del>28a or</del> 33a) inside the ground corn barn shall not exceed the following limits:
  - a) Hourly Throughput 40 tons per hour
  - b) Annual Throughput 350,400 tons per year
- 2. The volume of grain transferred to the loadout reclaim pile via front end loader (Unit 33b) inside the ground corn barn shall not exceed the following limits:
  - a) Hourly Throughput 150 tons per hour
  - b) Annual Throughput 350,400 tons per year
- 3. The Ground Corn Barn structure shall meet the requirements in condition A508 below under control equipment.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, record the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

C. Loadout via Conveyors into Trucks Unit 15

#### Requirement:

- 1. Unit 15 (Ground Grain Loadout) shall not exceed the following limits:
  - a) Hourly Throughput 150 tons per hour
  - b) Annual Throughput 350,400 tons per year
- 2. Grain for Unit 15 shall include ground corn from the hammermills and/or fines generated from the flakers.

**Monitoring:** None

Recordkeeping: The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

Reporting: The permittee shall report in accordance with Section B110.

D. Receiving & Loadout at Temporary Railcar Site – Units 16 & 17

# **Requirement:**

- 1. The ground grain receiving pit (Unit 16) and the ground grain loadout conveyor (Unit 17) shall not exceed the following limits for each unit:
  - a) Hourly Throughput 100 tons per hour
  - b) Annual Throughput 35,000 tons per year

**Monitoring:** None

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput for <u>each</u> unit (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year for <u>each</u> unit

**Reporting:** The permittee shall report in accordance with Section B110.

# A505 Whole Grain Handling (corn)

A. Whole Corn Handling within the Storage Barn – Units 27a & 27b

### **Requirement:**

- 1. The volume of grain transferred to the storage pile via front end loader (Unit 27a) inside the whole corn barn shall not exceed the following limits:
  - a) Hourly Throughput 112 tons per hour
  - b) Annual Throughput 115,000 tons per year
- 2. The volume of grain transferred to the loadout reclaim pile via front end loader (Unit 27b) inside the whole corn barn shall not exceed the following limits:
  - a) Hourly Throughput 60 tons per hour
  - b) Annual Throughput 115,000 tons per year
- 3. The Whole Corn Barn structure shall meet the requirements in condition A508 below under control equipment.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring.

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

a) On a daily basis, calculate the tons per hour throughput for each unit (i.e., daily average)

b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year for <u>each</u> unit

**Reporting:** The permittee shall report in accordance with Section B110.

B. Loadout via Conveyors into Trucks – Units 11a & 11b

# **Requirement:**

- 1. Unit 11a (Whole Grain Loadout) shall not exceed the following limits:
  - a) Hourly Throughput 140 tons per hour
  - b) Annual Throughput 28,000 tons per year
- 2. Unit 11b (Whole Grain Loadout) shall not exceed the following limits:
  - a) Hourly Throughput 420 tons per hour
  - b) Annual Throughput 560,000 tons per year

# Monitoring: None

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput for each conveyor (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year for each conveyor

**Reporting:** The permittee shall report in accordance with Section B110.

# A506 Feed Materials

A. Feed Material within the Flaked Milo Barn or the Commodity Barn – Units 30a, 30b or Units 33a and 33b

### Requirement:

- 1. The volume of feed material transferred to the storage pile via front end loader (Unit-30a or 33a) inside the ground corn barn shall not exceed the following limits:
  - a) Hourly Throughput 100 tons per hour
  - b) Annual Throughput 30,00 tons per year
- 2. The volume of flaked corn and milo transferred to the loadout reclaim pile via front end loader (Unit 30b or 33b) inside the ground corn barn shall not exceed the following limits:
  - a) Hourly Throughput 100 tons per hour
  - b) Annual Throughput 30,000 tons per year
- 3. The Commodity Barn shall meet the requirements in condition A508 below under control equipment.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

# A507 Dried Distillers Grain (DDG) Handling

A. DDG Loadout from Barn #1 via Conveyors into Trucks – Units 18 & 19

# **Requirement:**

Each DDG loadout unit (Unit 18 – DDG Loadout #1 and Unit 19 – Loadout #2) shall not exceed the following volumes:

