Mail Application To:		**For Department use only:**
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		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 being submitted as (check all that apply): ☐ Request for a No Permit Required Determination (no fee)
☐ **Updating** 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/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 ☐ NPR (no fee)
☑ $500 NSR Permit Filing Fee enclosed OR ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).
☑ Check No.: 3950 in the amount of $500 (Fee not required for Title V) ☐ This facility meets the applicable requirements to register as a Small Business and a check for 50% of the normal fee is enclosed (only applicable **provided** that NMED has a Small Business Certification Form from your company on file found at: http://www.env.nm.gov/aqb/permit/app_form.html).

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.72.200.X.X NMAC**
(i.e. an example of an application for a new minor source would be 20.2.72.200.A NMAC, one example of a low level cite for a Technical Permit Revision could be: 20.2.72.219.B.1.b NMAC, or a Title V acid rain cite would be: 20.2.70.200.C NMAC)

Synthetic Minor Source Information: A source is synthetic minor if its uncontrolled emissions are above major source applicability thresholds, but the facility is minor because it has federally enforceable requirements (federal requirements or permit conditions) that limit controlled emissions below major source thresholds. Facilities can be synthetic minor for either Title V (20.2.70 NMAC) or PSD (20.2.74 NMAC) or both. The Department tracks synthetic minor sources that are within 20% of either TV or PSD major source thresholds, referring to these as Synthetic Minor 80 Sources (abbreviated SM80). Please check all that apply:
Prior to this permitting action this source is a ☐ TV major source, ☐ a TV synthetic minor source, ☐ a TV SM80 source.
Prior to this permitting action this source is a ☐ PSD major source, ☐ a PSD synthetic minor source, ☐ a PSD SM80 source.
This permitting action results in a ☐ TV synthetic minor source and/or ☐ PSD synthetic minor source.

Section 1 – Facility Information

Section 1-A: Company Information		AI # if known (see 1st 3 to 5 #s of permit IDEA ID No.):	Updating Permit/NOI #:
1	Facility Name: Cross Roads Ag- West	Plant primary SIC Code (4 digits): 0119	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 621 East Curry Ave, Clovis, NM 88101		
2	Plant Operator Company Name: CrossRoads Agriculture	Phone/Fax:	
a	Plant Operator Address: 621 East Curry Ave, Clovis, NM 88101		
b	Plant Operator's New Mexico Corporate ID or Tax ID: KCVN 20-5362246		

3	Plant Owner(s) name(s): CrossRoads Agriculture	Phone/Fax: (914)666-2757
a	Plant Owner(s) Mailing Address(s): 118 N. Bedford Rd, Mt Kisco, NY 10549	
4	Bill To (Company): Cross Roads Agriculture West Phoenix	Phone/Fax: 914 666-2757
a	Mailing Address: 118 N. Bedford Rd, Mt Kisco, NY 10549	E-mail:Sbender@livbend.com
5	☐ Preparer: ☑ Consultant: Air Quality Services, Inc, Mr. Bruce Nicholson	Phone/Fax: 505 982-2737
a	Mailing Address: PO Box 6324 Santa Fe, NM 87502-6324	E-mail: brucnichol@aol.com
6	Plant Operator Contact: Jarryd Burris	Phone/Fax: (575) 494-7123
a	Address: 621 East Curry Ave, Clovis, NM 88101	E-mail: jwb.81@hotmail.com
7	Air Permit Contact: Mark (Buzz) Tourangeau	Title: Director of Operations
a	E-mail: tourangeaubuzz2@gmail.com	Phone/Fax: (970) 443-5814
b	Mailing Address: 1115 Bateleur Lane, Ft. Collins, CO 80524	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? ☑ 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 2910-M1
3	Is the facility currently shut down? ☑ Yes ☐ No	If yes, give month and year of shut down (MM/YY): 2006
4	Was this facility constructed before 8/31/1972 and continuously operated 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 History is unknown, facility was permitted up until 2006 when it was closed and removed from the permit	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☐ Yes ☑ No	If yes, the permit No. is: P-
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☑ No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☑ No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☐ Yes ☑ No	If yes, the permit No. is:
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ☑ No	If yes, the register No. is:

Section 1-C: Facility Input Capacity & Production Rate

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: 0	Daily: 0	Annually: 0
b	Proposed	Hourly: 6,000 bushels/hr	Daily: 40,000 bushels	Annually: 700,000 bushels/yr (21,000 ton)
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: 0	Daily: 0	Annually: 0
b	Proposed	Hourly: 6,000 bushels/hr	Daily: 40,000 bushels	Annually: : 700,000 bushels

Section 1-D: Facility Location Information

1	Section: SE1/4 of 18	Range: 36E	Township: 2N	County: Curry	Elevation (ft): 4,257
2	UTM Zone: ☐ 12 or ☑ 13			Datum: ☐ NAD 27 ☑ NAD 83 ☐ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 665618 m E			UTM N (in meters, to nearest 10 meters): 3807730 m N	
b	**AND** Latitude (deg., min., sec.): 34°23'51.88"N			Longitude (deg., min., sec.): 103°11'53.71"W	
3	Name and zip code of nearest New Mexico town: Clovis, 88101				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): located at the SW corner of Ross St and Curry Ave. (621 E. Curry Ave.)				
5	The facility is in Clovis, NM (nearest town).				
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: Texico, NM				
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 www.env.nm.gov/aqb/modeling/class1areas.html)? ☑ Yes ☐ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Texas (8.808 mi, 14.17 km)				
9	Name nearest Class I area: Salt Creek (137.3 km)				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 137.3 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 72 ft, 104 ft				
12	Method(s) used to delineate the Restricted Area: The facility site cannot be fenced due to railway rights of way. "**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/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ Yes ☑ No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? ☒ No ☐ Yes If yes, what is the name and permit number (if known) of the other facility?				

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

1	Facility **maximum** operating ($\frac{hours}{day}$): 14, varies/ daylight only	($\frac{days}{week}$): 7	($\frac{weeks}{year}$): 52	($\frac{hours}{year}$): 4015		
2	Facility's maximum daily operating schedule (if less than 24 $\frac{hours}{day}$)? Start: 7		☑AM ☐PM	End: 9:00 Daylight only	☐AM ☑PM	
3	Month and year of anticipated start of construction: Not applicable					
4	Month and year of anticipated construction completion: Not applicable					
5	Month and year of anticipated startup of new or modified facility: Oct., 2016					
6	Will this facility operate at this site for more than one 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 to this facility? ☐ Yes ☑ No If yes, specify:

a	If yes, NOV date or description of issue:		NOV Tracking No:
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	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☑ Yes ☐ No		
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? ☐ **Major** (☐ ≥10 tpy of any single HAP **OR** ☐ ≥25 tpy of any combination of HAPS) **OR** ☑ **Minor** (☑ <10 tpy of any single HAP **AND** ☑ <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☐ Yes ☑ No		
a	If yes, include the name of company providing commercial electric power to the facility: _____ Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

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.)

Section 1-H: Current Title V Information - Required for all applications from TV Sources

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC):		Phone:
a	R.O. Title:	R.O. e-mail:	
b	R. O. Address:		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	A. R.O. Title:	A. R.O. e-mail:	
b	A. R. O. Address:		
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):		
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.):		
a	Address of Parent Company:		
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.):		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations:		
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:		

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. If 'head-to-toe printing' is not possible, print single sided. 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.

2) If the application is for a minor NSR, PSD, NNSR, or Title V permitting action, include one working hard **copy** for Department use. This copy does not need to be 2-hole punched. 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 ***summary report only*** 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) 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.

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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[1]	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture or Reconstruction[2] / Date of Installation /Construction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classi-fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Compression Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
EP1 (EP1a, EP1b)	Truck receiving (Pit)	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C4, C5	3-02-005-52	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP2a	Elevator leg pickup	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C2	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP2b	Elevator leg discharge	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C1	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP3	Distributor Transfer	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C1	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP4a	Outside Silo loading	NA	NA	NA	0 bushels/hr	0 bushels/hr	circa 1960	none	3-02-005-40	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP4b	Headhoouse Bin loading	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C2	3-02-005-40	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP5	Reclaim belt	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C1,C2,C4	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP6 (EP6A, EP6B)	Truck Loadout	NA	NA	NA	7500 bushels/hr	6000 bushels/hr	circa 1960	C4	3-02-005-60	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
EP7	B Elev Transfer to C Pit	NA	NA	NA	6500 bushels/hr	6500 bushels/hr	circa 1960	C2	3-02-005-63	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
							circa 1960	NA				
Road1 R1a1, R1a2, R1B1	Inplant road	NA	NA	NA	10 trucks/hr	6 trucks/hr	circa 1960	C6	22960-0	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							circa 1960	NA				
Road2 (R2A1,R2A,R2B1,R2B2)	Inplant road	NA	NA	NA	10 trucks/hr	6 trucks/hr	circa 1960	C6	22960-0	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							circa 1960	NA				
Road3 R31-R32	Inplant road	NA	NA	NA	10 trucks/hr	6 trucks/hr	circa 1960	C6	22960-0	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							circa 1960	NA				
Road4 (R41-R44)	Inplant road	NA	NA	NA	10 trucks/hr	6 trucks/hr	circa 1960	C6	22960-0	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							circa 1960	NA				
Road 5 (R51,R52)	Inplant road	NA	NA	NA	10 trucks/hr	6 trucks/hr	circa 1960	C6	22960-0	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							circa 1960	NA				

[1] 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.
[2] Specify dates required to determine regulatory applicability.
[3] 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.
[4] "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-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[1]	Source Description	Manufacturer	Model #	Serial #	Maximum or Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture or Reconstruction[2] / Date of Installation /Construction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classi-fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Compression Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
EP10 (EP10A,EP10B)	Truck receiving (Pit)	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	C4 NA	3-02-005-52	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
EP11a	Elevator leg pickup	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	C1 NA	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
EP11b	Elevator leg discharge	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	C1 NA	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
EP12	Distributor Transfer	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	C1 NA	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
EP13	Bin or Silo loading	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	none NA	3-02-005-40	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
										☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
EP14	Reclaim auger	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	C1 NA	3-02-005-30	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
EP15 (EP15A, EP15B)	Truck Loadout	NA	NA	NA	6500 bushels/hr	6000 bushels/hr	circa 1960 circa 1960	C4 NA	3-02-005-60	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	None	N/A
										☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ 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 ☐ New/Additional Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
										☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		

[1] 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.
[2] Specify dates required to determine regulatory applicability.
[3] 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.
[4] "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[1] (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.

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
DW	Domestic hot water heater in office, about 30 gal	TBD	TBD TBD	Abt 30,000 btuh	20.2.72.202.B (1).a	ukn 2016	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☑ Replacement Unit ☐ To Be Modified ☐ To be Replaced
DH	Domestic Furnace Heater	TBD	TBD TBD	abt 150,000 btuh	20.2.202.B (1).a	ukn 2016	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☑ Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ 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 ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

The small office hot water tank and the furnace heater where no good and removed. Replacements have not been purchased yet.

[1] 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.

[2] Specify date(s) required to determine regulatory applicability.

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)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
C1	Full equipment enclosures	1960	PM	EP2a, EP2b,EP3, EP5,EP7,EP11a, EP11b,EP12,EP14	95.00%	Engineering Judgement
C2	Full building enclosure	1960	PM	EP2a, EP2b,EP3,EP4b,EP5,EP7, EP11a, EP11b,EP12,EP14	95%	Engineering Judgement
C3	Partial building enclosure	1960	PM		50%	Engineering Judgement
C4	Choke Flow control	1960	PM	EP1,EP10,EP6, EP15	90%	Accepted BACT
C5	Three sided passageway in elevator with open end doors	1960	PM	EP1, EP6, EP10, EP15	0%	Assumed
C6	Water+basecoarse in-plant road segments	1960	PM	R1, R2, R3, R4, R5	80%	Bureau default

R1 through R5 are short road segments located outside of the elevator buildings but on property for entry and exit to the elevator passageway and to access the truck scale.

[1] List each control device on a separate line. For each control device, list all emission units controlled 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 with a minimum of two significant figures[1]. If there are any significant figures to the left of a decimal point, there shall be no more than one significant figure to the right of the decimal point.

Unit No.	NOx		CO		VOC		SOx		TSP[2]		PM10[2]		PM2.5[2]		H_2S		Lead	
	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
EP1									6.300	27.59	1.404	6.15	0.234	1.02				
EP2a									10.980	48.09	6.120	26.81	1.044	4.57				
EP2b									10.980	48.09	6.120	26.81	1.044	4.57				
EP3									10.980	48.09	6.120	26.81	1.044	4.57				
EP4a									0.000	0.00	0.000	0.00	0.000	0.00				
EP4b									4.500	19.71	1.134	4.97	0.198	0.87				
EP5									0.000	0.00	0.000	0.00	0.000	0.00				
EP6									15.480	67.80	5.220	22.86	0.882	3.86				
EP7									11.895	52.10	6.630	29.04	1.131	4.95				
EP10									6.300	27.59	1.404	6.15	0.234	1.02				
EP11a									10.980	48.09	6.120	26.81	1.044	4.57				
EP11b									10.980	48.09	6.120	26.81	1.044	4.57				
EP12									10.980	52.1	6.120	26.81	1.044	4.57				
EP13									4.500	19.71	1.134	4.97	0.198	0.87				
EP14									10.980	48.09	6.120	26.81	1.044	4.57				
EP15									15.480	67.80	5.220	22.86	0.882	3.86				
R1-total									1.223	5.36	0.312	1.37	0.031	0.14				
R2-total									1.316	5.76	0.335	1.47	0.034	0.15				
R3-total									0.606	2.65	0.155	0.68	0.015	0.07				
R4-total									1.119	4.90	0.285	1.25	0.029	0.12				
R5-total									0.363	1.59	0.092	0.40	0.009	0.04				
Totals									145.94	643.23	66.17	289.80	11.18	48.99				

[1] **Significant Figures Examples:** One significant figure – 0.03, 3, 0.3. Two significant figures – 0.34, 34, 3400, 3.4

[2] **Condensables:** Include condensable particulate matter emissions in particulate matter calculations.

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 with a minimum of two significant figures[1]. If there are any significant figures to the left of a decimal point, there shall be no more than one significant figure to the right of the decimal point. Please do not change the column widths on this table.

Unit No.	NOx		CO		VOC		SOx		TSP[2]		PM10[2]		PM2.5[2]		H_2S		Lead	
	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
EP1									0.63	0.03675	0.1404	0.0082	0.0234	0.00137				
EP2a									0.549	0.032	0.306	0.01785	0.0522	0.003				
EP2b									0.549	0.032	0.306	0.0179	0.0522	0.003				
EP3									0.549	0.032	0.306	0.01785	0.0522	0.003				
EP4a									0	0	0	0	0	0				
EP4b									0.225	0.0019	0.0567	0.00047	0.0099	8.3E-05				
EP5									0	0	0	0	0	0				
EP6									1.548	0.0903	0.522	0.03045	0.0882	0.00515				
EP7									0.59475	0.03203	0.3315	0.01785	0.05655	0.00305				
EP10									0.63	0.03675	0.1404	0.00819	0.0234	0.00137				
EP11a									0.549	0.032	0.306	0.0179	0.0522	0.003				
EP11b									0.549	0.032	0.306	0.01785	0.0522	0.003				
EP12									0.549	0.032	0.306	0.0179	0.0522	0.003				
EP13									4.5	0.2625	1.134	0.06615	0.198	0.01155				
EP14									0.549	0.032	0.306	0.0179	0.0522	0.003				
EP15									1.548	0.0903	0.522	0.03045	0.0882	0.00515				
R1-total									0.245	0.491	0.062	0.125	0.0062	0.0125				
R2-total									0.260	0.530	0.067	0.130	0.0067	0.0135				
R3-total									0.121	0.243	0.031	0.062	0.0031	0.0060				
R4-total									0.224	0.449	0.057	0.115	0.0057	0.0115				
R5-total									0.073	0.146	0.018	0.037	0.0018	0.0037				
Totals									14.4414	2.63363	5.2244	0.75611	0.87655	0.0959				

[1] **Significant Figures Examples**: One significant figure – 0.03, 3, 0.3. Two significant figures – 0.34, 34, 3400, 3.4

[2] **Condensables:** Include condensable particulate matter emissions in particulate matter calculations.

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

☑ This table is intentionally left blank as all SSM emissions at this facility do not require an increase in Requested Allowables greater than those listed in Table 2-E. If you are required to report GHG emissions as described in Section 21, include any GHG emissions due Startup, Shutdown, and/or Scheduled Maintenance in Table 2-P. Provide explanation in Section 6.

All applications, including NOI applications, must fill out this table, reporting Maximum Emissions during Startup, Shutdown and Scheduled Maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). Only report SSM emissions greater than the cooresponding Table 2-E emissions[1]. Not providing emissions for a unit indicates that SSM emissions for this unit are less than the Requested Allowables for that unit in Table 2-E. In Section 6, provide emissions calculations for any emissions listed in this table. 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. List all units and SSM fugitives, except GHGs, in this table. Refer to Table 2-E for instructions on use of the "-" symbol and on significant figures.

Unit No.	NOx		CO		VOC		SOx		TSP[2]		PM10[2]		PM2.5[2]		H_2S		Lead	
	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
Totals																		

There are no additional emissions associated with startup or shut down or routine maintenance.

[1] **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 the table below. 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.

[2] **Condensables**: Include condensable particulate matter emissions in particulate matter calculations.

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.

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		TSP		PM10		PM2.5		☐ H_2S or ☐ Lead	
		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
Totals:																	

There is no combustion processing equipment nor are there stacks associated with the elevators.

Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each operating scenario, including blowdown venting parameters.

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H-Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter or L x W (ft)
						(acfs)	(dscfs)			

There are no stacks.

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.

Stack No.	Unit No.(s)	Total HAPs		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP	
		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
Totals:																			

There are no TAPS or HAPS at this facility,

Table 2-J: Fuel

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

Unit No.	Fuel Type (No. 2 Diesel, Natural Gas, Coal, …)	Specify Units				
		Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash

There is no process combustion equipment at the facility.

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.

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)

There are no liquid storage tanks at this facility. There is one outside tank listed as Mineral Oil (out of Service) that is not used at this facility.

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)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M^3)			Roof	Shell			

Refer to note in table 2-K

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

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		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	
					BL: Black	
					OT: Other (specify)	

Note: 1.00 bbl = 0.159 M^3 = 42.0 gal

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

Material Processed				Material Produced			
Description	**Chemical Composition**	**Phase (Gas, Liquid, or Solid)**	**Quantity (specify units)**	**Description**	**Chemical Composition**	**Phase**	**Quantity (specify units)**
grain	wheat, milo	solid	700,000 bushels	grain	whest, milo	solid	700,000 bushels

There is no grain processing at this facility. Farm grain is stored and then sold.