- a) Hourly Throughput 140 tons per hour
- b) Annual Throughput 240,000 tons per year

Monitoring: None

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput for <u>each</u> conveyor (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year for <u>each</u> conveyor

**Reporting:** The permittee shall report in accordance with Section B110.

B. DDG Barn #2 – Unit 20

### **Requirement:**

- 1. The DDG Barn #2 (Unit 20) shall be constructed and fully operational in compliance with the terms and schedules described in the Settlement Agreement (approved 11/8/10). The completed barn shall be:
  - a) A completely enclosed (4-sides with a roof) structure with functional doors
  - b) Large enough for trucks to enter/exit the barn to conduct loadout activities
  - c) Completed on or before March 31, 2011
- 2. The doors of DDG Barn #2 shall remain closed at all times during material handling activities inside the barn (e.g., truck loading & unloading, etc.)
- 3. The volume of DDGs in Barn #2 shall not exceed the following limits:
  - a) Hourly Throughput 500 tons per hour

- b) Annual Throughput 50,000 tons per year
- 4. The DDG Barn #2 structure shall meet the requirements in Condition A508 below under control equipment.
- 5. The permittee is prohibited from conducting receiving and/or loadout operations from off-site sources simultaneously at the DDG Barn #2 and the DDG Outside Storage Pile while both units are in existence.

Monitoring: Once the barn is fully operational, the permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring.

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

**Reporting:** The permittee shall report in accordance with Section B110.

C. DDG Outside Storage Pile Unit 20a

# Requirement:

- 1. Until the DDG Barn #2 becomes fully operational (per A506.B above), DDGs that are stored outside (Unit 20a) shall be located in the southwest corner of the facility, completely covered by a functioning tarp at all times (except during receiving & loadout), & shall not exceed the following limits:
  - a) Hourly Throughput 500 tons per hour
  - b) Annual Throughput 50,000 tons per year
  - c) Surface Area 11.25 acres
- 2. Maintenance on the tarp shall be performed as necessary to ensure that the DDGs are completely covered.
- 3. The entire outside storage pile shall be removed within thirty (30) days from the date that the permittee begins using DDG Barn #2 (Unit 20). During this transition period (when the outside storage pile is being decommissioned and the new Barn #2 becomes operational), DDGs can be transferred from the pile into DDG Barn #2 and/or shipped off-site by truck.
- 4. Immediately following the decommissioning of the outside storage pile, all DDGs received thereafter at the facility shall be stored in DDG Barn #1 and/or Barn #2.
- 5. The permittee is prohibited from conducting receiving and/or loadout operations from off-site sources simultaneously at the DDG Barn #2 and the DDG Outside Storage Pile while both units are in existence.

Monitoring: The permittee shall monitor the following:

a) Conduct inspections of the tarp for damage (tears, rips, etc.) on a weekly basis at a minimum and within 24-hours after potentially damaging storms (hail, strong winds, etc.).

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year
- c) Inspection and maintenance activities performed on the tarp

Reporting: The permittee shall report in accordance with Section B110.

D. DDG Truck Loading Inside Barn #2 – Unit 21

### **Requirement:**

- 1. Once the DDG Barn #2 is constructed and fully operational (per A506.B above), DDG shall be loaded into trucks by front end loader inside the barn with the doors closed at all times during loading operations.
- 2. Unit 21 shall NOT operate between 1:00 a.m. and 4:00 a.m. and 9:00 p.m. and 12:00 a.m. as described in the permittee's modeling analysis.
- 3. DDG loadout (Unit 21) shall not exceed the following volumes:
  - a) Hourly Throughput 150 tons per hour
  - b) Annual Throughput 50,000 tons per year

# **Monitoring:** None

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year c) Record the times that Unit 21 operates.

**Reporting:** The permittee shall report in accordance with Section B110.

E. DDG Receiving/Loadout by Front End Loader/Truck at Outside Storage Pile Unit 21a

#### Requirement:

- 1. Until the DDG Barn #2 becomes fully operational (per A506.B & D above), DDGs associated with the outside storage pile (Unit 20a) can be transported as follows:
  - a) From DDG Barn #1 via front end loaders and/or trucks to the outside storage pile
  - b) From the pile into trucks via front end loaders for off-site loadout
- 2. Handling of DDGs (receiving and loadout) associated with the outside pile (Unit 20a) shall not exceed the following volumes:
  - a) Hourly Throughput 150 tons per hour
  - b) Annual Throughput 50,000 tons per year

#### **Monitoring:** None

Recordkeeping: The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year

### Reporting: The permittee shall report in accordance with Section B110.

F. DDG Handling within Barn #1– Units 26a & 26b

# **Requirement:**

- 1. The volume of grain transferred to the storage pile via front end loader (Unit 26a) inside DDG Barn #1 shall not exceed the following limits:
  - a) Hourly Throughput 400 tons per hour
  - b) Annual Throughput 240,000 tons per year
- 2. The volume of grain transferred to the loadout reclaim pile via front end loader (Unit 26b) inside DDG Barn #1 shall not exceed the following limits:
  - a) Hourly Throughput 280 tons per hour
  - b) Annual Throughput 240,000 tons per year
- 3. The DDG Barn structure shall meet the requirements in condition A508 below under control equipment.

**Monitoring:** The permittee shall monitor the following:

a) Refer to Condition A508 below for storage barn monitoring.

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) On a daily basis, calculate the tons per hour throughput for <u>each</u> unit (i.e., daily average)
- b) On a monthly basis, calculate a monthly rolling 12-month total throughput in tons per year for each unit

**Reporting:** The permittee shall report in accordance with Section B110.

### **A508 Haul Roads**

#### A. Truck Traffic – Unit 25

#### **Requirement:**

- 1. The permittee shall use the haul road segments as designated in the maps in Appendix A of this permit.
- 2. The Grain Received On-site Segment shall NOT operate between 12:00 a.m. and 8:00 a.m. as described in the permittee's modeling analysis.
- 3. The haul road segments shall not exceed the following limits:

Haul Road Segment	Round Trip Length (miles)	Annual Tons Hauled (tpy)		
Grain Received On-site Segment	0.27	280,000		
Flaked Grain Hauled Off-site Segment/ Commodity Barn Loop Segment	0.45/0.36	357,000		

Ground Grain Hauled Off-site Segment/ Commodity Barn Loop Segment	0.28/0.36	153,000
Feed Materials Receiving	0.36	30,000
Feed Materials Shipping	0.36	30,000
DDG Plant Segment	0.39	50,000
DDG Base Course Segment	0.34	50,000
DDG Caliche Segment (this segment will no longer used as a haul road – DDG storage pile no longer in use)	NA	NA
DDG Barn #2 Base course Segment (this segment will begin to be used once the DDG Barn #2 is fully operational per A506.D)	0.12	50,000

**Monitoring:** The permittee shall track the following truck traffic information:

a) Measure the length of each haul road segment at a minimum of one time every 365 days. when there are modifications to haul roads or receiving/loadout locations.

**Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:

- a) Document the date & time, name of staff doing the measurement, measurement device used, and length of each haul road segment to verify the haul road length per monitoring requirement above.
- b) On a monthly basis, calculate a monthly rolling 12-month total tons hauled per year for each haul road segment (i.e., daily average).
- c) Record the times that the Grain Received On-site Segment operates.

Reporting: The permittee shall report in accordance with Section B110.

B. Delineate Haul Road Routes

### Requirement:

- 1. Within ninety (90) days after the permit issuance date, the permittee shall install signs to indicate the location of each grain receiving and loadout area associated with a haul road segment.
- 2. Signs shall be maintained, repaired, &/or replaced as necessary.
- 3. The permittee shall provide all truck drivers with maps clearly indicating the location of each haul road segment at the facility.

Monitoring: The permittee shall inspect the signs at a minimum of one time every 365 days.