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

There are no stacks and no CEMS at this facility.

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

There are no parametric emission measurement equipment at this facility.

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 and include 1) reporting GHGs for each individual piece of equipment; 2) reporting 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; 3) or may check the following ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									Total GHG Mass Basis ton/yr[4]	Total CO_2e ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**298**	**25**	**22,800**	**footnote 3**										
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
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	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO2e															
Total	**mass GHG**															
	CO_2e															

There is no process combustion equipment that would produce green house gases.

[1] **GWP** (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.

[2] For **HFCs** or **PFCs** describe the specific HFC or PFC compound and use a separate column for each individual compound.

[3] For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

[4] Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

Read & delete this comment:

Section 3

Application Summary

The **Application Summary** 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.

This permit is for an existing grain elevator operation in Clovis, NM that had been shut down circa 2006 and the permit relinquished for this facility. The property has been purchased and the owners wish to begin operations as a farm grain elevator operation. All emissions from the facility are fugitive. There are no permits for this facility. There are no modifications to the facility, just cleaning and repairs due to 10 years of non use. This is a minor source permit action.

The CrossRoads grain elevator is a country/farm elevator. This is not a commercial or processing facility like some others in the area. Grain is received during two harvest seasons, which for wheat is roughly June and for milo is roughly October. The farms are 30 to 45 miles from the facility. The busy season for the elevator is during the harvesting periods when grain is transported to the site by truck in roughly 25 ton loads. It takes 45 minutes to an hour at least to travel from the elevator to the farm to load grain. Consequently there will not likely be any queue of trucks waiting and they will arrive at the elevator at random times during the day. Harvesting is a daytime operation so that in June harvest, trucks will unload as late as 9 pm while in October, the last trucks unload at roughly 6 pm. For this permit, it was assumed that 6 trucks per hour would either unload grain during harvest or load grain for transport. This equates to around 6000 bushels per hour.

There are two grain elevators at this site designated as the "C" elevator, which fronts Curry Ave, and the "B" elevator which fronts the rail yard. During receiving or during grain loading, only one of the elevators will be used at any given time. Subsequent to purchase, CrossRoads found major structural cracks in the outside annex large silos in the "C" silos, but the internal silos and bins below the head house are sound. This resulted in a large loss of storage capacity. As a consequence, there will be no grain reclaim operations occurring at the "C" elevator. During truck loading in "C", the overhead bins will feed directly by gravity pipes to the leg boot, up to the distributor and into the loading bin and into trucks. Grain reclaim will occur at the "B" elevator to pull grain from the large storage silos for truck loading.

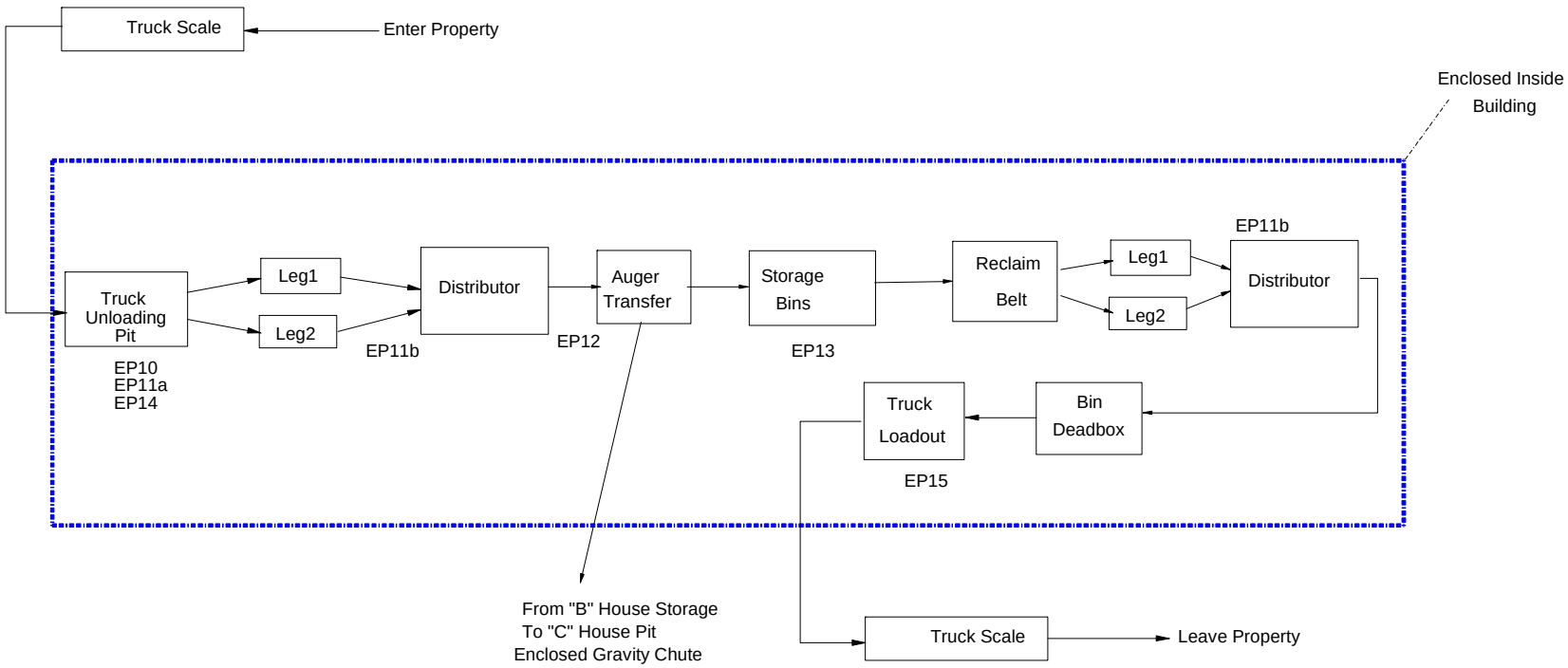
At this CrossRoads facility, only trucks will be used for both receiving and for loading. Trucks begin by pulling onto the weigh scale located at the office building (Figure 13). After receiving or loading, the trucks pull around again onto the weigh scale so that the amount of grain received or loaded can be determined.

While the permit has evaluated the grain elevator operations as operating 365 days per year, and both receiving and loading of grain has been evaluated in this manner, in reality the grain elevator will be inactive for most of the year. Once grain has been received during harvest (June and October roughly), no further grain receiving is likely to occur for the remainder of the year. The grain will remain stored until market prices and sales have been made and then stored grain in varying amounts would be shipped out to market. Again, once all of the grain is shipped, the elevator would be idle.

Section 4

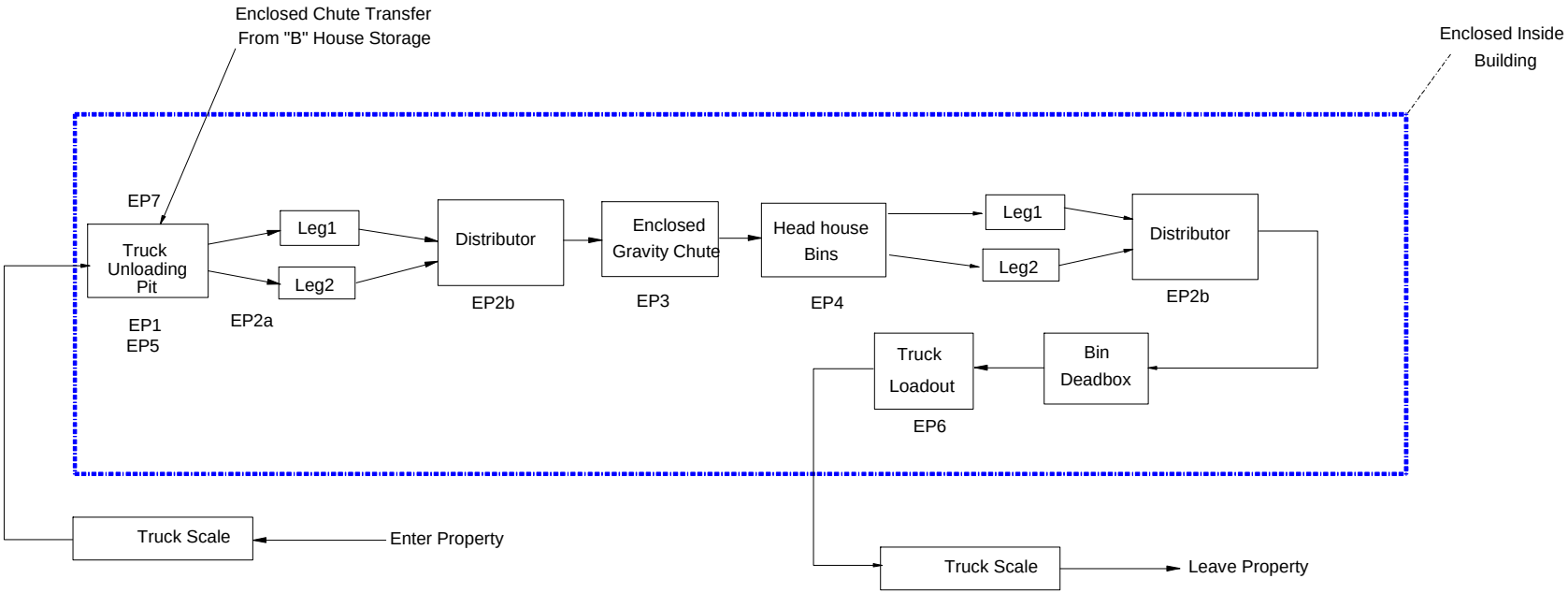
Process Flow Sheet

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



Note: All emissions are fugitive
Truck loading does not occur during truck receiving
Loading and Receiving are two separate events in time

Cross Roads Ag - West 621 East Curry Clovis, NM 88101	**Process Flow Diagram "B" Building** Revised May 26, 2016	**Air Quality Services, Inc.** PO Box 6324 Santa Fe, NM 87502 (505) 982-2737 p (505) 670-5519 cell



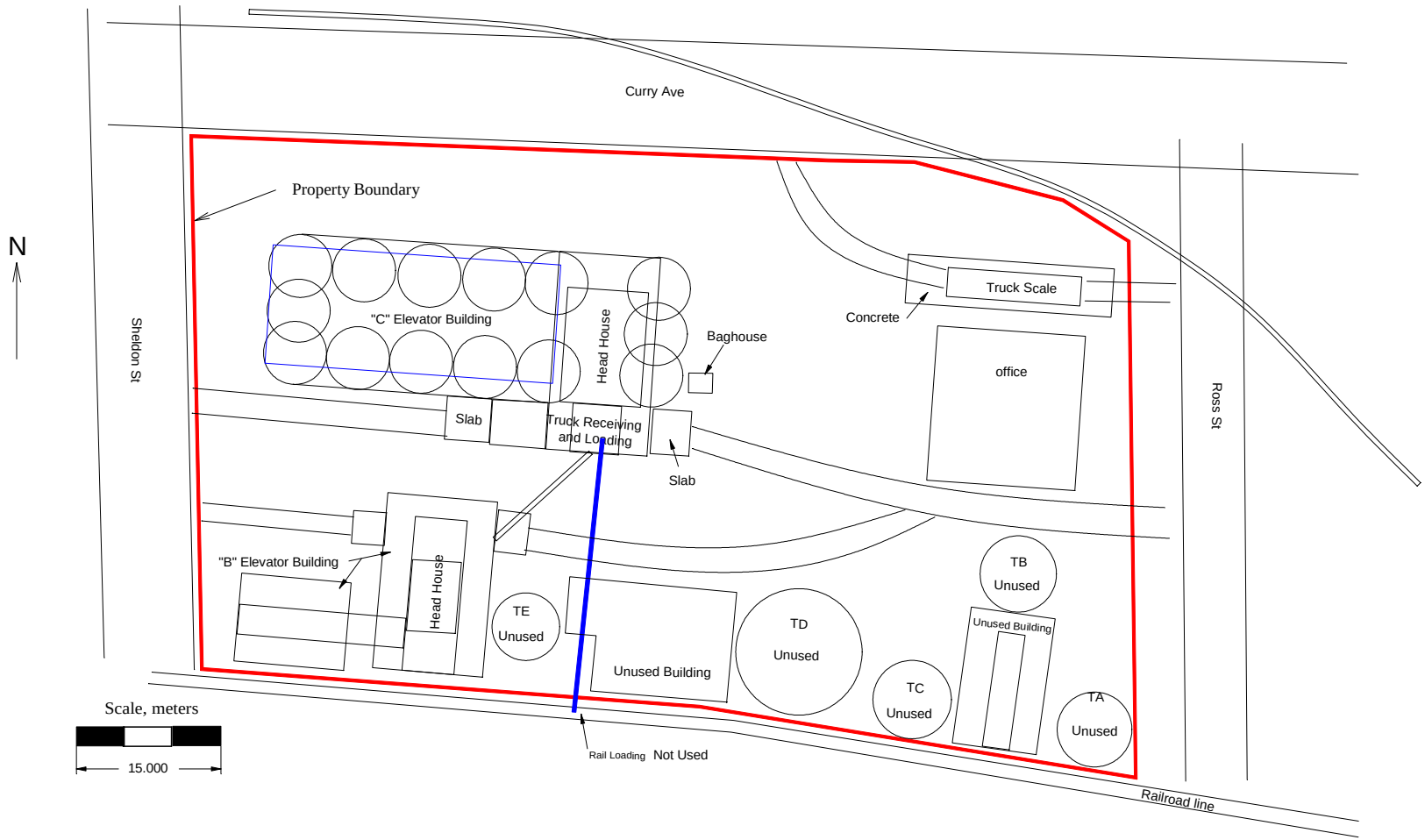
Note: All emissions are fugitive
Truck loading does not occur during truck receiving
Loading and Receiving are two separate events in time

Cross Roads Ag - West 621 East Curry Clovis, NM 88101	**Process Flow Diagram "C" Building** Revised May 26, 2016	**Air Quality Services, Inc.** PO Box 6324 Santa Fe, NM 87502 (505) 982-2737 p (505) 670-5519 cell

Section 5

Plot Plan Drawn To Scale

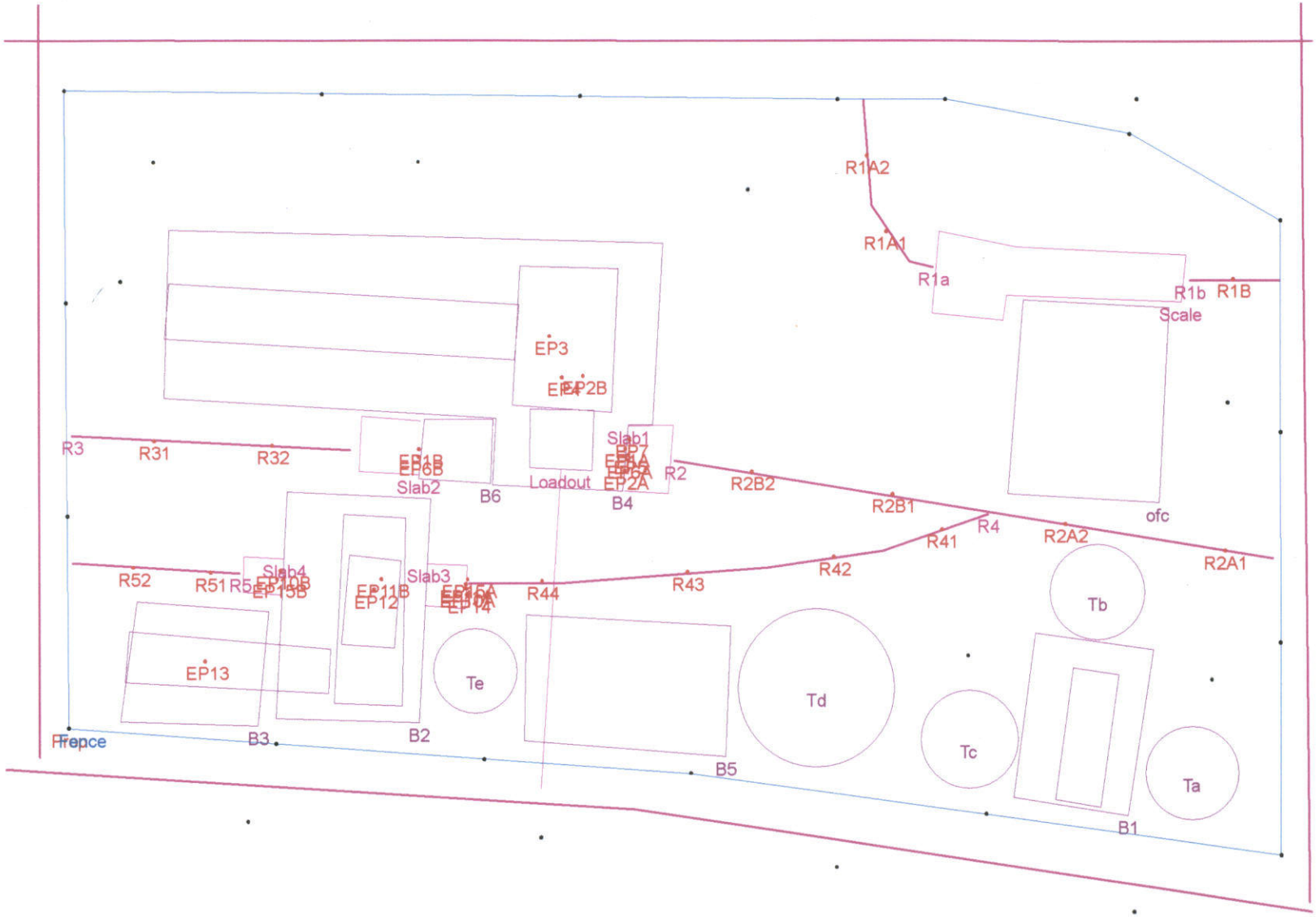
A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent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



Cross Roads Ag - West
621 East Curry
Clovis, NM 88101

Plot Plan
Scaled approximately from Google Earth
Revised April 28, 2016

Air Quality Services, Inc.
PO Box 6324
Santa Fe, NM 87502
(505) 982-2737 p (505) 670-5519 cell



B Building Operating 80% control roads Both doors open 0% control

Scale: 1" = 13.0 Meters

Plot Plan View of AERMOD Model

Section 6

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

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.

Emission estimation

Elevator Operations

AP-42 Chapter 9.9.1 Grain Elevators and Processes, was used to obtain the emission factors for the various activities at the site. These emission factors are uncontrolled emission factors. While the emission spreadsheet calculations contain an entry for straight truck receiving, CrossRoads will only use hopper trucks. The design of the elevators has operations of both receiving and loading of trucks inside of the concrete silo passageway (see Figure 15 in Section 10). All Figure referenced here are contained in Section 10 of the application. Both loading and receiving take place at the same spot in the elevator passageway (Figure 1 and 2). There is no loading of trucks during the very busy grain harvest period. Note that other than the entry and exit truck doors, there are two windows for light and one man door in the C passageway, but there are no windows in the B passageway, only a man door.

There are two grain elevators at this site designated as the "C" elevator and the "B" elevator (Figure 15, 16, 17). Subsequent to purchase, CrossRoads found major structural cracks in the outside annex large silos in the "C" silos, but the internal silos and bins below the head house are sound. As a consequence, while categories for reclaim are in the emission calculation spreadsheet, there will be no reclaim operations occurring at the "C" elevator. During truck loading, the overhead bins will feed to the leg boot, up to the distributor and into the loading bin and into trucks.

In both elevators receiving consists of a hopper truck pulling inside the elevator passageway and positioning over the grate above the receiving bin. (See Figure 1 and 2 for view of "C" interior) The receiving bin discharges to the leg receiver boot by gravity and this operation is a closed equipment enclosure. Grain is lifted to the top of the elevator and the grain is transferred to the distributor receiver, also enclosed. The distributor routes the grain to whichever bin is chosen to allow grain to flow down a closed gravity chute. (See Figure 5) Exterior bins are loaded from the distributor by an enclosed gravity chute from the distributor to the enclosed auger and thence by closed gravity chutes to the silo (See Figures 6 and 7). The overhead distributor and leg top are an enclosed device where the grain is transferred to the distributor. In "C" elevator, the grain goes directly to one of the head house bins by gravity feed from the distributor. The entire structure that is at and below the head house is enclosed (See Figure 17).

In the "B" house, a similar setup is present. During truck loading grain is transferred from either an overhead bin or one of the outside silos. If a outside annex silo beyond the head house is chosen, then grain is transferred to an enclosed reclaim auger that runs inside a tunnel in the basement underneath the silos that brings the grain to the leg receiver boot where it is transferred inside of an equipment receiver enclosure (See Figures 8-12). The auger is enclosed inside of the outer tube (see Figure 10). Grain is raised to the top of the enclosed distributor and thence by gravity through an enclosed pipe to the truck load bin. All of these movements are inside the elevator and are inside of enclosed equipment enclosures. In "B" there will be grain transferred to the outside

annex silos. By this I mean those silos that extend beyond the head house part of the overall structure both east-west and north-south. For these silos, there will be a bin vent to let displaced air escape during silo filling and this is a fugitive emission point. This vent is not controlled. Note that there are windows and man doors in both head houses. Also note in Figure 17 photo there is a walkway from the top of the B elevator to the top of the C elevator so that personnel can move from one head house to the other without having to take the man lift down to ground level and back up the other side.

Except for truck receiving and truck loading periods, PM emissions are nonexistent since the elevator is not operated. For modeling purposes, I have included all emission points in the model file even if the emission is insignificant in order to avoid confusion between calculations in the spreadsheet and not finding a corresponding entry in the modeling files. I have set both the loading operation and the receiving operation as though they were running continuously 365 days per year. As described in the emission estimation this cannot physically happen especially for harvest receiving since it is confined to specify harvest months. By running the model for receiving as though it occurred year round, this allows the elevator to receive grain from aother sources should that circumstance happen.

The elevator leg capacities are 6500 bushels/hr and 7500 bushels/hr respectively for the "B" and the "C" elevator. Emissions for roads were based on 6 trucks per hour. This equates to approximately 6000 bushels per hour. Elevator operation emissions were based on 6000 bushels per hour for both the "C" and the "B" elevators. In both runs for the "C" building, the road emissions only occur on the portion of the road leading directly to the "C" structure and exiting on the other side of the passageway. In both runs for the "B" building, the road emissions only occur on the portion of the road leading directly to the "B" structure and exiting on the other side. This avoids the potential for double counting road emissions and corresponds to the actual operation.

Choke Flow

Grain receiving is accomplished using choke flow of the grain. When the first truck of the day pulls in to unload, it will drop grain into an empty receiving bin until grain reaches the truck hopper bottom. For the remainder of receiving by that truck, the flow of grain is choked by the grain blockage at the hopper bottom and grain flows rather than drops and it is pulled from the bottom of the bin due to gravity and the grain lift from the leg (bucket elevator) . This practice eliminates a grain drop and keeps any dust inside of the hopper. The grain is removed by the leg lift. The bin will be left full for the remainder of the days' receiving. The next truck that comes in and thereafter for the day, the bin will be full of grain and a very short time period will occur from when the truck hopper is opened before choking occurs. Choke flow control is a standard practice and is considered to be 90% effective in controlling dust. The attached Texas TCEQ guidance for grain elevator documents 90% control. Refer to the utube video link https://www.youtube.com/watch?v=zwhRv8xMxvg for choke flow in an empty receiving bin.

Truck loading of grain is similarly choked. A flexible chute extends from the overhead loading bin to the truck bin. Grain is loaded and then as it rises, the grain covers the end of the flexible chute as grains continues to flow into the truck bin. The chute is slowly lifted and the truck pulls forward to maintain choke flow during the loading.

In-plant Roads

CrossRoads had initially committed to use calcium chloride on the base coarse roads to control road dust from the truck travel. This is a very good dust suppression method. They have experience with this in other operations and can attest to its effectiveness. However the Bureau would not allow 90% control efficiency for its use because it is not in a table of road efficiencies that they use. In order to use 90%, they would have required application of water, which effectively eliminates the effectiveness of the calcium chloride. Therefore, the emission estimate for roads uses only base coarse plus water at 80% control efficiency relative to a bare dirt road. Calcium chloride application will not be used.

Table A - Emission Calculations for CrossRoads Ag - West Grain Elevator Operations - "C" Building, No Outside Storage in Damaged Silos

						Uncontrolled Emission Factor						Uncontrolled Emissions						Controlled Emissions to Outside Air					
		Maximum	ThroughPut[3]						Control	Control	Overall	Hourly, lb/hr			PTE - Annual, ton/yr			Hourly, lb/hr			Annual, ton/yr		
ID	Emission Source	One Hour, bushels	Day Hourly. bushels	Annual bushels	Percent Type	PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	Factor	Efficiency, %	Penetration	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
EP1	Truck Receiving - Fugitive	7500	6000	700000	0	0.18	0.059	0.01	No Choke Flow	0	1	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0.000000	0	0	0
	Pit -Straight Truck								Building enclosure	0													
									Negative pit air	0													
	Truck Receiving - Fugitive	7500	6000	700000	100	0.035	0.0078	0.0013	Choke Flow Feed	90	0.1	6.300	1.404	0.234	27.594	6.150	1.025	0.63	0.1404	0.0234	0.03675	0.00819	0.001365
	Pit - Hopper Trucks								Building enclosure	0													
									Negative pit air	0		**6.300**	**1.404**	**0.234**	**27.594**	**6.150**	**1.025**	**0.6300**	**0.1404**	**0.0234**	**0.03675**	**0.00819**	**0.00137**
EP2a[7]	Elevator leg pickup	7500	6000	700000	100	0.061	0.034	0.0058	No Choke Flow	0	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
									Full equipment encl	95													
									Negative air	0													
									Building enclosure	0													
EP2b	Elevator leg discharge	7500	6000	700000	100	0.061	0.034	0.0058	No choke flow	0	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
	to Distributor								Full equipment encl	95													
									Negative air	0													
									Building enclosure	0													
EP3	Distributor	7500	6000	700000	100	0.061	0.034	0.0058	Full equipment encl	95	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
	transfer- Fugitive								Building enclosure	0													
									none	0													
EP4b[4]	Bin Loading headhouse	7500	6000	100030	100	0.025	0.0063	0.0011	Free fall	0	0.05	4.500	1.134	0.198	19.710	4.967	0.867	0.225	0.0567	0.0099	0.001876	0.000473	0.000083
	Enclosed bins,								Negative air	0													
	no external vents								Building Enclosure	95													
EP5[6,7]	Reclaim auger transfer	7500	6000	700000	100	0	0	0	Choke Flow	90	0.00025	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0	0.000000	0	0.000000
									Full equipment encl	95													
									Negative air	0													
									Building enclosure	95													
EP6	Truck Loadout - Fugitive	7500	6000	700000	100	0.086	0.029	0.0049	Choke Flow	90	0.1	15.480	5.220	0.882	67.802	22.864	3.863	1.548	0.522	0.0882	0.090300	0.03045	0.005145
	Doors open								Building enclosure	0													
									deadbox	0													
EP7	B-House ChuteTransfer to	6500	6500	700000	100	0.061	0.034	0.0058	No Choke Flow	0	0.05	11.895	6.630	1.131	52.100	29.039	4.954	0.59475	0.3315	0.05655	0.032025	0.01785	0.003045
	Pit for Rail or Truck								Full equipment encl	0													
	Load out - enclosed								Negative pit air	0													
									Building enclosure	95													
									Total PM Emission with Truck Loadout No Rail[5]---->			**71.12**	**32.75**	**5.58**	**311.48**	**143.44**	**24.43**	**4.64**	**1.97**	**0.33**	**0.257**	**0.111**	**0.0188**

Note:
1. Facility receives wheat and milo during two separate harvest seasons. Wheat weighes 60 lb/bushel and milo weighes 56 lb/bushel. Weight throughputs are based on wheat at 60 lb/Bu.
2. Note that total PM (filterable, PM100 approx) is not the same as the NM AAQS pollutant TSP (PM30). TSP will be smaller that PM.
3. The truck receiving and loadout amounts depends on the leg lift capacity. The "C" elevator leg capacity is 7500 bu/hr.
4 Based on the bins/silo capacities, the headhouse enclosed bins constitute 14.29 percent of total storage. No outside silo storage can be used as structural cracks were discovered in these silos.
5 Based on loss of silo storage capacity and likely acquisition of Gavilon elevator across the street, only truck loadout and no rail load out in permit.

Table B - Emission Calculations for CrossRoads Ag - West Grain Elevator Operations - "B" Building

ID	Emission Source	Maximum One Hour, bushels	ThroughPut[3] Day Hourly. bushels	Annual bushels	Percent Type	Uncontrolled Emission Factor PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	Control Factor	Control Efficiency, %	Overall Penetration	Uncontrolled Emissions Hourly, lb/hr PM	PM10	PM2.5	PTE - Annual, ton/yr PM	PM10	PM2.5	Controlled Emissions to Outside Air Hourly, lb/hr PM	PM10	PM2.5	Actual Annual, ton/yr PM	PM10	PM2.5
EP10	Truck Receiving - Fugitive Pit - Straight Trucks	6500	6000	700000	0	0.18	0.059	0.01	Choke Flow Feed Building enclosure Negative pit air	0 0 0	1	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0	0	0	0
	Truck Receiving - Fugitive Pit - Hopper Trucks	6500	6000	700000	100	0.035	0.0078	0.0013	Choke Flow Feed Building enclosure Negative pit air	90 0	0.1	6.300	1.404	0.234	27.594	6.150	1.025	0.630	0.1404	0.0234	0.03675	0.00819	0.001365
												6.300	**1.404**	**0.234**	**27.594**	**6.150**	**1.025**	**0.630**	**0.1404**	**0.0234**	**0.03675**	**0.00819**	**0.001365**
EP11a[5]	Elevator leg pickup	6500	6000	700000	100	0.061	0.034	0.0058	No Choke Flow Full equipment encl Negative air Building enclosure	0 95 0 0	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
EP11b	Elevator leg discharge to Distributor	6500	6000	700000	100	0.061	0.034	0.0058	No choke flow Full equipment encl Negative air Building enclosure	0 95 0 0	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
EP12	Distributor to auger transfer- Fugitive	6500	6000	700000	100	0.061	0.034	0.0058	Building enclosure Full equipment encl none	0 95 0	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
EP13	Bin Loading annex Fugitive	6500	6000	700000	100	0.025	0.0063	0.0011	Free fall No air Enclosed	0 0 0	1	4.500	1.134	0.198	19.710	4.967	0.867	4.5	1.134	0.198	0.2625	0.06615	0.01155
EP14[5]	Reclaim auger transfer	6500	6000	700000	100	0.061	0.034	0.0058	Choke Flow Full equipment encl Negative air Basement tunnel enclosu	0 95 0 0	0.05	10.980	6.120	1.044	48.092	26.806	4.573	0.549	0.306	0.0522	0.032025	0.01785	0.003045
EP15	Truck Loadout - Fugitive Doors open	6500	6000	700000	100	0.086	0.029	0.0049	Choke Flow Building enclosure Deadbox	90 0 0	0.1	15.480	5.220	0.882	67.802	22.864	3.863	1.548	0.522	0.0882	0.0903	0.03045	0.005145
									Total PM Emission with Truck Loadout[4] ---->			**70.20**	**32.24**	**5.49**	**307.48**	**141.20**	**24.05**	**8.874**	**3.020**	**0.518**	**0.518**	**0.176**	**0.0302**

Note:
1. Facility receives wheat and milo during two separate harvest seasons. Wheat weighes 60 lb/bushel and milo weighes 56 lb/bushel. Weight throughputs are based on wheat at 60 lb/Bu.
2. Note that total PM (filterable, PM100 approx) is not the same as the NM AAQS pollutant TSP (PM30). TSP will be smaller that PM.
3. The truck receiving and loadout amounts are limited to the leg capacity of 6500 Bu/hr for the "B" Elevator Building.
4. Truck receiving and truck loadout are mutually exclusive activities that do not occur at the same one hour period. The hourly totals for any hour are lower than these total PM values at the bottom of the spreadsheet.

:" Elevator Head House Bins

Bin	Capacity, BU	
5	6274	
6	6274	
8	9877	
9	9877	
10	9877	
11	8672	
13	3227	
14a	2155	
14b	3461	
15	4480	
16	3993	
17u	1966	
17l	4263	
18u	1757	
18l	3799	
19	3493	
20	3461	
21	3993	
Total	90899	100000
Total all bins an silos	499205	
Percent Head bins	18.21	

	Controlled Emissions, lb/hr			Controlled Emissions, Tons/Year		
	TSP	PM10	PM2.5	TSP	PM10	PM2.5
"B" building	8.874	3.020	0.518	0.518	0.176	0.0302
"C" Building	4.870	2.025	0.345	0.259	0.111	0.0189
All roads	0.925	0.236	0.024	1.858	0.473	0.047
Total	14.669	5.282	0.887	2.6342	0.7606	0.0964
Public Notice	12	4	1	3	1	0.1

	Uncontrolled PTE Emissions, tons/year (8760 hr/yr)			
	TSP	PM10	PM2.5	
"B" building	307.48	141.20	24.05	
"C" Building	311.48	143.44	24.43	
All roads	20.27	5.16	0.52	
Total	639.22	289.80	48.99	ok

CrossRoads Ag - Clovis West | Revised: | 22-May-16
Clovis, NM
Particulate Emission Calculations

Pollutants: **PM**

Category: **Road unpaved with basecoarse and water**

Unpaved Road Emissions

Vehicle weights

Empty weight	29000	lbs
Loaded weight	79000	lbs
Avg Weight	54000	lbs
Avg Weight	27	tons

Weekday Operation

Mean Vehicle Weight	27	tons
Length of Road1a	53.8	feet
Length of Road1b	23.8	feet
Avg. number round trips/hour	6	
Hours of Operation:	7	day/wk
	11	hr/day
	52	wk/yr

Round trip VMT/hr
0.122
0.054

365 **day/yr**
4015 **Hours/year**

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

Scale entrance **Two way emission --->**

	Controlled Emissions			
	TSP	PM-10	PM2.5	**R1a**
g/s	**0.021**	**0.005**	**0.001**	
lb/hr	**0.170**	**0.043**	**0.0043**	
tons/yr	**0.34**	**0.09**	**0.009**	
	Uncontrolled Emissions			
	TSP	PM-10	PM2.5	
g/s	**0.107**	**0.027**	**0.003**	
lb/hr	**0.848**	**0.216**	**0.0216**	
tons/yr	**1.70**	**0.43**	**0.04**	
PER Tons/year	**3.71**	**0.95**	**0.09**	

USING:
E = k X (s/12)^a X (W/3)^b = lbs/VMT
PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road
PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365
x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10
k = particle size mutlipler	0.15	AP-42, PM2.5
a = empirical constant	**0.7**	**AP-42,TSP**
a = empirical constant	0.9	AP-42
b = empirical constant	**0.45**	**AP-42, TSP**

b = empirical constant	0.45	AP-42, PM-10
s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)
W = mean vehicle weight (tons)	27.0	Application
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1
Average no. of round trips per hour	6.0	
Length of Haul Road (one way)	53.8	feet
Emission factor with no controls	**6.94**	lb/VMT, TSP
Emission factor with no controls	**1.77**	lb/VMT, PM-10
Emission factor with no controls	**0.18**	lb/VMT, PM2.5
Control Efficiency	**80**	%
Emission Factor w/Controls	**1.39**	lb/VMT, TSP
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10
Emission Factor w/Controls	**0.04**	lb/VMT, PM2.5

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

Scale exit **Two way emission --->**

USING:

E = k X (s/12)^a X (W/3)^b = lbs/VMT

	Controlled Emissions			
	TSP	PM10	PM2.5	**R1b**
g/s	**0.009**	**0.0024**	**0.00024**	
lb/hr	**0.075**	**0.019**	**0.0019**	
Tons/year	**0.151**	**0.038**	**0.0038**	
	Uncontrolled Emissions			
	TSP	PM10	PM2.5	
g/s	**0.047**	**0.0120**	**0.00120**	
lb/hr	**0.375**	**0.096**	**0.0096**	
Tons/year	**0.753**	**0.192**	**0.0192**	
PER Tons/year	**1.64**	**0.42**	**0.04**	

PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road
PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365
x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10
k = particle size mutlipler	0.15	AP-42, PM2.5
a = empirical constant	**0.7**	**AP-42,TSP**
a = empirical constant	0.9	AP-42
b = empirical constant	**0.45**	**AP-42, TSP**
b = empirical constant	0.45	AP-42, PM-10
s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)
W = mean vehicle weight (tons)	27.0	Application
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1