Recordkeeping: The permittee shall maintain records of the installation dates of the signs, inspections, and maintenance in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

C. Maintenance **Requirement:** 

- 1. Asphalt emulsifier shall be maintained and re-applied as necessary on the following segments: a) Grain Received On-site
  - b) Flaked Grain Hauled Off-site
  - c) Ground Grain Hauled Off-site
  - d) DDG Plant Segment
- 2. Base course shall be maintained and re-applied as necessary on the following segments: a) DDG Base course
  - b) DDG Barn #2 (begins when this segment comes on-line per A506.D)
- 3. Dust suppressant shall be applied to base course segments as necessary to control dust.

**Monitoring:** The permittee shall inspect all road segments on a weekly basis to determine whether maintenance is necessary to control dust.

**Recordkeeping:** The permittee shall maintain records of inspections and maintenance conducted on each road segment in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

# **A509** Control Equipment

A. Mineral Oil Application System – All Grain (except DDG)

**Requirement:** The Mineral Oil Application System has the following requirements:

- 1. Type of Grain: White mineral oil (food grade) shall be applied to all grain (except DDG) received at the facility in accordance with manufacturers specifications.
- 2. Location: White mineral oil shall be applied to grain after the receiving pits and before the entrance to the bucket conveyors of the elevator.
- 3. Oil Flow Measurement Device(s): Flow measurement devices (such as totalizers, meters, etc.) shall be operational at all times during oil application.
- 4. Rate: The application rate of white mineral oil shall be a minimum of 0.48 gallons of oil/1,000 bushels of grain and in volumes that are sufficient to meet the visible emissions limit per Condition A112.
- 5. Oil Droplet Size: The spray nozzles on the oil spray bars shall emit a droplet size greater than or equal to 20 µm in diameter.
- 6. Use of other oils: Alternate oil(s) that provide a control efficiency equivalent to white mineral oil may be substituted for white mineral oil pursuant to approval by the Department.
- 7. Perform maintenance as necessary to ensure the oil application system remains fully operational when in use.

**Monitoring:** The permittee shall monitor the oil spray system as follows:

- a) Oil Flow Measurement Device(s): Flow measurement devices (as descried above) shall measure the amount of oil applied to grain after the receiving pits and before the entrance to the bucket conveyors of the elevator. Such devices shall be periodically calibrated and inspected per manufacturer requirements.
- b) Rate: The oil application rate shall be measured daily in gallons of oil/1,000 bushels of grain.
- c) System Maintenance: The oil spray system shall be inspected according to manufacturer's specifications to ensure a uniform application of oil is being applied on the grain. Inspections shall include, but not limited to, checking the nozzles for clogging; checking the position of the nozzles for adequate angle of spraying; droplet size; and adherence to manufacturer's operating specifications.

**Recordkeeping:** The permittee shall maintain records of the following information in accordance with Section B109:

- a) Flow Meter(s): Calibration results & maintenance activities performed on the flow meter(s) shall be recorded.
- b) Rate: The oil application rate shall be recorded daily.
- c) System Maintenance: Inspections and maintenance activities performed on the oil application system shall be recorded.

**Reporting:** The permittee shall report in accordance with Section B110.

B. Pit Baffles and Choke Loading Dust Control System – Grain Received by Rail (Unit 12)

#### Requirement:

- 1. The <u>pit baffles</u> choke loading dust control system or equivalent (such as that described in the manufacturers specifications for the Brock Dustmaster system provided in the permit application) shall be operated and maintained according to manufacturer's specifications.
- 2. During normal operations, the choke loading dust control system shall be operated grain shall be received in such a manner as to ensure that grain unloading is conducted under choke loading conditions with the goal of preventing the freefall of grain into the receiving pit for Unit 12 (grain receiving pit rail). Choke loading conditions are defined as maintaining an almost completely-filled receiving pit, with a sufficient head of material above the receiving opening to keep the pit full continuously. Therefore, operation of conveyors associated with the receiving shall not commence until the train receiving pits are almost completely filled.