Average no. of round trips per hour	6.0	
Length of Haul Road (one way)	23.8	feet
Emission factor with no controls	**6.94**	lb/VMT, TSP
Emission factor with no controls	**1.77**	lb/VMT, PM-10
Emission factor with no controls	**0.18**	lb/VMT, PM-10
Control Efficiency	**80**	%
Emission Factor w/Controls	**1.39**	lb/VMT, TSP
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10
Emission Factor w/Controls	**0.04**	lb/VMT, PM-10

CrossRoads Ag - Clovis West | Revised: | 22-May-16
Clovis NM
Particulate Emission Calculations

Pollutants: **PM**

Category: **Road unpaved with basecoarse and water**

Unpaved Road Emissions **One-Way only**

Vehicle weights

Empty weight	29000	lbs
Loaded weight	79000	lbs
Avg Weight	54000	lbs
Avg Weight	27	tons

Weekday Operation

Vehicle Weight	27	tons
Length of Road2a	82	feet
Length of Road2b	85	feet
Length of Road3 exit	76.9	feet
Avg. round trips/hour entrance	6	
Round trips/hr C split	6	
Hours of Operation:	7	day/wk
	11	hr/day
	52	wk/yr

Round trip VMT/hr	
0.093	R2a
0.097	R2b
0.087	R3

365 **day/yr**
4015 **Hours/year**

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

Common entrance both elevators **One way emission --->**

Controlled Emissions — **R2a**

	TSP	PM-10	PM2.5
g/s	**0.016**	**0.004**	**0.0004**
lb/hr	**0.129**	**0.033**	**0.0033**
tons/year	**0.26**	**0.066**	**0.0066**

Uncontrolled Emissions

	TSP	PM-10	PM2.5
g/s	**0.081**	**0.021**	**0.002**
lb/hr	**0.65**	**0.16**	**0.02**
tons/year	**1.30**	**0.331**	**0.0331**
PER tons/year	**2.83**	**0.72**	**0.07**

USING:
E = k X (s/12)^a X (W/3)^b = lbs/VMT

PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road
PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365
x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10

Road PM Emissions

Air Quality Services, inc-2016

k = particle size mutlipler	0.15	AP-42, PM2.5	
a = empirical constant	**0.7**	**AP-42,TSP**	
a = empirical constant	0.9	AP-42	
b = empirical constant	**0.45**	**AP-42, TSP**	
b = empirical constant	0.45	AP-42, PM-10	
s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)	
W = mean vehicle weight (tons)	27.0	Application	
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1	
Average no. of round trips per hour	6.0		
Length of Haul Road (one way)	82	feet	
Emission factor with no controls	**6.94**	lb/VMT, TSP	
Emission factor with no controls	**1.77**	lb/VMT, PM-10	
Emission factor with no controls	**0.18**	lb/VMT, PM2.5	
Control Efficiency	**80**	%	Basecoarse + water
Emission Factor w/Controls	**1.39**	lb/VMT, TSP	
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10	
Emission Factor w/Controls	**0.04**	lb/VMT, PM2.5	

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

Entrance to "C" elevator **One way emission --->**

R2b

	Controlled Emissions		
	TSP	PM-10	PM2.5
g/s	**0.0169**	**0.0043**	**0.0004**
lb/hr	**0.134**	**0.034**	**0.0034**
tons/year	**0.269**	**0.069**	**0.007**

	Uncontrolled Emissions		
	TSP	PM-10	PM2.5
g/s	**0.0844**	**0.0215**	**0.0022**
lb/hr	**0.670**	**0.171**	**0.017**
tons/year	**1.345**	**0.343**	**0.034**
PER tons/year	**2.93**	**0.75**	**0.07**

USING:

E = k X (s/12)^a X (W/3)^b = lbs/VMT

PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road

PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365 x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10
k = particle size mutlipler	0.15	AP-42, PM2.5
a = empirical constant	**0.7**	**AP-42,TSP**
a = empirical constant	0.9	AP-42

b = empirical constant	**0.45**	**AP-42, TSP**	
b = empirical constant	0.45	AP-42, PM-10	
s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)	
W = mean vehicle weight (tons)	27.0	Application	
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1	
Average no. of round trips per hour	6.0		
Length of Haul Road (one way)	85	feet	
Emission factor with no controls	**6.94**	lb/VMT, TSP	
Emission factor with no controls	**1.77**	lb/VMT, PM-10	
Emission factor with no controls	**0.18**	lb/VMT, PM2.5	
Control Efficiency	**80**	%	Basecoarse + water
Emission Factor w/Controls	**1.39**	lb/VMT, TSP	
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10	
Emission Factor w/Controls	**0.04**	lb/VMT, PM2.5	

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

			Controlled Emissions			
			TSP	PM-10	PM2.5	**R3**
Exit from "C" elevator	**One way emission --->**	g/s	**0.015**	**0.004**	**0.000**	
		lb/hr	**0.121**	**0.031**	**0.0031**	
		tons/year	**0.243**	**0.062**	**0.006**	
			Uncontrolled Emissions			
USING:			TSP	PM-10	PM2.5	
E = k X (s/12)^a X (W/3)^b = lbs/VMT		g/s	**0.076**	**0.019**	**0.002**	
		lb/hr	**0.61**	**0.154**	**0.015**	
		tons/year	**1.217**	**0.310**	**0.031**	
		PER tons/year	**2.65**	**0.68**	**0.07**	

PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road
PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365
x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10
k = particle size mutlipler	0.15	AP-42, PM2.5
a = empirical constant	**0.7**	**AP-42,TSP**
a = empirical constant	0.9	AP-42
b = empirical constant	**0.45**	**AP-42, TSP**
b = empirical constant	0.45	AP-42, PM-10

s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)
W = mean vehicle weight (tons)	27.0	Application
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1
Average no. of round trips per hour	6.0	
Length of Haul Road (one way)	76.9	feet
Emission factor with no controls	**6.94**	lb/VMT, TSP
Emission factor with no controls	**1.77**	lb/VMT, PM-10
Emission factor with no controls	**0.18**	lb/VMT, PM-10
Control Efficiency	**80**	%
Emission Factor w/Controls	**1.39**	lb/VMT, TSP
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10
Emission Factor w/Controls	**0.04**	lb/VMT, PM-10

CrossRoads Ag - Clovis West
Clovis, NM
Particulate Emission Calculations

Revised: 22-May-16

Pollutants: **PM**

Category: **Road unpaved with basecoarse and water**

Unpaved Road Emissions **One-Way Only**

Vehicle weights

Empty weight	29000	lbs
Loaded weight	79000	lbs
Avg Weight	54000	lbs
Avg Weight	27	tons

Weekday Operation

Vehicle Weight Loaded	27	tons
Length of Haul Road 4 to B	142	feet
Length of Haul Road 5 from B	46	feet
Avg.round trips/hour both sections	6	

Round trip VMT/hr	
0.161	R4
0.052	R5

Hours of Operation:

7	day/wk		365	**day/yr**
11	hr/day		4015	**Hours/year**
52	wk/yr			

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

R4

Entrance to "B" elevator **One way emission --->**

	Controlled Emissions		
	TSP	PM10	PM2.5
g/s	**0.028**	**0.007**	**0.0007**
lb/hr	**0.224**	**0.057**	**0.0057**
tons/year	**0.449**	**0.115**	**0.0115**

USING:

E = k X (s/12)^a X (W/3)^b = lbs/VMT

	Uncontrolled Emissions		
	TSP	PM10	PM2.5
g/s	**0.141**	**0.036**	**0.0036**
lb/hr	**1.119**	**0.285**	**0.029**
tons/year	**2.247**	**0.573**	**0.057**
PER tons/year	**4.90**	**1.25**	**0.12**

PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road
PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365
x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10
k = particle size mutlipler	0.15	AP-42, PM2.5

a = empirical constant	**0.7**	**AP-42,TSP**
a = empirical constant	0.9	AP-42
b = empirical constant	**0.45**	**AP-42, TSP**
b = empirical constant	0.45	AP-42, PM-10
s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)
W = mean vehicle weight (tons)	27.0	Application
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1
Average no. of round trips per hour	6.0	
Length of Haul Road (one way)	142	feet
Emission factor with no controls	**6.94**	lb/VMT, TSP
Emission factor with no controls	**1.77**	lb/VMT, PM-10
Emission factor with no controls	**0.18**	lb/VMT, PM2.5
Control Efficiency	**80**	%
Emission Factor w/Controls	**1.39**	lb/VMT, TSP
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10
Emission Factor w/Controls	**0.04**	lb/VMT, PM2.5

Unpaved Roads (Fugitive) **AP-42, 11/2006, Section 13.2.2, Equation 1a**

			Controlled Emissions			
			TSP	PM10	PM2.5	**R5**
Exit from "B" elevator	**One way emission --->**	g/s	**0.0091**	**0.0023**	**0.0002**	
		lb/hr	**0.073**	**0.018**	**0.0018**	
		tons/year	**0.146**	**0.037**	**0.0037**	
			Uncontrolled Emissions			
USING:			TSP	PM10	PM2.5	
E = k X (s/12)^a X (W/3)^b = lbs/VMT		g/s	**0.0457**	**0.0116**	**0.0012**	
		lb/hr	**0.363**	**0.092**	**0.0092**	
		tons/year	**0.728**	**0.185**	**0.0185**	
		PER tons/year	**1.59**	**0.40**	**0.040**	

PM Emissions (lb/hr) = E (lb/VMT) x Control Efficiency x Twice Length of Haul Road
PM Emissions (ton/yr) = PM Emissions (lb/hr) x Operating hours (hr/yr) x (365-P)/365
x Round Trips per Hour

k = particle size mutlipler	**4.9**	**AP-42, TSP**
k = particle size mutlipler	1.5	AP-42, PM-10
k = particle size mutlipler	0.15	AP-42, PM2.5
a = empirical constant	**0.7**	**AP-42,TSP**
a = empirical constant	0.9	AP-42
b = empirical constant	**0.45**	**AP-42, TSP**

b = empirical constant	0.45	AP-42, PM-10
s = surface silt content (%)	4.8	AP-42, Table 13.2.2-1 (Sand and gravel processing mean)
W = mean vehicle weight (tons)	27.0	Application
P = no. of day w precip. > 0.01	70	Figure 13.2.2-1
Average no. of round trips per hour	6.0	
Length of Haul Road (one way)	46	feet
Emission factor with no controls	**6.94**	lb/VMT, TSP
Emission factor with no controls	**1.77**	lb/VMT, PM-10
Emission factor with no controls	**0.18**	lb/VMT, PM-10
Control Efficiency	**80**	%
Emission Factor w/Controls	**1.39**	lb/VMT, TSP
Emission Factor w/Controls	**0.35**	lb/VMT, PM-10
Emission Factor w/Controls	**0.04**	lb/VMT, PM-10

Volume Source Emissions for each Road Segment based on everyother volume spacing
Number of volume points rounded up or set higher to get better coverage

			Round	Total		Evolume/each			
Road R1a		ft	Use	Emission	Lb/hr	lb/hr	Sigma-yo*	Sigma-zo*	
	length =	53.8		TSP	0.16959	0.08480	18.60	9.30	Scale entrance
	Width =	20		PM10	0.04322	0.02161			
	2xW =	40		PM2.5	0.00432	0.002161			
	Nvol=	1.345	2						
RoadR1b		ft							
	length =	23.8		TSP	0.07502	0.07502	18.60	9.30	Scale exit
	Width =	20		PM10	0.01912	0.01912			
	2xW =	40		PM2.5	0.00191	0.00191			
	Nvol=	0.595	1						

Main Entrance to B plus C

Road R2a		ft							
	length =	82		TSP	0.12924	0.06462	18.60	9.30	Entrance up to road sp
	Width =	20		PM10	0.03294	0.01647			
	2xW =	40		PM2.5	0.00329	0.001647			
	Nvol=	2.05	2						
Road R2b		ft							
	length =	85		TSP	0.13397	0.0670	18.60	9.30	Rem. road distance int
	Width =	20		PM10	0.03414	0.01707			
	2xW =	40		PM2.5	0.00341	0.001707			
	Nvol=	2.125	2						
Road R3		ft							
	length =	76.9		TSP	0.12121	0.06060	18.60	9.30	Exit from C elevator bu
	Width =	20		PM10	0.03089	0.01545			
	2xW =	40		PM2.5	0.00309	0.001545			
	Nvol=	1.9225	2						
Road R4		ft							Split road to B bldg (14
	length =	142		TSP	0.22381	0.05595	18.60	9.30	

	Width =	20		PM10	0.05704	0.01426			
	2xW =	40		PM2.5	0.00570	0.001426			
	Nvol=	3.55	4						
Road R5		ft							Exit from B bldg 46 ft)
	length =	46		TSP	0.07250	0.01813	18.60	9.30	
	Width =	20		PM10	0.01848	0.00462			
	2xW =	40		PM2.5	0.00185	0.000462			
	Nvol=	1.15	2						

Note * The road segments are surrounded by very tall structures and will be well mixed in the building wakes. The standared method of setting sigma-yo and sigma-zo based on isolated roadways are not appropriate to this situation. All of the internal volume emission releases should have large sigma's set commensurate with the surrounding building dimensions, especially the sigma-z and release height.

Controlled Road Emissions, lb/hr

	R1a	R1b	R2a	R2b	R3	R4	R5	Total Roads
Tsp	0.16959	0.07502	0.12924	0.13397	0.12121	0.22381	0.07250	0.925
PM10	0.04322	0.01912	0.03294	0.03414	0.03089	0.05704	0.01848	0.236
PM2.5	0.00432	0.00191	0.00329	0.00341	0.00309	0.00570	0.00185	0.024

Controlled Road Emissions, tons/year

	R1a	R1b	R2a	R2b	R3	R4	R5	
Tsp	0.340	0.151	0.2595	0.2689	0.243319	0.45	0.145549	1.858
PM10	0.087	0.038	0.0661	0.0685	0.062013	0.11	0.037095	0.473
PM2.5	0.0087	0.0038	0.0066	0.0069	0.006201	0.0115	0.003709	0.047

		Uncontrolled Hourly Emission, Lb/hr			Annual PTE Emission, ton/yr		
		TSP	PM10	PM2.5	TSP	PM10	PM2.5
ɔlit (82 ft)	R1a	0.8480	0.2161	0.0216			
	R1b	0.3751	0.0956	0.0096			
	Total R1	**1.2231**	**0.3117**	**0.0312**	**5.357**	**1.365**	**0.137**
to C (85 ft)	R2a	0.6462	0.1647	0.0165			
	R2b	0.6699	0.1707	0.0171			
	Total R2	**1.3161**	**0.3354**	**0.0335**	**5.764**	**1.469**	**0.147**
ɹilding	R3	**0.6060**	**0.1545**	**0.0154**	**2.654**	**0.677**	**0.068**
	R4	**1.1191**	**0.2852**	**0.0285**	**4.901**	**1.249**	**0.125**
	R5	**0.3625**	**0.0924**	**0.0092**	**1.588**	**0.405**	**0.040**
	Total Roads	**4.6268**	**1.1792**	**0.1179**	**20.265**	**5.165**	**0.516**
ɨ2 ft)							

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 complete 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_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e 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_2e 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_2e 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 and include 1) reporting GHGs for each individual piece of equipment; 2) reporting 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 may check the following ☐ 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 Mandatory Green House Gas Reporting 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_2 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)

Section 7

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.
- ☑ 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.

9.9.1 Grain Elevators And Processes

9.9.1.1 Process Description[1-14]

Grain elevators are facilities at which grains are received, stored, and then distributed for direct use, process manufacturing, or export. They can be classified as either "country" or "terminal" elevators, with terminal elevators further categorized as inland or export types. Operations other than storage, such as cleaning, drying, and blending, often are performed at elevators. The principal grains and oilseeds handled include wheat, corn, oats, rice, soybeans, and sorghum.

Country elevators are generally smaller elevators that receive grain by truck directly from farms during the harvest season. These elevators sometimes clean or dry grain before it is transported to terminal elevators or processors. Terminal elevators dry, clean, blend, and store grain before shipment to other terminals or processors, or for export. These elevators may receive grain by truck, rail, or barge, and generally have greater grain handling and storage capacities than do country elevators. Export elevators are terminal elevators that load grain primarily onto ships for export.

Regardless of whether the elevator is a country or terminal, there are two basic types of elevator design: traditional and modern. Traditional grain elevators are typically designed so the majority of the grain handling equipment (e.g., conveyors, legs, scales, cleaners) are located inside a building or structure, normally referred to as a headhouse. The traditional elevator often employs belt conveyors with a movable tripper to transfer the grain to storage in concrete or steel silos. The belt and tripper combination is located above the silos in an enclosed structure called the gallery or bin deck. Grain is often transported from storage using belt conveyors located in an enclosed tunnel beneath the silos. Particulate emissions inside the elevator structure may be controlled using equipment such as cyclones, fabric filters, dust covers, or belt wipers; grain may be oil treated to reduce emissions. Controls are often used at unloading and loading areas and may include cyclones, fabric filters, baffles in unloading pits, choke unloading, and use of deadboxes or specially designed spouts for grain loading. The operations of traditional elevators are described in more detail in Section 2.2.1. Traditional elevator design is generally associated with facilities built prior to 1980.

Country and terminal elevators built in recent years have moved away from the design of the traditional elevators. The basic operations performed at the elevators are the same; only the elevator design has changed. Most modern elevators have eliminated the enclosed headhouse and gallery (bin decks). They employ a more open structural design, which includes locating some equipment such as legs, conveyors, cleaners, and scales, outside of an enclosed structure. In some cases, cleaners and screens may be located in separate buildings. The grain is moved from the unloading area using enclosed belt or drag conveyors and, if feasible, the movable tripper has been replaced with enclosed distributors or turn-heads for direct spouting into storage bins and tanks. The modern elevators are also more automated, make more use of computers, and are less labor-intensive. Some traditional elevators have also been partially retrofitted or redesigned to incorporate enclosed outside legs, conveyors, cleaners, and other equipment. Other techniques used to reduce emissions include deepening the trough of the open-belt conveyors and slowing the conveyor speed, and increasing the size of leg belt buckets and slowing leg velocity. At loading and unloading areas of modern elevators, the controls cited above for traditional elevators can also be used to reduce emissions.

The first step at a grain elevator is the unloading of the incoming truck, railcar, or barge. A truck or railcar discharges its grain into a hopper, from which the grain is conveyed to the main part of the

Table 9.9.1-1. PARTICULATE EMISSION FACTORS FOR GRAIN ELEVATORS[a]

Emission Source	Type of Control	Filterable[b]					
		PM	EMISSION FACTOR RATING	PM-10[c]	EMISSION FACTOR RATING	PM-2.5[d]	EMISSION FACTOR RATING
Grain receiving (SCC 3-02-005-05)							
Straight truck (SCC 3-02-005-51)	None	0.18[e]	E	0.059[f]	E	0.010[g]	E
Hopper truck (SCC 3-02-005-52)	None	0.035[e]	E	0.0078[f]	E	0.0013[g]	E
Railcar (SCC 3-02-005-53)	None	0.032[f]	E	0.0078[f]	E	0.0013[g]	E
Barge (SCC 3-02-005-54)							
Continuous barge unloader (SCC 3-02-005-56)	None	0.029[h]	E	0.0073[j]	E	0.0019[j]	E
Marine leg (SCC 3-02-005-57)	None	0.15[h]	E	0.038[j]	E	0.0050[j]	E
Ships (SCC 3-02-005-55)	None	0.15[k]	E	0.038[k]	E	0.0050[k]	E
Grain cleaning (SCC 3-02-005-03)							
Internal vibrating (SCC 3-02-005-37)	Cyclone	0.075[m]	E	0.019[n]	E	0.0032[g]	E
Grain drying (SCC 3-02-005-04)							
Column dryer (SCC 3-02-005-27)	None	0.22[p]	E	0.055[n]	E	0.0094[g]	E
Rack dryer (SCC 3-02-005-28)	None	3.0[p]	E	0.75[n]	E	0.13[g]	E
	Self-cleaning screens (<50 mesh)	0.47[p]	E	0.12[n]	E	0.020[g]	E
Headhouse and grain handling (SCC 3-02-005-30) (legs, conveyors, belts, distributor, scale, enclosed cleaners, etc.)	None	0.061[f]	E	0.034[f]	E	0.0058[g]	E
Storage bin (vent) (SCC 3-02-005-40)	None	0.025[q]	E	0.0063[n,q]	E	0.0011[g,q]	E

Table 9.9.1-1 (cont.).

Emission Source	Type of Control	Filterable[b]					
		PM	EMISSION FACTOR RATING	PM-10[c]	EMISSION FACTOR RATING	PM-2.5[d]	EMISSION FACTOR RATING
Grain shipping (SCC 3-02-005-06)							
Truck (unspecified) (SCC 3-02-005-60)	None	0.086[e]	E	0.029[f]	E	0.0049[g]	E
Railcar (SCC 3-02-005-63)	None	0.027[f]	E	0.0022[f]	E	0.00037[g]	E
Barge (SCC 3-02-005-64)	None	0.016[h]	E	0.0040[j]	E	0.00055[j]	E
Ship (SCC 3-02-005-65*)	None	0.048[h]	E	0.012[j]	E	0.0022[j]	E

[a] Specific sources of emission factors are cited in Reference 1, Table 4-16 and supporting tables, except as indicated in the following footnotes. Factors are in units of lb/ton of grain handled or processed. Lb/ton divided by 2 gives kg/Mg. SCC = Source Classification Code. ND = no data available. Example uses of emission factors in this table are provided in Section 9.9.1.3.
[b] Weight of total filterable PM, regardless of size, per unit weight of grain throughput.
[c] Weight of PM ≤ 10 micrometers (µm) in aerodynamic diameter per unit weight of grain throughput.
[d] Weight of PM ≤ 2.5µm in aerodynamic diameter per unit weight of grain throughput.
[e] Mean of two values from References 18 and 19.
[f] Reference 19.
[g] Emission factor for PM-10 scaled to PM-2.5 using the mean ratio of 17 percent from Reference 40.
[h] PM-10 emission factor scaled to total particulate using the ratio of 25 percent presented in Reference 1.
[j] Reference 40.
[k] Unloading a vessel with a marine leg is analogous to use of a marine leg in barge unloading.
[m] Mean of six A- and C-rated data points from References 20, 21, 22, 23, and 24.
[n] PM-10 emission factor estimated by taking 25 percent of the filterable PM emission factor.
[p] Mean of two D-rated data points from Reference 2.
[q] Based on average of wheat and sorghum PM emission factors reported in Reference 42. PM emission factors based on data at the inlet of an aspirated capture/collection system. Due to natural removal processes, uncontrolled emissions may be overestimated compared to those emissions that occur without such a system.

* SCC was corrected by D. Safriet 3/3/2004

Air Permits Division

Calculations Guidance Package

Grain Elevators

Compiled, published, and distributed by the
Air Permits Division
Texas Commission on Environmental Quality
Post Office Box 13087 - MC 163
Austin, Texas 78711-3087
(512) 239-1250

References:

All assumptions should be justified and references should be provided where applicable.

(a) AP-42, EPA Compilation of Air Pollutant Emission Factors, Particulate Emission Factors for Grain Processing Facilities, Table 9.9.1-2, 2003. Assume dust generated during the receiving of all bulk commodities is similar to the receiving operations at an animal feedmill.

(b) AP-40, Air Pollution Engineering Manual, Air and Waste Management Association, 1991, pg 115. "Well designed and operated baghouses have been shown to be capable of reducing overall particulate emissions to less than 0.01 gr/dscf"...."in some cases as low as 0.01 - 0.005 gr/dscf".

(c) AP-42, EPA Compilation of Air Pollutant Emission Factors, Particulate Emission Factors for Grain Elevators, Table 9.9.1-1, 2003.

(d) Accepted efficiencies given for certain control devices/measures that minimize fugitive emissions only (not to be utilized on point sources). Any other control efficiencies should be well justified and submitted with references if possible. Accepted efficiencies include:

- Enclosed receiving or loadout area with doors and/or flexible strips (canvas or plastic) and suction being pulled = 100%

- Flexible strips (canvas or plastic) and choke feeding = 95%

- Enclosed receiving or loadout area with no suction = 90%

- Choke feeding on receiving operations = 90%

- Mineral oil application = 90%

(e) AP-42, EPA Compilation of Air Pollutant Emission Factors from Natural Gas Combustion, Table 1.4-1, 1.4-2, and 1.4-3, 1998.

Best Available Control Technology emission factors determined for fuel fired equipment. Any other emission factors or control efficiencies should be well justified and submitted with references if possible. Accepted factors include:

NO_X emission factor for fuel fired equipment with an hourly BTU rating greater than 10 million and less than or equal to 40 million = 0.10 lb/10^6 BTU

NO_X emission factor for fuel fired equipment with an hourly BTU rating greater than 40 million = 0.06 lb/10^6 BTU

TCEQ Mechanical Sources

Current Best Available Control Technology (BACT) Guidelines

Grain Elevators

Source Type	Pollutant	Minimum Acceptable Control	Control Efficiency or Details
Receiving	Particulate Matter (PM)	90% reduction	Typically achieved by choke feeding at gravity receiving pits
Mechanical Conveying	PM	Enclosed conveying or equivalent	
Pneumatic Conveying	PM	99% reduction, outlet grain loading ≤ 0.01 gr/dscf	Typically achieved by a baghouse
Drying	Products of Combustion	Column type dryers with outlet perforations no greater than 0.094 inches in diameter or equivalent	NSPS requirement
Loadout	PM	Drop socks on all loadout spouts or equivalent	

13.2.2 Unpaved Roads

13.2.2.1 General

When a vehicle travels an unpaved road, the force of the wheels on the road surface causes pulverization of surface material. Particles are lifted and dropped from the rolling wheels, and the road surface is exposed to strong air currents in turbulent shear with the surface. The turbulent wake behind the vehicle continues to act on the road surface after the vehicle has passed.

The particulate emission factors presented in the previous draft version of this section of AP-42, dated October 2001, implicitly included the emissions from vehicles in the form of exhaust, brake wear, and tire wear as well as resuspended road surface material[25]. EPA included these sources in the emission factor equation for unpaved public roads (equation 1b in this section) since the field testing data used to develop the equation included both the direct emissions from vehicles and emissions from resuspension of road dust.

This version of the unpaved public road emission factor equation only estimates particulate emissions from resuspended road surface material [23, 26]. The particulate emissions from vehicle exhaust, brake wear, and tire wear are now estimated separately using EPA's MOBILE6.2 [24]. This approach eliminates the possibility of double counting emissions. Double counting results when employing the previous version of the emission factor equation in this section and MOBILE6.2 to estimate particulate emissions from vehicle traffic on unpaved public roads. It also incorporates the decrease in exhaust emissions that has occurred since the unpaved public road emission factor equation was developed. The previous version of the unpaved public road emission factor equation includes estimates of emissions from exhaust, brake wear, and tire wear based on emission rates for vehicles in the 1980 calendar year fleet. The amount of PM released from vehicle exhaust has decreased since 1980 due to lower new vehicle emission standards and changes in fuel characteristics.

13.2.2.2 Emissions Calculation And Correction Parameters[1-6]

The quantity of dust emissions from a given segment of unpaved road varies linearly with the volume of traffic. Field investigations also have shown that emissions depend on source parameters that characterize the condition of a particular road and the associated vehicle traffic. Characterization of these source parameters allow for "correction" of emission estimates to specific road and traffic conditions present on public and industrial roadways.

Dust emissions from unpaved roads have been found to vary directly with the fraction of silt (particles smaller than 75 micrometers [μm] in diameter) in the road surface materials.[1] The silt fraction is determined by measuring the proportion of loose dry surface dust that passes a 200-mesh screen, using the ASTM-C-136 method. A summary of this method is contained in Appendix C of AP-42. Table 13.2.2-1 summarizes measured silt values for industrial unpaved roads. Table 13.2.2-2 summarizes measured silt values for public unpaved roads. It should be noted that the ranges of silt content vary over two orders of magnitude. Therefore, the use of data from this table can potentially introduce considerable error. Use of this data is strongly discouraged when it is feasible to obtain locally gathered data.

Since the silt content of a rural dirt road will vary with geographic location, it should be measured for use in projecting emissions. As a conservative approximation, the silt content of the parent soil in the area can be used. Tests, however, show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles.

The following empirical expressions may be used to estimate the quantity in pounds (lb) of size-specific particulate emissions from an unpaved road, per vehicle mile traveled (VMT):

For vehicles traveling on unpaved surfaces at industrial sites, emissions are estimated from the following equation:

$$E = k\,(s/12)^a (W/3)^b \tag{1a}$$

and, for vehicles traveling on publicly accessible roads, dominated by light duty vehicles, emissions may be estimated from the following:

$$E = \frac{k\,(s/12)^a (S/30)^d}{(M/0.5)^c} - C \tag{1b}$$

where k, a, b, c and d are empirical constants (Reference 6) given below and

E = size-specific emission factor (lb/VMT)
s = surface material silt content (%)
W = mean vehicle weight (tons)
M = surface material moisture content (%)
S = mean vehicle speed (mph)
C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.

The source characteristics s, W and M are referred to as correction parameters for adjusting the emission estimates to local conditions. The metric conversion from lb/VMT to grams (g) per vehicle kilometer traveled (VKT) is as follows:

1 lb/VMT = 281.9 g/VKT

The constants for Equations 1a and 1b based on the stated aerodynamic particle sizes are shown in Tables 13.2.2-2 and 13.2.2-4. The PM-2.5 particle size multipliers (k-factors) are taken from Reference 27.

Table 13.2.2-2. CONSTANTS FOR EQUATIONS 1a AND 1b

Constant	Industrial Roads (Equation 1a)			Public Roads (Equation 1b)		
	PM-2.5	PM-10	PM-30*	PM-2.5	PM-10	PM-30*
k (lb/VMT)	0.15	1.5	4.9	0.18	1.8	6.0
a	0.9	0.9	0.7	1	1	1
b	0.45	0.45	0.45	-	-	-
c	-	-	-	0.2	0.2	0.3
d	-	-	-	0.5	0.5	0.3
Quality Rating	B	B	B	B	B	B

*Assumed equivalent to total suspended particulate matter (TSP)
"-" = not used in the emission factor equation

Table 13.2.2-2 also contains the quality ratings for the various size-specific versions of Equation 1a and 1b. The equation retains the assigned quality rating, if applied within the ranges of source conditions, shown in Table 13.2.2-3, that were tested in developing the equation:

Table 13.2.2-3. RANGE OF SOURCE CONDITIONS USED IN DEVELOPING EQUATION 1a AND 1b

Emission Factor	Surface Silt Content, %	Mean Vehicle Weight		Mean Vehicle Speed		Mean No. of Wheels	Surface Moisture Content, %
		Mg	ton	km/hr	mph		
Industrial Roads (Equation 1a)	1.8-25.2	1.8-260	2-290	8-69	5-43	4-17[a]	0.03-13
Public Roads (Equation 1b)	1.8-35	1.4-2.7	1.5-3	16-88	10-55	4-4.8	0.03-13

[a] See discussion in text.

As noted earlier, the models presented as Equations 1a and 1b were developed from tests of traffic on unpaved surfaces. Unpaved roads have a hard, generally nonporous surface that usually dries quickly after a rainfall or watering, because of traffic-enhanced natural evaporation. (Factors influencing how fast a road dries are discussed in Section 13.2.2.3, below.) The quality ratings given above pertain to the mid-range of the measured source conditions for the equation. A higher mean vehicle weight and a higher than normal traffic rate may be justified when performing a worst-case analysis of emissions from unpaved roads.

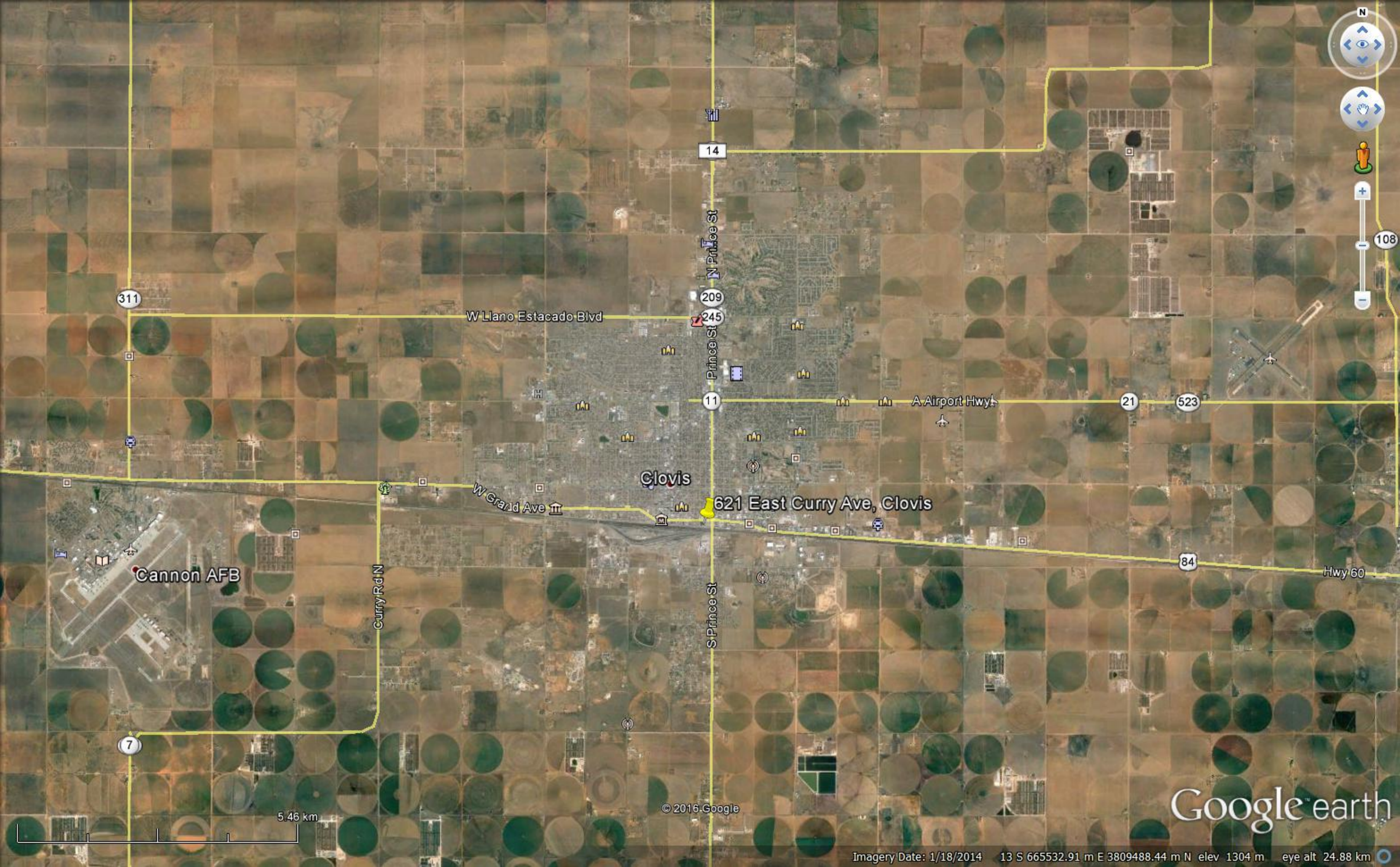
The emission factors for the exhaust, brake wear and tire wear of a 1980's vehicle fleet (*C*) was obtained from EPA's MOBILE6.2 model [23]. The emission factor also varies with aerodynamic size range

Section 8

Map(s)

A map 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	


14
N Prince St
209
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W Llano Estacado Blvd
311
Prince St
11
A Airport Hwy
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523
108
Clovis
W Grand Ave
621 East Curry Ave, Clovis
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Hwy 60
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Google earth
Imagery Date: 1/18/2014 13 S 665532.91 m E 3809488.44 m N elev 1304 m eye alt 24.88 km

Curry Ave
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621 East Curry Ave, Clovis
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Imagery Date: 1/18/2014 13 S 665636.21 m E 3807725.14 m N elev 1297 m eye alt 1.49 km
Google earth

Section 9

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. ☑ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
8. ☑ 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</u> <u>or</u> <u>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.

May 23, 2016 By CERTIFIED MAIL

Dear [Neighbor/Environmental Director/county or municipal official]:

CrossRoads Agriculture announces its application submittal to the New Mexico Environment Department for an air quality permit for the operation of its grain elevator facility. The expected date of application submittal to the Air Quality Bureau is May 30, 2016.

The exact location for the proposed facility known as CrossRoads Ag-West, is 621 East Curry Ave, Clovis, NM. The facility is located in Clovis on Curry Ave, between Ross St and Sheldon St in Curry County. The proposed permit is to restart grain elevator operation.