Monitoring: The permittee shall inspect the <u>pit baffles based upon manufacturer</u> recommendations or a schedule determined by historical necessity of repairs. choke loading dust control system on a weekly basis or per the manufacturer's specifications, whichever is more frequent.

**Recordkeeping:** The permittee shall maintain records of inspections and maintenance conducted on the choke loading dust control system in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

- C. Baghouse Receiving Pits for Trucks (Units 7a & 7b) & Headhouse (Unit 8) **Requirement:**
- 1. Each baghouse shall be fully operational with a minimum capture efficiency of 80% when Units 7a, 7b, and/or 8 are in operation.
- 2. Each baghouse shall be maintained and operated according to manufacturers' specifications or the normal operating range as established by the permittee.
- 3. Each baghouse shall be equipped with a differential pressure gauge capable of continually monitoring the differential pressure drop across the filter element. The differential pressure shall be measurable to the nearest 0.5 inches of water column.
- 4. If the differential pressure for any baghouse is observed to be outside the manufacturer's recommended operating range or the normal operating range established by the permittee, the baghouse shall be shut down within one (1) hour from the time that the out-of-range pressure is recorded. Corrective actions shall be taken immediately following shutdown of the baghouse. Operation of the emission unit associated with the malfunctioning baghouse shall cease until the baghouse returns to service.
- 5. Initial compliance tests shall be conducted for each baghouse in accordance with Section B111.

**Monitoring:** The permittee shall monitor each baghouse as follows:

a) The differential pressure drop across the filter element of each baghouse shall be measured each day that the receiving pits or headhouse are operating (as described above).

**Recordkeeping:** The permittee shall maintain records of monitoring, inspections, maintenance, and compliance tests conducted on each baghouse in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

D. Cyclones – Flakers & Hammermills

# **Requirement:**

- 1. Each cyclone shall be fully operational with a minimum control efficiency of 50% whenever grain is being received into each associated flaker and hammermill.
- 2. Within ninety (90) days after the permit issuance date, Standard Operating Procedures (SOP) that describe the proper operation and maintenance of a cyclone shall be written and developed by the permittee. The SOP shall also include items 1 through 4 in Monitoring below.
- 3. All cyclones shall be operated and maintained in accordance with written SOPs.
- 4. Within ninety (90) days after the permit issuance date, a pressure gauge shall be installed on each cyclone.

5. Initial compliance tests shall be conducted on each cyclone after the pressure gauges have been installed in accordance with Section B111.

**Monitoring:** The permittee shall monitor each cyclone as follows:

- a) Each cyclone shall be inspected on a quarterly basis for potential malfunction, such as excessive vibration, broken seals, or uncontrolled product loss.
- b) The pressure drop across each cyclone shall be checked prior to startup of each associated flaker and hammermill.
- c) The dump valve at the bottom of each cyclone shall be inspected in accordance with manufacturer's specifications to ensure that the valve is operating freely.
- d) The inside of each cyclone shall be inspected to ensure there is no significant accumulation of material at the end of each operating day.
- e) Implement monitoring practices as described in the SOPs for cyclones (as described above).

**Recordkeeping:** The permittee shall maintain records of inspections, maintenance, and installation dates of pressure gauges for each cyclone in accordance with Section B109.

**Reporting:** The permittee shall report in accordance with Section B110.

E. Storage Barns & Complete Enclosures – Grain Storage & Handling

# **Requirement:**

- 1. Storage Barns E-26, E-27, E-28, E-29, E-30, E-33: At a minimum, these structures shall be maintained as three (3) solid walls and a roof with access doors that can remain open at all times for safety and operational purposes.
- 2. Complete Enclosures Unit CE-4 (flaked corn loadout shed), Unit CE-5 (flaked milo loadout shed), & Unit CE-20 (DDG Barn #2): These structures shall be maintained as completely enclosed buildings (with the exception of roof passive vents) with four (4) solid walls, a roof, and functional doors that close.