The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and may change slightly during the course of the Department's review: TSP 13 pph/3 tpy; PM10 5 pph/1 tpy; PM2.5 2 pph/0.1 tpy.

The standard operating schedule of the facility will be from 7 a.m. to 5 p.m. 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be from 7 a.m. to 9 p.m. 7 days a week and a maximum of 52 weeks per year.

The owner of the facility is: CrossRoads Agriculture, 118 N. Bedford Rd, Mt Kisco, NY 10549 The operator of the facility is: CrossRoads Agriculture, 621 East Curry Ave, Clovis, NM 88101.

If you have any comments about the construction or operation of the above facilities, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html

Other comments and questions may be submitted verbally.

Please refer to the company name and facility name, as used in this notice or send a copy of this notice along with your comments, since the Department may not have received the permit application at the time of this notice. Please include a legible mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

Sincerely,

Bruce Nicholson, Air Quality Services, Inc, Consultant
for CrossRoads Agriculture

Conway Oil Co
280 Collier Blvd, Unit 1704
Marco Island, FL 34145

Barnett Oil Company, Inc.
PO Box 1480
Clovis, NM 88102

Katie Flaherty
Gavilon Grain, LLC
1331 Capitol Ave
Omaha, NE 68102

Burlington Northern Santa Fe
PO Box 961089
Ft Worth, TX 76161

Frank & Deborah Lasky
814 Sheldon
Clovis, NM 88101

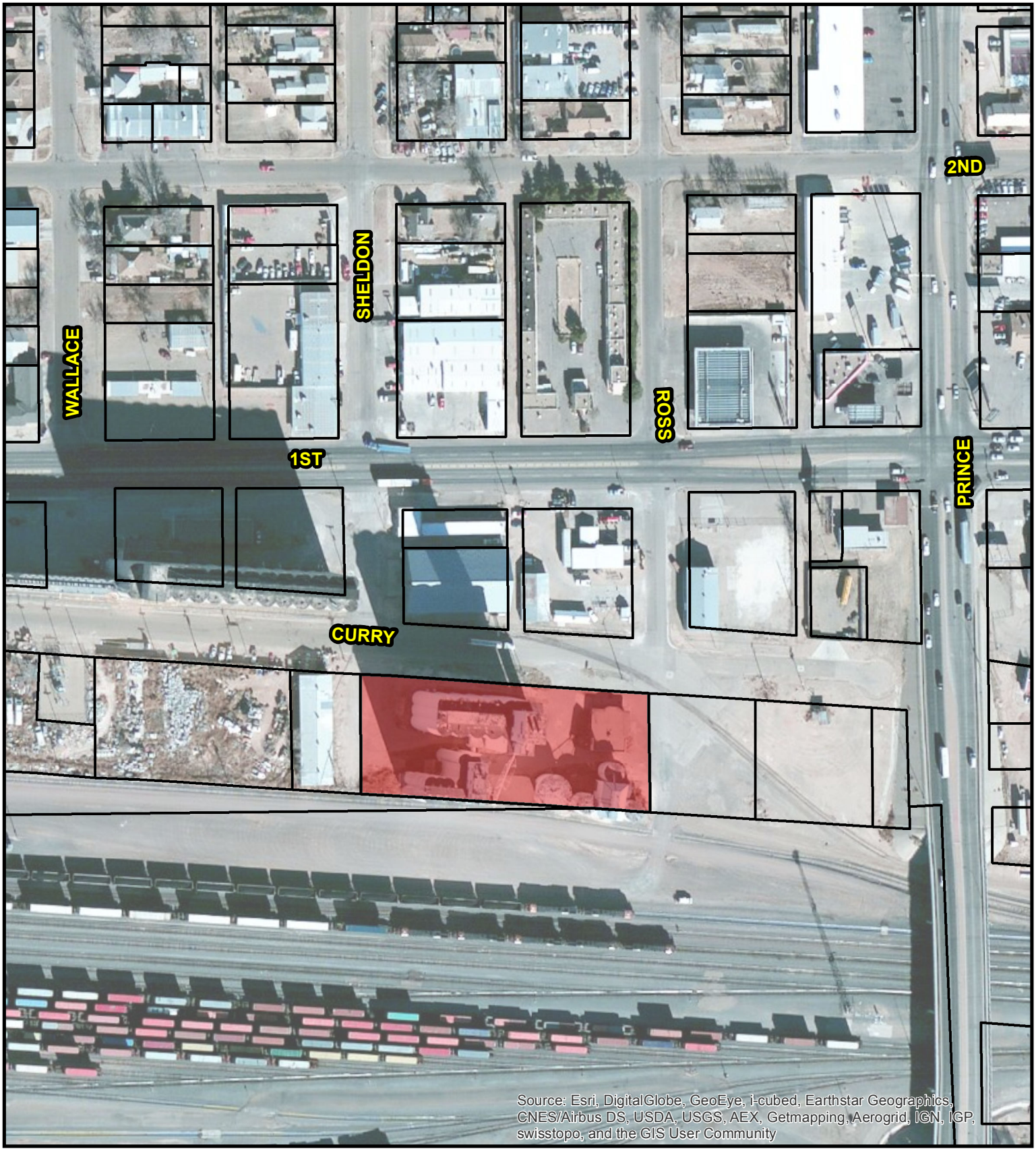
Frank Lasky III
401 Curry
Clovis, NM 88101

Lance A. Pyle
Curry County Manager
700 N. Main St, Suite #10
Clovis, NM 88101

City Manager, City of Texico
219 Griffin
Texico, NM 88135

Property Information Report 1

Map Key	Property Code	Property Address	Property Legal Description
0	1211010504295	705 E 1ST	CLOVIS ORIGINAL BLOCK 85 LOT 5 6 7 8
1	1211010482296	623 E 1ST	CLOVIS ORIGINAL BLOCK 86 LOT 1 2 3
2	1211010436297		CLOVIS ORIGINAL BLOCK 87 LOT 1 THROUGH 5 INCL FIRST STREET COMPLEX
3	1211010396660		SECTION-18 TOWNSHIP-02N RANGE-36E TR SE4
4	1211010432275	517 CURRY AV	CLOVIS ORIGINAL BLOCK 93 LOT 2 3 4 5 6
5	1211010435275		CLOVIS ORIGINAL BLOCK 93 LOT 1 CURRY AVE COMPLEX
6	1211010502271		CLOVIS ORIGINAL BLOCK 91 LOT 5 6 CURRY AVE COMPLEX
7	1211010466294	612 CURRY AV	CLOVIS ORIGINAL BLOCK 86 LOT 4 5
8	1211010514268		



N
W E
S

Legend

Property 121101047427200

Curry County Parcels

Source data compiled from GIS databases by RKJ. This map is a graphical representation of Curry County and should only be used for illistrative purposes. In no way should this map, in part or in whole, be used to settle any boundry disputes or locational conflicts.

0 62.5 125 250 375 500 Feet

Legend

- Property 121101047427200
- Approx 100 ft surrounding Properties
- Curry County Parcels

N
W E
S

Source data compiled from GIS databases by RKJ. This map is a graphical representation of Curry County and should only be used for illustrative purposes. In no way should this map, in part or in whole, be used to settle any boundry disputes or locational conflicts.

0 62.5 125 250 375 500 Feet

Property Ownership Report 2

Map Key	Property Code	Ownership Name and Address			
0	1211010504295	CONWAY OIL CO	280 S COLLIER BLVD UNIT 1704	MARCO ISLAND	FL 34145
1	1211010482296	BARNETT OIL COMPANY INC	P O BOX 1480	CLOVIS	NM 88102
2	1211010436297	GAVILON GRAIN LLC FLAHERTY KATIE	1331 CAPITOL AVE	OMAHA	NE 68102
3	1211010396660	BURLINGTON NORTHERN SANTA FE PROPERTY TAX DEPARTMENT	P O BOX 961089	FORT WORTH	TX 76161
4	1211010432275	LASKY FRANK II & DEBORAH	814 SHELDON	CLOVIS	NM 88101
5	1211010435275	LASKY FRANK III	401 E CURRY	CLOVIS	NM 88101
6	1211010502271	GAVILON GRAIN LLC FLAHERTY KATIE	1331 CAPITOL AVE	OMAHA	NE 68102
7	1211010466294	BARNETT OIL COMPANY INC	P O BOX 1480	CLOVIS	NM 88102
8	1211010514268				

7014 3490 0001 8187 2870

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CLOVIS, NM 88101

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.77

CORONADO STATION SANTA FE, NM 0501 MAY 23 2016 87505-9998 05/23/2016

Sent To: Lance A. Pyle, Curry Co. Mgr.
Street & Apt. No., or PO Box No.: 700 N. Main St, Suite #10
City, State, ZIP+4: Clovis, NM 88101

PS Form 3800, July 2014 See Reverse for Instructions

7014 3490 0001 8187 2849

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.

MARCO ISLAND, FL 34145

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.77

CORONADO STATION SANTA FE, NM 25 MAY 23 2016 Postmark Here 87505-9998 05/23/2016

Sent To: Conway Oil Co.
Street & Apt. No., or PO Box No.: 280 Collier Blvd, Unit 1704
City, State, ZIP+4: Marco Island, FL 34145

PS Form 3800, July 2014 See Reverse for Instructions

7014 3490 0001 8187 2863

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.

TEXICO, NM 88135

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.77

CORONADO STATION SANTA FE, NM 25 MAY 23 2016 Postmark Here 87505-9998 05/23/2016

Sent To: City Mgr, City of Texico
Street & Apt. No., or PO Box No.: 219 Griffin
City, State, ZIP+4: Texico, NM 88135

PS Form 3800, July 2014 See Reverse for Instructions

7014 3490 0001 8187 2887

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CLOVIS, NM 88101

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.77

0501 25 CORONADO STATION SANTA FE, NM Postmark Here MAY 23 2016 05/23/2016 87505-9998

Sent To: Frank Lasky III.
Street & Apt. No., or PO Box No.: 401 Curry
City, State, ZIP+4: Clovis, NM 88101

PS Form 3800, July 2014 See Reverse for Instructions

7014 3490 0001 8187 2894

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CLOVIS, NM 88101

OFFICIAL USE

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Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.77

CORONADO STATION SANTA FE, NM 0501 MAY 23 2016 Postmark Here 87505-9998 05/23/2016

Sent To: Frank & Deborah Lasky
Street & Apt. No., or PO Box No.: 814 Sheldon
City, State, ZIP+4: Clovis, NM 88101

PS Form 3800, July 2014 See Reverse for Instructions

7014 3490 0001 8187 2856

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For delivery information, visit our website at *www.usps.com®*.

CLOVIS, NM 88102

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$3.77

0501 25 CORONADO STATION SANTA FE, NM Postmark Here MAY 23 2016 05/23/2016 87505-9998

Sent To: Barnett Oil Company, Inc
Street & Apt. No., or PO Box No.: PO Box 1480
City, State, ZIP+4: Clovis, NM 88102

PS Form 3800, July 2014 See Reverse for Instructions

7014 3490 0001 8187 2917

U.S. Postal Service™
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For delivery information, visit our website at *www.usps.com®*.

FORT WORTH, TX 76161

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$0.47
	$3.77

CORONADO STATION SANTA FE, NM 87505-9998
MAY 23 2016
0501 25
05/23/2016

Postmark Here

Sent To: Burlington Northern Santa Fe
Street & Apt. No., or PO Box No.: PO Box 961089
City, State, ZIP+4: Ft Worth, Tx 76161

PS Form 3800, July 2014 — See Reverse for Instructions

7014 3490 0001 8187 2900

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at *www.usps.com®*.

OMAHA, NE 68102

OFFICIAL USE

Postage	$3.30
Certified Fee	$0.00
Return Receipt Fee (Endorsement Required)	$0.00
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$0.47
	$3.77

CORONADO STATION SANTA FE, NM 87505-9998
MAY 23 2016
0501 25
05/23/2016

Postmark Here

Sent To: Katie Flaherty, Gavelin
Street & Apt. No., or PO Box No.: 1331 Capitol Ave
City, State, ZIP+4: Omaha, NE 68102

PS Form 3800, July 2014 — See Reverse for Instructions

General Posting of Notices – Certification

I, _Mark Tourangeau, the undersigned, certify that on **May 25, 2016,** posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in **Clovis** of **Curry** County, State of New Mexico on the following dates:

1. Facility office May 25, 2016
2. Clovis County Courthouse May 25, 2016
3. Clovis Library May 25, 2016
4. Clovis City Hall May 25, 2016

Signed this 31 day of May, 2016,

Signature

5/31/16
Date

Mark Tourangeau
Printed Name

Director of Operations
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

NOTICE

CrossRoads Agriculture announces its application to the New Mexico Environment Department for an air quality permit for its Clovis Grain Elevator facility. The expected date of application submittal to the Air Quality Bureau is May30, 2016.

The exact location for the proposed facility known as, CrossRoads Ag-West, is 621 East Curry Ave, Clovis, NM 88101. The facility is located in Clovis on Curry Ave, between Ross St and Sheldon St in Curry County.

The proposed permit is to restart grain elevator operations.

The estimated maximum quantities of regulated air contaminants will be as follows in pound per hour (pph) and tons per year (tpy). These reported emissions could change slightly during the course of the Department's review:

TSP 13 pph/ 3 tpy; PM10 5 pph/1 tpy; PM2.5 2 pph/ 0.1 tpy.

The standard operating schedule of the facility will be from 7 a.m. to 5 p.m. 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be from 7 a.m. to 9 p.m. 7 days a week and a maximum of 52 weeks per year. The owner of the facility is: CrossRoads Agriculture, 118 N. Bedford Rd, Mt Kisco, NY 10549. The operator of the facility is: CrossRoads Agriculture, 621 East Curry Ave, Clovis, NM 88101.

If you have any comments about the operation of the above facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html
Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, as used in this notice or send a copy of this notice along with your comments. Sending this copy is necessary since the Department may not have received the permit application before this notice. Please include a legible mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

NOTICE OF AIR QUALITY PERMIT APPLICATION

CrossRoads Agriculture announces its application submittal to the New Mexico Environment Department for an air quality permit for the operation of its grain elevator facility. The expected date of application submittal to the Air Quality Bureau is May 30, 2016. The exact location for the proposed facility known as, CrossRoads Ag-West, is 621 East Curry Ave, Clovis, NM 88101. The facility is located in Clovis on Curry Ave, between Ross St and Sheldon St in Curry County.

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General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

Meetings calendar

Today

ENMWUA meeting — 10 a.m.
Clovis-Carver Public Library, north annex, 701 N. Main St., Clovis.
Information: 575-769-7928

Melrose City Council — 4:30 p.m.
City Clerk Office, 105 E. Avenue B., Melrose.
Information: 575-253-4274

Wednesday

Clovis Community College Board of Trustees Meeting — 8 a.m.
CCC, Room 512, 417 Schepps Blvd., Clovis.
Information: 575-769-4001

Eastern Plains Council of Governments Annual Meeting — 10 a.m.
Youth Recreation Building, 1504 E. Seventh St., Clovis.
Information: 575-762-7714

Clovis Chamber Ambassador Meeting — 11:30 a.m.
Clovis Chamber, 105 E. Grand Ave., Clovis.
Information: 575-763-3435

The meetings calendar is a daily listing of area public meetings. To place an item on the calendar, call the newsroom at 575-763-6991 or e-mail: cmondragon@cnjonline.com

A gift for dad

Staff photo: Tony Bullocks

Kage Trujillo, 2, gives his father, Ben Trujillo, of Clovis some dandelions he picked out for him Wednesday morning in the Clovis High School's courtyard. The two were enjoying the weather while Ben's daughter, Karli Trujillo, was taking part in the Wildcadette dance clinic.

Local roundup

Wheatfields holding dance

Wheatfields Senior Living will hold a rodeo dance 6 p.m. June 4 at its center.

The event is catered to residents 50 and older and will be held at the center at 4701 N. Prine St. The dance will feature live music, along with snacks and refreshments.

Information: 575-762-8700.

Work scheduled along Wilhite

Over the next 60 days, there will be utility relocation, survey work and tree trimming along Wilhite Road in connection to projected roadwork.

There will be periodic delays on Wilhite between Prince and Norris streets during that time.

Information: Public Works Director Clint Bunch, 575-769-2376.

— Staff reports

Find What You're Looking for in a Snap!

Shop today's Classifieds for yourself or others.

Clovis News Journal

Ft. Sumner Monuments
Fort Sumner, NM 88119
Albert Sena
(575) 763-6079
Geraldine Sena
(575) 760-2443
M-F 8:30-12 & 1-5
Service to Tucumcari Available

Serenity.
Remember, share and honor a loved one. View obituaries online and send your personal condolences in our online guest book.
cnjonline.com

Events calendar

Today

Red Nose Day — 6 p.m.-9 p.m.
Tickets $25 each or $20 each for four or more.
The Underground Embassy, 321 E. First St., Clovis.
Information: 575-769-2103

Adult Coloring Club — 10 a.m.-noon
Clovis- Carver Public Library, Ingram Room, 701 N. Main St., Clovis.
Information: 575-769-9687

Adult Coloring Club — 6 p.m.-8 p.m.
Clovis- Carver Public Library, Ingram Room, 701 N. Main St., Clovis.
Information: 575-769-9687

Friday

Clovis Livestock Auction Summer Horse Sale — 9 a.m.
Clovis Livestock Auction, 504 S. Hull St., Clovis.
Information: 575-762-4422

Ribbon Cutting for Stage II — 11:30 a.m.
Clovis Curry County Chamber of Commerce, 105 E. Grand Ave. Clovis
Information: 575-763-3435

Ribbon Cutting for Autoimage — 4:30 p.m.
Autoimage, 1504 Mabry Dr., Clovis.
Information: 575-763-3435

Saturday

2016 Cannon Air Force Base Air Show — 9 a.m.
Free.
Cannon Air Force Base, Clovis.

Clovis Livestock Auction Summer Horse Sale — 9 a.m.
Clovis Livestock Auction, 504 S. Hull St., Clovis.
Information: 575-762-4422

Clovis Livestock Auction Sale Dance — 5 p.m.
Curry County Events Center, 1900 E. Brady Ave., Clovis.
Information: 575-935-7000

Wheatland School Reunion — 8 a.m.
Senior Citizen Building, Main and Jefferson streets, Grady.
Information: 806-333-4524

Annual Reunion and Homecoming — 10 a.m.
Lunch at Noon.
The Hassell Church, 7 West and 5 North of House.
Information: 575-253-4401

Sunday

2016 Cannon Air Force Base Air Show — 9 a.m.
Free.
Cannon Air Force Base, Clovis.

Clovis Livestock Auction Summer Horse Sale — 9 a.m.
Clovis Livestock Auction, 504 S. Hull St., Clovis.
Information: 575-762-4422

Monday

Memorial Day Fly-In Event — 10 a.m.-2 p.m.
Tours $10; Flights (T-6 and B-25) $200-$450.
Clovis Municipal Airport, Clovis
Information: Kyle Birkhirn, 505-400-9605

Pioneer Days Rodeo Queen Pageant — 10 a.m.
Curry County Fairgrounds, 1900 E. Brady Ave., Clovis.
Information: 575-935-7000

Little Buckaroo Rodeo — 5 p.m.
Curry County Fairgrounds, 1900 E. Brady Ave., Clovis.
Information: 575-935-7000

Tuesday

Ribbon Cutting for CASA — 4:30 p.m.
Matt 25 Hope Center, 1200 Thornton St., Clovis.

Wednesday

Miss Rodeo New Mexico Pageant Check In — 4 p.m.
Days Inn and Suites, 2700 Mabry Dr., Clovis.
Information: 575-760-6487

Horsemanship — 2 p.m.
Curry County Events Center, 1900 E. Brady Ave., Clovis.
Information: 575-760-6487

Ongoing

Artist of the Month — Glenda Cox and Jackie Hinderliter, Clovis-Carver Public Library. Information: 575-769-7840.

Artist of the Month of June — Sandra Chancey, Clovis-Carver Public Library. Information: 575-769-7840.

Adult summer reading program — through July 30, registration required. 18 and over only. Clovis-Carver Public Library 701 N. Main St. Information: 575-769-9687

46th Annual Pioneer Days — Monday through June 4, Curry County Events Center, 1900 E. Brady Ave, Clovis. Information: 575-760-6487

The events calendar is a daily listing of area events. To place an item on the calendar, call the newsroom at 575-763-6991 or e-mail: cmondragon@cnjonline.com

MEMORIAL DAY
Early Deadlines

Retail/Classified Display

Publication Date	Space Reservation Deadline
Tuesday 5/31	4 PM Thursday, 5/26
Wednesday, 6/1	2 PM Friday, 5/27

Classified Line Ads

Publication Date	Space Reservation Deadline
Tuesday 5/31	3 PM Friday, 5/27

Cannon Connections

Publication Date	Space Reservation Deadline
Friday, 6/3	4 PM Friday, 5/27

We will be closed
Memorial Day
Monday, May 30, 2016

Clovis NEWS JOURNAL
PORTALES NEWS-TRIBUNE

NOTICE OF AIR QUALITY PERMIT APPLICATION

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General information about air quality and the permitting process can be found at the Air Quality Bureau/s web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

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CMI

AFFIDAVIT OF LEGAL PUBLICATION

LEGAL # 45085

STATE OF NEW MEXICO
COUNTY OF CURRY:

The undersigned, being duly sworn, says:
That she is a Legal Clerk of
The CLOVIS NEWS JOURNAL, a daily
Newspaper of general circulation,
published in English at Clovis,
said county and state, and that the
hereto attached

AIR QUALITY PERMIT
LEGAL 45085 MAY 26, 2016

was published in said CLOVIS NEWS JOURNAL,
a daily newspaper duly
qualified for that purpose within
the meaning of Chapter 167 of the
1937 Session Laws of the State of
New Mexico for 1 consecutive
days/weeks on the same days as follows:

05/26/2016

Rebekah Blakeley
Legal Clerk

Subscribed and sworn to before me
26th day of May, 2016

Leslie Nagy
Notary Public
Leslie Nagy

My Commission Expires: 05/24/2019

Copy of Publication

LEGAL 45085
May 26, 2016

NOTICE OF AIR QUALITY PERMIT APPLICATION

CrossRoads Agriculture announces its application submittal to the New Mexico Environment Department for an air quality permit for the operation of its grain elevator facility. The expected date of application submittal to the Air Quality Bureau is May 30, 2016. The exact location for the proposed facility known as, CrossRoads Ag-West, is 621 East Curry Ave, Clovis, NM 88101. The facility is located in Clovis on Curry Ave, between Ross St and Sheldon St in Curry County.

The proposed permit is to restart grain elevator operations. The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Departments review: TSP 13 pph/3 tpy; PM10 5 pph/1 tpy; PM2.5 2 pph/0.1 tpy.

The standard operating schedule of the facility will be from 7 a.m. to 5 p.m. 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be from 7 a.m. to 9 p.m. 7 days a week and a maximum of 52 weeks per year.

The owner of the facility is: CrossRoads Agriculture, 118 N. Bedford Rd, Mt Kisco, NY 10549. The operator of the facility is: CrossRoads Agriculture, 621 East Curry Ave, Clovis, NM 88101.

If you have any comments about the operation of the above facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; phone: (505) 476-4300; 1 800 224-7009; https://www.env.nm.-gov/aqb/permit/aqb_draft_permits.html

Other comments and questions may be submitted verbally.

Please refer to the company name and site name, as used in this notice or send a copy of this notice along with your comments, since the Department may not have received the permit application at the time of this notice.

Please include a legible mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Departments notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process can be found at the Air Quality Bureaus web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the Permits section of this web site.

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

PSA

CrossRoads Agriculture will be submitting a permit application around June 1, 2016 to restart its Grain Elevator operation located at 621 East Curry Ave. Public notices have been posted in Clovis at the elevator office site, the Curry County Courthouse, Clovis City Hall, and the Clovis library. You may submit comments or obtain information from the Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009.

----------End ----------

Please respond by email whether this Public Service Announcement will be aired or declined.

Thank you,

Bruce Nicholson
Air Quality Services, Inc.

Submittal of Public Service Announcement – Certification

I, Bruce Nicholson, the undersigned, certify that on May 31, 2016, submitted a public service announcement to KRMQ Radio, 208 E. Grand Ave that serves the City of **Clovis**, in **Curry** County, New Mexico, in which the source located and that they **RESPONDED THAT IT WOULD AIR THE ANNOUNCEMENT.**

Signed this 31 day of May, 2016,

Bruce R. Nicholson
Signature

May 31, 2016
Date

Bruce Nicholson
Printed Name

Air Quality Services, Inc. (Consultant)
Title

From: casey <casey@rooneymoon.com>
To: Bruce Nicholson <brucnichol@aol.com>
Subject: Re: PSA announcement
Date: Wed, Jun 1, 2016 11:02 am

Bruce,
Thank you for the information. The PSA has been run on our station BIG 1015.
Please let me know if you have any questions.
Have a great day,
Casey
> Casey-
>
>
> As part of an air quality permit, a PSA is required to be submitted.
> Attached is the PSA. Would you kindly respond back to this email that the
> PSA will be run or that it was declined to be run.
>
>
> Thank you,
>
>
> Bruce Nicholson
> Air Quality Services, Inc.
> PO Box 6324
> Santa Fe, NM 87502
> 505.982.2737 ph
> 505.670.5519 cell
> brucnichol@aol.com
>
>

--
Casey L Peacock
Community Relations Coordinator
Rooney Moon Broadcasting
420 North Main Street
Clovis, NM 88101
(575) 763-0338 - Office
(575) 309-6487 - Cell

The more that you read,
The more things you will know.
The more that you learn,
The more places you'll go.
-Dr. Seuss

Rooney Moon Broadcasting does not discriminate on the basis of race,
gender or ethnicity in the placement, scheduling or

Section 10

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.

This is a grain elevator for farm wheat and milo storage and for transport to buyers. All receiving is by truck and all shipping is also by truck. The grain elevator will receive grain in two harvest seasons, one for wheat (June) and another for milo October). Grain is received at the elevator inside the building and off loaded. The grain is conveyed to silo storage. There are two elevators, the "B" elevator and the "C" elevator. Most grain storage will occur at the "B" elevator. Depending on buyer pricing and demand, grain is shipped out to buyers during the rest of the year.

Building Enclosures, Equipment Enclosures and Fugitive Emissions

The CrossRoads grain elevator is a country/farm elevator. This is not a commercial or processing facility. Grain is received during harvest seasons, which for wheat is roughly June and for milo is roughly October. The farms are 30 to 45 miles from the facility. The busy season for the elevator is during the harvesting periods when grain is transported to the site by truck in roughly 25 ton loads. It takes 45 minutes to an hour at least to travel from the elevator to the farm to load grain. Consequently there will not likely be any queue of trucks waiting and they will arrive at the elevator at random times during the day. Harvesting is a daytime operation so that in June harvest, trucks will unload as late as 9 pm while in October, the last trucks unload at roughly 6 pm. For this permit, it was assumed that 6 trucks per hour would either unload grain during harvest or load grain for transport. This equates to around 6000 bushels per hour.

There are two grain elevators at this site designated as the "C" elevator and the "B" elevator. During receiving or during grain loading, only one of the elevators will be used at any given time. Subsequent to purchase, CrossRoads found major structural cracks in the outside annex large silos in the "C" silos, but the internal silos and bins below the head house are sound. This resulted in a large loss of storage capacity. As a consequence, while categories for silo grain reclaim are in the emission calculation spreadsheet, there will be no grain reclaim operations occurring at the "C" elevator. During truck loading in "C", the overhead bins will feed directly by gravity pipes to the leg boot, up to the distributor and into the loading bin and into trucks.

At this CrossRoads facility, only trucks will be used for both receiving and for loading. Trucks begin by pulling onto the weigh scale located at the office building (Figure 13). After receiving or loading, the trucks pull around again onto the weigh scale so that the amount of grain received or loaded can be determined.

Elevator Operation Description

The Grain elevator is a massive structure (Figure 16 and 17). Grain elevators are called elevators for a reason. The flow of grain is up and down, up and down. All of this up and down takes place inside of closed, encased pipes or housings. The loaded grain truck from the farm(s) enters either the "B" elevator or the "C" elevator (Figure 15), the truck positions over the receiving pit (Figure 1 and 2) and received grain is emptied from a truck into a receiving bin which is below the level of the floor and grate shown in Figure 1,2. Past the pit everything is enclosed, either within an equipment housing (gravity pipes, steel housings etc.) and inside of the concrete structure (Figure 15, Figures 3 and 4, Figure 10). The grain is lifted by the bucket elevator (leg) (Figure 3) to the enclosed distributor (Figures 5,19). The distributor spout is positioned to one of the gravity pipes and the grain flows by gravity chutes or pipes into silos or bins or to the head house auger (Figure 6,7 and 18) that loads silos. Notice in Figure 5 there is no striking surface, the grain just drops into the entrance to the gravity pipe. There is no wind to separate dust from grain because the head house is closed. Therefore, dust stays with the grain.

Once grain receiving is completed during the harvest season, no emissions occurs again and no grain movement occurs until it is sold in part or in whole or a shipment of grain from another source is received. For the most part, there is no activity at the grain elevator site. When loading trucks for shipment, the process goes through the leg elevator again. For loading trucks, grain flows by a gravity chute or pipe from a silo into the reclaim auger (Figure 8, Figure 9, Figure 10) and from the auger back to the leg (Figure 12) or directly from a bin by gravity pipe to the bucket elevator (Leg) (Figure 12) to be lifted once again so that the distributor (Figure 5) can select the gravity pipe that loads the bin above the ceiling of the passageway. That bin is the one that loads into a truck that transports the grain off site.

The CrossRoads facility has one other transfer that can occur. Grain from the "B" elevator can be transferred to the "C" elevator receiving pit via a gravity pipe (Figure 14) and thereby be stored or loaded to truck within the "C" elevator. When the transfer of grain from B to C occurs, both of the C entry doors shown in Figure 15 and Figures 1 and 2 are closed. A flexible chute is connected to the terminal end of the gravity pipe to fill the receiving bins. Since the C elevator outside silo storage is no longer available, only the head hose bins would be used for storage in this case.

The three times and locations where PM emission can occur to the outside is during truck receiving, truck loading or from the large annex silo vents at the top of the silo during silo filling. Except for those three events, there is no emission, even though the emission spreadsheet has been designed to calculate a small emission to the outside, rather than to take 100% retention (which really occurs). The following discussion covers the various assumptions and control efficiencies used in the emission spreadsheet and covers the paths of the grain in the elevator.

a. Limited building enclosure. A building enclosure that has a door or window opening to the atmosphere, but no cross ventilation (e.g. one open door or open window).

In the case of the structure enclosing the receiving or truck loading pit area (they are one and the same) (Figure 1,2) , both receiving and loading of trucks must have the entry door open as the trucks are too long to be entirely inside the building. For both the "B" and the "C" building, this portion of the building is oriented east-west. With the west end door shut but the east end door open, any wind direction other than from the east will be blocked by the massive grain silo structure. When the wind direction is from a easterly direction, the winds will blow inside of the building which is a large enclosed space. Any dust generated by the receiving or the loading of trucks will be transported inside of the building. The net effect of the large enclosed space is to contain the dust. The issue is more of a housekeeping issue than an outside dust release issue.

When the west door is opened, dust that is still suspended inside the building will have a pathway to the atmosphere under some wind direction conditions. An 80% control efficiency has been previously used and approved by the Bureau for the enclosure described above. A recent Bureau table has identified 50% control. In the emission

spreadsheet and as used in the dispersion model, no credit is taken for control and emissions are based on both doors being open and all dust that is generated being released to the air outside.

b. Full building enclosure

In both grain elevators, full building enclosures apply once grain is received past the pit Since there is no direct contact with the outside atmosphere. Once the grain passes the receiving bin and on its way into and through the elevator structure, it is entirely contained. Any dust on or generated by grain hitting a surface in the handling stays with the grain. Examples of a full building enclosure include the head houses on top of both grain elevators (Figure 6), the internal head house bins above the ceiling in the receiving area are another example and finally, the concrete tunnel below ground and underneath the silos and receiving pits is another example (Figure 10). These are cases where there is either no door or window in the area or there is a man door or windows that are closed. These could easily be assigned a 100% capture or retention, but I chose to assign 95% capture. This is too low a capture given the lack of possible contact with the outside unless for example, in the head house a window pane becomes broken or a door is left opened. Neither of these situations are left that way because it provides a means for pigeons or other birds to enter and potentially contaminate the grains. The head house bins have no bin vent openings to the outside. In the case of the reclaim tunnel and the leg bottom, there are no windows or doors.

c. Choke flow

During first minute or less of receiving, the bin starts to fill up to the point where the grain builds to the bottom of the hopper. After this occurs emissions effectively cease because the grain forms a seal preventing further dust emission and there is no drop height. The choke flow practice at CrossRoads is to leave the bin full after the first truck and remain that way until the last truck of the day is unloaded. After the first truck unloads, there is an even briefer interval when the hopper initially opens before choke flow occurs. A choke flow control efficiency of 90% was used and accepted by the Bureau for the J.D. Heiskell NSR permit in Portales a few years ago. The Texas TCEQ Guidance document (attached) specifies choke flow at 90%. and also as a BACT control level. I believe that the 90% is low in that this applies to an empty bin prior to the choke condition. Refer to the link https://www.youtube.com/watch?v=zwhRv8xMxvg for choke flow in an empty receiving bin.

d. Reclaim operation tunnel (Grain Transfer or Truck Loading)

In the case of the "C" elevator, the outside silos will not be used due to structural cracks, and thus there is no reclaim of grain occurring from those silos. All grain will be loaded to the bins in the head house area and those bins have direct gravity flow to the legs.

In the case of the "B" elevator, there will be a grain reclaim used to direct grain for loading trucks and to transfer grain to the "C" receiving bin via an enclosed gravity chute

over to the "C" receiver pit. The "B" elevator uses an enclosed auger system which terminates into the enclosed leg boot and this transfer occurs in a closed equipment enclosure inside the tunnel below the silos. The tunnel is a concrete structure that runs underneath the concrete silos and in which the auger runs and without any windows or doors (See Figure 10). It is not ventilated. It has no direct or indirect contact with the outside atmosphere. The reclaim discharges to the enclosed leg boot where grain is raised once again to the distributor and is directed to other silos or bins within the elevator either for storage or shipping. For shipping. the distributor directs grain to the pipe that fills the loading bin (enclosed bin in an enclosed area) that is above the elevator passageway ceiling. There is no fugitive PM grain dust transfer created by the gravity pipe to the loading bin. There is no fugitive PM created by grain discharge into the auger because the auger is enclosed. Grain discharge to the leg boot in both the "C" and the "B" elevator boot occurs inside an equipment enclosure and underneath the elevator structure. There is no direct contact with the outside. Grain dust stays with the grain, and only during grain receiving, or loading is there a means of contact with outside air. The other fugitive PM emission occurs at the top of the grain annex storage silos when they are filled since there is a silo vent at 113 ft level for the "B" silos. This emission only occurs when the silo is filled.

e. Grain Distributor

The enclosed leg top empties into the enclosed distributor receiving housing and this is an enclosed transfer with no emission to the atmosphere. In addition, the distributor is located inside the enclosed head house above the silos. A control efficiency of 95% or higher is appropriate in this case. There is a gap of about 3 inches from the distributor spout pipe end where it discharges into an enclosed pipe (Figure 5) that runs either to an enclosed auger or to a closed gravity pipe that runs directly to one of the head house bins or the large annex silos. Note that the pipe discharge just flows into another pipe and there is no surface to strike at the distributor transfer and no air currents to blow dust from the grain stream entering the pipe, there is no way to create fugitive PM dust at this point. Even if it were to generate some slight dust, it would remain inside the enclosed head house building structure.

f. Receiving and Truck Loading Passageway

Loading and receiving can occur in two ways. Besides choke flow control, the far passageway door can be either closed or open during these operations. For purposes of this permit, emissions were based on having both doors open. In this case, there is no credit taken for PM capture except for the choke flow efficiency. In the case of one door closed at the far end of the passageway, the Limited Building Enclosure control efficiency of 80% would be appropriate, although the Bureau has recently suggested 50% control. If the video link above was watched, there is an initial burst of dust and large non PM particles when the grain first drops and strikes the side of the empty bin, then the dust disappears. This video is outside receiving of 1000 bushels and in terns of visual emissions there is extremely little with none at all once choke flow occurs.

g. Truck Loading - Choke Flow

Choke flow also occurs with truck loading. Grain is loaded into the truck bin by a flexible chute into the truck bin. At the beginning of loading. the grain strikes the bin surface which will liberate PM dust, then the grain level rises to the chute opening and then the truck slowly pulls forward to allow the grain to flow into the truck bin bed until full rather than falling into the truck. This practice eliminates the grain drop and seals the chute exit leaving any dust generated by the fall from the above bin to remain within the chute or within the grain.

h. Multiple control efficiencies

There are situations where multiple control (capture) efficiencies occur in the emissions spreadsheet. These are calculated as series controls since each control is applied to the fugitives remaining from the preceding control. For example with choke flow at 90% and the building enclosure at 50% the overall capture would be: 1 - ((1-90/100)*(1-50/100)) = 95% control. The penetration, that which escapes, is (1-90/100)*(1-50/100) = 0.05, or 5% of the uncontrolled emission escapes to the atmosphere. The choke flow results in 10% emission and then the limited build accounts for control such that only 50% of the 10% makes its way outside.

i. TSP issue

TSP is that particulate matter that is specified as measured by the old EPA Hi-Volume ambient sampler. That ambient air sampler has a sampling cut point of nominally 30 microns (micro-meters). The emission factors in the grain elevator table 9.9.1 are listed for PM, PM-10 and PM2.5. AP-42 states that total PM ("PM") is that amount captured in a front end filter, ie filterable portion, from method 5 isokinetic sampling. That is not ambient TSP (PM-30). There is no particle size distribution data available from which one can deduce the adjusted factor for PM-30. Therefore the total PM factor biases upward the emissions with respect to the TSP ambient air quality standard and poses a problem in permitting and the modeling associated with permitting due to upward biasing of emissions. The TSP modeling based on total PM will overstate impacts. Without size distribution information, it is not known how much upward biasing occurs. The little amount of size data contained in the background document, seems to indicate that PM-30 is anywhere from 56% to 71% of the total PM reported in the Table 9.9.1 category emission factors.

j. House Keeping Practices

House keeping practices are maintaining the internal silo structures in a clean manner. If any grain dust begins to accumulate on floors or equipment surfaces, it will be swept up and put into a dumpster or put back into the grain by sweeping into the receiving bin so that it stays with the grain.