Monitoring: The permittee shall inspect each structure every six (6) months to determine if any repairs are necessary to maintain the integrity of the structure & minimize openings/gaps in each wall and the roof. The permittee shall ensure routine observations and checks are sufficient to maintain the integrity of the structure & minimize openings/gaps.

Recordkeeping: The permittee shall maintain records of inspections and maintenance conducted on each storage barn in accordance with Section B109. The permittee shall maintain records of maintenance conducted on storage barns in response to potential excess emissions events.

**Reporting:** The permittee shall report in accordance with Section B110.

# PART B GENERAL CONDITIONS

### **B100 Introduction**

A. The Department has reviewed the permit application for the proposed construction/modification/revision and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

# **B101 Legal**

- A. The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20.2.72.210.A NMAC)
- B. Any future physical changes, changes in the method of operation or changes in restricted area may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202 NMAC, no modification shall begin prior to issuance of a permit. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- C. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, will increase the discharge of emissions or affect modeling results. Any such proposed changes shall be submitted as a revision or modification. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- D. The permittee shall establish and maintain the property's Restricted Area, as identified in the most recent modeling plan for which the permittee received Department approval. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- E. Applications for permit revisions and modifications shall be submitted to:

Program Manager, Permits Section New Mexico Environment Department Air Quality Bureau 525 Camino de los Marquez, Suite 1a Santa Fe, NM 87501

F. Pursuant to 20.2.72.210 NMAC, at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC)

### **B102** Authority

- A. This permit is issued pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.
- B. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

# B103 Annual Fee

- A. The Department will assess an annual fee for this Facility. This regulation set the fee amount at \$1,500 through 2004 and requires it to be adjusted annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two. (20.2.75.11 NMAC)
- B. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

### **B104 Appeal Procedures**

A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given

of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to: (20.2.72.207.F NMAC)

Secretary, New Mexico Environmental Improvement Board 1190 St. Francis Drive, Runnels Bldg. Rm. N2153 P.O. Box 5469 Santa Fe, New Mexico 87502

### **B105 Submittal of Reports and Certifications**

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to <a href="Stacktest.AQB@state.nm.us">Stacktest.AQB@state.nm.us</a>.
- B. Excess Emission Reports shall be submitted electronically to <a href="mailto:eereports.aqb@state.nm.us">eereports.aqb@state.nm.us</a>. (20.2.7.110 NMAC)
- C. Regularly scheduled reports shall be submitted to:

Manager, Compliance and Enforcement Section New Mexico Environment Department Air Quality Bureau 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87505-1816

### B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3).

# B107 Startup, Shutdown, and Maintenance Operations

A. The permittee shall operate in accordance with the procedures set forth in the plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan), except for operations or equipment subject to Section B106 above. (20.2.7.14.A NMAC)

### **B108 General Monitoring Requirements**

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring exemptions at B108.D(2), hours of operation shall be monitored and recorded.
  - (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
  - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the

- permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
- (3) A minimum of one of each type of monitoring activity shall be conducted during any five-year period for sources not subject to 20.2.70 NMAC, Operating Permits.
- E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.
- F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- G. Monitoring shall become effective 120 days after the date of permit issuance if the monitoring is new or in addition to monitoring imposed by an existing applicable requirement. Any pre-existing monitoring requirements incorporated in this permit shall continue to be in force from the date of permit issuance.

# **B109** General Recordkeeping Requirements

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any other applicable requirements that become effective after permit issuance. The minimum information to be included in these records is:
  - (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
  - (2) date(s) and time(s) of sampling or measurements;
  - (3) date(s) analyses were performed;
  - (4) the qualified entity that performed the analyses;
  - (5) analytical or test methods used;
  - (6) results of analyses or tests; and
  - (7) operating conditions existing at the time of sampling or measurement.

- B. Except as provided in the Specific Conditions, records shall be maintained on-site for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Records for unmanned sites may be kept at the nearest company office. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.
- C. Routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
  - (1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)
  - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source.

# **B110 General Reporting Requirements**

(20.2.72 NMAC Sections 210 and 212)

- A. Records and reports shall be maintained on-site unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest company office.
- B. The permittee shall notify the Department's Compliance Reporting Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B):
  - (1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Actual startup shall not occur earlier than the permit issuance date;
  - (2) after receiving authority to construct, the equipment serial number as provided by the manufacturer or permanently affixed if shop-built and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date; and
  - (3) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.

- C. The permittee shall notify the Department's Permitting Program Manager, in writing of, or provide the Department with (20.2.72.212.C and D):
  - (1) any change of operators or any equipment substitutions within fifteen (15) days of such change;
  - (2) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.
- D. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. Reported numerical values shall not be truncated or rounded, and shall be recorded and reported to the number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- E. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

# **B111 General Testing Requirements**

# A. Compliance Tests

- (1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be reimposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- (3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.
- (7) Pursuant to 20.2.72.210.C NMAC, for combustion sources with stacks, the permittee shall also provide a one-quarter (1/4) inch stainless steel sampling line adjacent to the sampling ports and extending down to within four (4) feet above ground level to provide access for future audits. The line shall extend into the stack a distance of 1/4 the stack diameter, but not less than one inch from the stack wall.
  - The sampling line shall be maintained clear of blockage at all times. This line shall be in place at the time of any required compliance tests. For any source for which compliance tests are not required or for previously existing sources this line shall be installed no later than one hundred and eighty (180) days from the date of this permit.
- (8) As an alternative, the permittee may provide a portable sampling line that is readily available which allows the Department to safely obtain representative stack gas samples at the time of compliance audits or site inspections.
- (9) The physical configuration of the Facility shall conform to the emissions testing requirements of 20.2.72.210.C NMAC and of 40 CFR 60.8(e), which is imposed under the authority of 20.2.72.210.C.4 NMAC.

#### B. EPA Reference Method Tests

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:
  - (a) Methods 1 through 4 for stack gas flowrate
  - (b) Method 5 for TSP
  - (c) Method 6C and 19 for SO<sub>2</sub>
  - (d) Method 7E for NO<sub>X</sub> (test results shall be expressed as nitrogen dioxide (NO<sub>2</sub>) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO<sub>2</sub> is equivalent to 1.194 x 10-7 lb/SCF)
  - (e) Method 9 for opacity

- (f) Method 10 for CO
- (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
- (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
- (i) Method 29 for Metals
- (j) Method 201 for filterable PM<sub>10</sub>
- (k) Method 202 for condensable PM
- (l) Method 320 for organic Hazardous Air Pollutants (HAPs) (m) Method 25A for VOC reduction efficiency
- (2) Alternative test method(s) may be used if the Department approves the change

# C. Portable Analyzer Requirements

- (1) The permittee shall follow the *SOP for Use of Portable Analyzers in Performance Tests* posted to NMED's Air Quality web site under Compliance and Enforcement/Testing.
- (2) A portable analyzer that is used for periodic emissions tests must meet the requirements of ASTM D 6522 00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be used until it is replaced.
- (3) The portable emissions analyzer shall be setup and operated in accordance with the manufacturer's instructions, with the requirements of ASTM D-6522-00, or with the criterion of an analyzer previously approved by the Department.
- (4) During emissions tests, pollutant, O<sub>2</sub> concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

### D. Test Procedures:

(1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test.

- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's *Universal Test Notification, Protocol and Report Form and Instructions*. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment. Sample ports of a size compatible with the test methods shall be located on the stack with the provisions of EPA Method 1 of 40 CFR 60, Appendix A. The stack shall be of sufficient height and diameter so that a representative test of the emissions can be performed in accordance with EPA Method 1.
- (5) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed.

# **B112** Compliance

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three days unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.72.210.B.4 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

### **B113 Permit Cancellation and Revocation**

- A. The Department may revoke this permit if the applicant or permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.
- B. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit. (20.2.72 NMAC)
- C. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year. (20.2.72 NMAC)

### **B114 Notification to Subsequent Owners**

- A. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change. (20.2.72.212.C NMAC)
- B. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address. (20.2.73.200.E.3 NMAC)

# **B115** Asbestos Demolition

A. Before any asbestos demolition or renovation work, the permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

### PART C MISCELLANEOUS

### C100 Supporting On-Line Documents

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
  - (1) Excess Emission Form (for reporting deviations and emergencies)

- (2) Universal Stack Test Notification, Protocol and Report Form and Instructions
- (3) SOP for Use of Portable Analyzers in Performance Tests

# C101 <u>Definitions</u>

- A. "Daylight" is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).
- B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 NMAC permitting actions.
- C. **"Fugitive Emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- D. "Insignificant Activities" means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. Note; insignificant activities are only valid for 20.2.70 NMAC permitting actions.
- E. "Natural Gas" is defined as: a naturally occurring fluid mixture of hydrocarbons found in geologic formations beneath the earth's surface, of which the principal constituent is methane; liquefied petroleum gas, as defined in ASTM D1835; or a mixture of hydrocarbons that maintains a gaseous state at ISO conditions and is either 70 percent methane by volume or has a gross calorific value between 34 and 43 megajoules per dry standard cubic meter. that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.41c)
- F. "Natural Gas Liquids" means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- G. "National Ambient air Quality Standards" means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.
- H. "Night" is the time period between sunset and sunrise, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <a href="http://aa.usno.navy.mil/">http://aa.usno.navy.mil/</a>. Alternatively, these times can be obtained from a Farmer's Almanac or from <a href="http://www.almanac.com/rise/">http://www.almanac.com/rise/</a>).

- I. "Night Operation or Operation at Night" is operating a source of emissions at night.
- J. "NO2" or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term "nitrogen dioxide," for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NOx or NOx. (20.2.2 NMAC)

#### K. "NOx" see NO<sub>2</sub>

- L. "Potential Emission Rate" means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.
- M. "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the department. Barriers could also include rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- N. "Shutdown" means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- O. "Startup" means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

### C102 Acronyms

2SLB		2-Stroke	Lean
Burn			
4SLB		4-Stroke	Lean
Burn 4	SRB	4-Strok	e Rich
Burn a	acti	ual cubic fe	et per

minute AFR	air
fuel ratio	
AP-42	EPA Air Pollutant Emission Factors
AQB	Air Quality Bureau
BTU	British thermal
unit	
CAA	Clean Air Act of 1970 and 1990 Amendments
CEM	Continuous Emissions
Monitoring cfh	cubic
feet per hour cfm	cubic
feet per minute CFR	
Federal	Regulation CO
	carbon monoxides
EIB	Environmental Improvement Board
EPA	United States Environmental Protection Agency
gr./100 cf	grains per one hundred cubic feet
gr./dscf	grains per dry standard cubic foot
HAP	hazardous air pollutant
hp	horsepower
IC	Internal Combustion
KW/hr	kilowatts per hour
1b/hr	pounds per hour
lb/MMBtu	pounds per million British thermal unit
	Maximum Achievable Control Technology
	million cubic feet per hour
	million standard cubic feet
N/A	Not
Applicable NAAQS	National Ambient Air
Quality Standards NESHAP	
Hazardous Air Pollutants	
NMAAQS	New Mexico Ambient Air Quality Standards
	New Mexico Administrative Code
NMED	
NMSA	
Annotated	
NOx	nitrogen
oxides	
NSCR	
NSPS	
NSR	
Review PEM	
Monitoring PM par	ticulate matter (equivalent to TSP, total suspended

	particulate matter 10 microns and less
in diameter PM <sub>2.5</sub>	particulate matter 2.5 microns and less
in	diameter
pph	pounds per hour
ppmv	parts per million by volume
	reciprocating internal combustion engine
rpm	revolutions per minute
	standard cubic feet per minute
SO <sub>2</sub>	sulfur
dioxide TAP	
Pollutant TBD	to be
determined THC	Total
Hydrocarbons TSP	Total
Suspended	Particulates tpy
	tons per year
USEPA	
UTM	
UTMH	
UTMV	
VOC	volatile organic compounds