Figure 1

Figure 2

B Head house- Rectangular object is the elevator leg going to the distributor above the ceiling.
Pipes are the gravity pipes that load grain to Bins or to the Auger.
Bucket Elevator (Leg)
Gravity Pipes (Chutes)

Figure 3

Gravity chutes to Bins or to auger from distrubutor above ceiling

Figure 4

Leg (rectangular chute left) and distributor discharge pipe. Each round gravity chute top (round hole) serves a bin or silo or the enclosed auger in the floor below. There is no impact to the grain flowing to the chute top and there is no wind to entrain any free dust particles. The transfer from distributor to pipe opening should be dust free.

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9

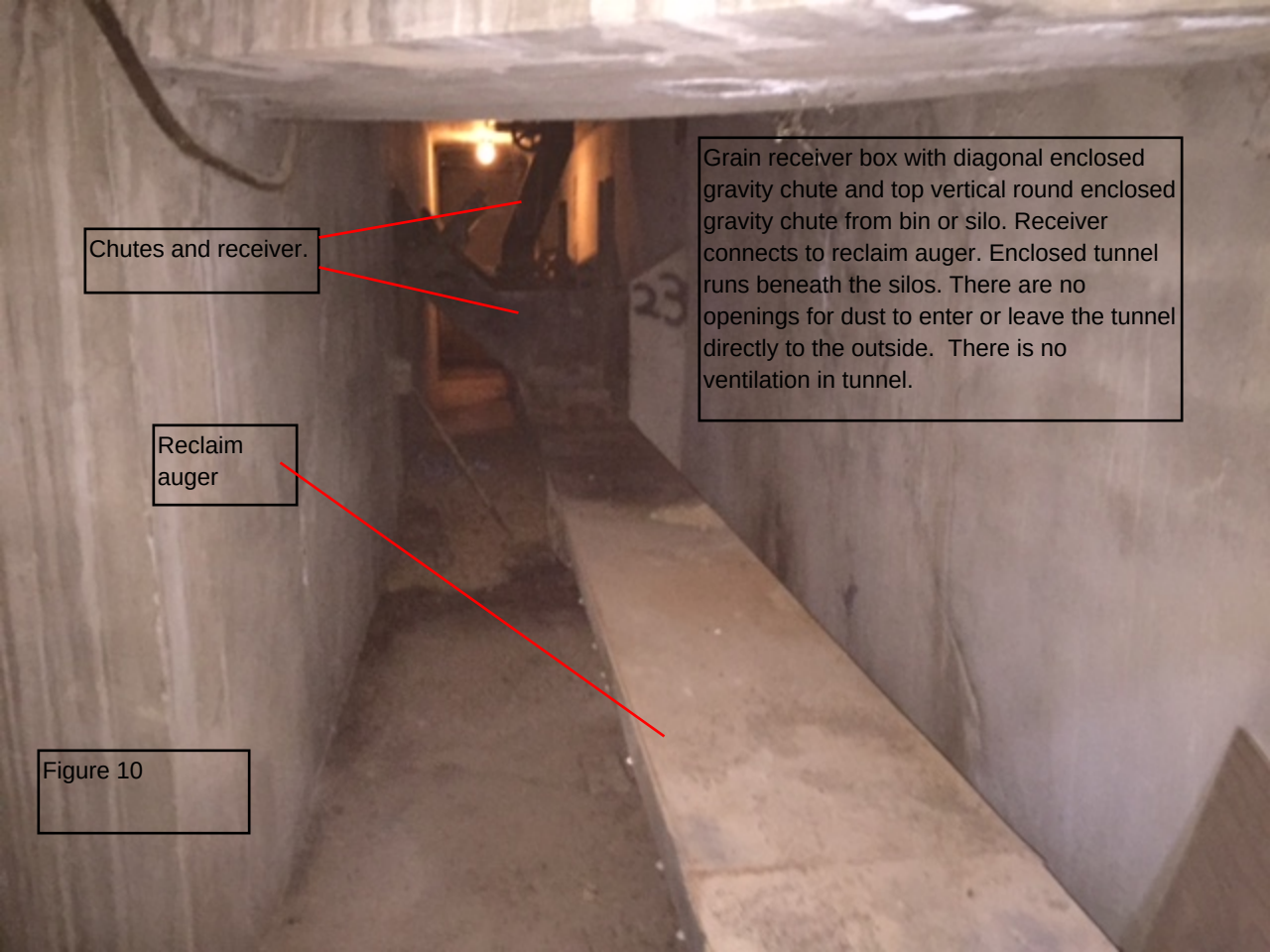
Chutes and receiver.
Grain receiver box with diagonal enclosed gravity chute and top vertical round enclosed gravity chute from bin or silo. Receiver connects to reclaim auger. Enclosed tunnel runs beneath the silos. There are no openings for dust to enter or leave the tunnel directly to the outside. There is no ventilation in tunnel.
Reclaim auger
23

Figure 10

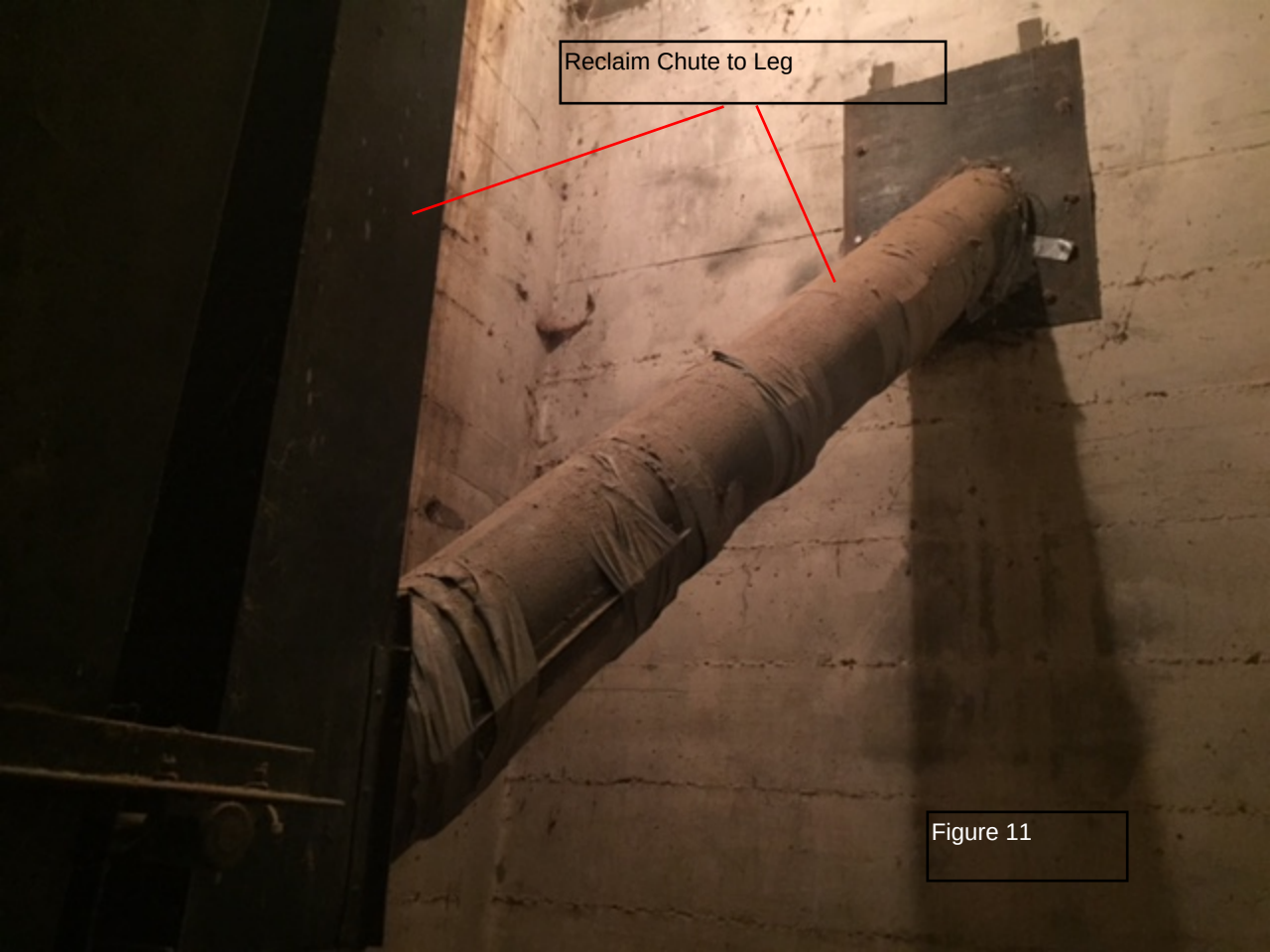

Figure 11

Figure 12

Scale Office and Scale Entrance
Scale is part of the concrete pad

Figure 13

Gravity Transfer Chute from B Bin to C Receiving Pit

Figure 14

View Showing Entry to B elvator Passageway (Left) or C Entry Passageway (Right)

There are Bins above the Passageway. The B passageway has one man door and no windows. The C passageway has two windows and one man door.

Figure 15

Figure 16

C Head House (right) on top of silo structure and B Head House (Just visible to the Left) on top of silo structure

Figure 17

Figure 18 Pipe to B Head House Auger

Figure 19 Leg to Distributor Housing

Figure 20 Basement Chute Convergence

Section 11
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, Single Source Determination Guidance, 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)**:**
All of the emission sources identified in Table 2A and located on the property shown in Section 5 plot plan constitute this source.

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

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

☑ **Yes** ☐ **No**

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

☑ **Yes** ☐ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☑ **Yes** ☐ **No**

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

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.

A. This facility is:

- ☑ **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. The "project" emissions listed below only result from changes described in this permit application, thus no emissions from other [revisions or modifications, past or future] to this facility. 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: 0 TPY**
e. **TSP (PM): 2.6 TPY**
f. **PM10: 0.76 TPY**
g. **PM2.5: 0.1 TPY**
h. **Fluorides: 0 TPY**
i. **Lead: 0 TPY**
j. **Sulfur compounds (listed in Table 2): 0 TPY**
k. **GHG: 0 TPY**

C. **Netting is not required (project is not significant)**
D.
E. **BACT** is **not required for this modification, as this application is a minor source.**
F. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

Section 13

Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation

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Provide a discussion demonstrating compliance with applicable state & federal regulation. If there is a state or federal regulation (other than those listed here) for your facility's source category that does not apply to your facility, but seems on the surface that it should apply, add the regulation to the appropriate table below and provide the analysis. Examples of regulatory requirements that may or may not apply to your facility include 40 CFR 60 Subpart OOO (crushers), 40 CFR 63 Subpart HHH (HAPs), or 20.2.74 NMAC (PSD major sources). We don't want a discussion of every non-applicable regulation, but if there is questionable applicability, explain why it does not apply. All input cells should be filled in, even if the response is 'No' or 'N/A'.

In the "Justification" column, identify the criteria that are critical to the applicability determination, numbering each. For each unit listed in the "Applies to Unit No(s)" column, after each listed unit, include the number(s) of the criteria that made the regulation applicable. For example, TK-1 & TK-2 would be listed as: TK-1 (1, 3, 4), TK-2 (1, 2, 4). Doing so will provide the applicability criteria for each unit, while also minimizing the length of these tables.

As this table will become part of the SOB, please do not change the any formatting in the table, especially the width of the table.

If this application includes any proposed exemptions from otherwise applicable requirements, provide a narrative explanation of these proposed exemptions. These exemptions are from specific applicable requirements, which are spelled out in the requirements themselves, not exemptions from 20.2.70 NMAC or 20.2.72 NMAC.

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

Example of a Table for Applicable STATE REGULATIONS:

STATE REGU-LATIONS CITATION	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce-able	Does Not Apply	JUSTIFICATION: Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m^3, 3. VOL)
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	X		Yes		20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC
20.2.7 NMAC	Excess Emissions			Yes	X	All Title V major sources are subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and are thus subject to the requirements of this regulation. Also listed as applicable in NSR Permit XXXX.
20.2.72 NMAC	Construction Permits	X		Yes		This facility is subject to 20.2.72 NMAC and NSR Permit number:
20.2.73 NMAC	NOI & Emissions Inventory Requirements	X		Yes		**NOI:** 20.2.73.200 NMAC applies (requiring a NOI application) **Emissions Inventory Reporting:** 20.2.73.300 NMAC applies. All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC.
20.2.75 NMAC	Construction Permit Fees	X		Yes		This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC. N/A if subject to 20.2.71 NMAC.

Example of a Table for Applicable FEDERAL REGULATIONS (Note: This in not an exhaustive list):

FEDERAL REGU-LATIONS CITATION	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce-able	Does Not Apply	JUSTIFICATION:
40 CFR 50	NAAQS	X		Yes		Defined as applicable at 20.2.70.7.E.11, Any national ambient air quality standard
NSPS 40 CFR 60, Subpart A	General Provisions			Yes	X	Applies if any other NSPS subpart applies.
NSPS 40 CFR 60, Subpart DD - Standards of Performance for Grain Elevators				Yes	X	§60.300 Applicability and designation of affected facility. (a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations. (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part. The elevator was constructed circa 1960 and therefore is not subject to this subpart. The grain storage capacity is roughly 350,000 bushels of grain. This is not a grain terminal elevator (2.5 million bushels capacity) nor a grain storage elevator located at a mill or soybean oil extraction with an elevator capacity of 1 million bushels. This subpart does not apply.

There are no combustion devices that are part of this facility.
There are no liquid petroleum storage tanks at this facility.
There are no Part 63 subparts that apply to this facility.

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☐ **Title V Sources** (20.2.70 NMAC)**:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** 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.

☑ **Title V** (20.2.70 NMAC)**, 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 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.

This Section does not apply.

Section 16

Air Dispersion Modeling

1) 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 (http://www.env.nm.gov/aqb/permit/app_form.html) 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. **Note:** Neither modeling nor a modeling waiver is required for VOC emissions.	X
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	X
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 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 replacements.	
Other: i.e. SSM modeling. See #2 above.	
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 (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

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.

Modeling and Emission Estimation Description

The CrossRoads grain elevator is a country/farm elevator. This is not a commercial or processing facility. Grain is simply brought to the elevator for storage and then sold based on market conditions. Grain is received during harvest seasons, which for wheat is roughly the month of June and for milo is roughly the month of October. The local farms are 30 to 45 miles from the elevator storage facility. The busy season for the elevator is during the two harvesting periods when grain is transported to the site from farms by truck in roughly 25 ton loads. It takes 45 minutes to an hour at least to travel from the elevator to the farm to load grain. Consequently there will not likely be any queue of trucks waiting and they will arrive at the elevator at random times during the day. Harvesting is a daytime operation so that in June harvest, trucks will unload as late as 9 pm while in October, the last trucks unload at roughly 6 pm. This permit is based on 6 trucks per hour that would either unload grain during harvest or load grain for transport between the harvest months. This equates to around 6000 bushels per hour during those times.

Note that even though the model run described below for loading was run without restriction in relation to the harvest season, loading of grain does not occur during the harvest season and it does not occur at 6000 bushels per hour for every day of the year as was run in the model. Based on this fact, the annual concentration is biased high. The 24 hour PM concentration is also biased high if the maximum concentrations from loading occur during harvest months. Overall PM concentrations from the model are biased very high due to the NMED Air Quality Bureau requirement to use only control capture efficiencies in their approved table, which does not recognize the multiple containment that exists at a grain elevator due to its design or that transfer activities exist inside of a building.

Emission estimation

Elevator Operations

AP-42 Chapter 9.9.1 Grain Elevators and Processes, was used to obtain the emission factors for the various activities at the site. These emission factors are uncontrolled emission factors. While the emission spreadsheet calculations contain an entry for straight truck receiving, CrossRoads will only use hopper trucks. The design of the elevators has operations of both receiving and loading of trucks inside of the concrete silo passageway (see Figure 15 in Section 10). All Figures referenced here are contained in Section 10 of the application. Both loading and receiving take place at the same spot in the elevator passageway (Figure 1 and 2). There is no loading of trucks during the very busy grain harvest period. Note that other than the entry and exit truck doors, there are two windows for light and one man door in the C passageway, but there are no windows in the B passageway, only a man door.

There are two grain elevators at this site designated as the "C" elevator and the "B" elevator (Figure 15, 16, 17). Subsequent to purchase, CrossRoads found major structural cracks in the outside annex large silos in the "C" silos, but the internal silos and bins below the head house are sound. As a consequence, while categories for "C" reclaim are in the emission calculation

spreadsheet, there will be no reclaim operations occurring at the "C" elevator. During truck loading, the overhead bins will feed to the leg boot, up to the distributor and into the loading bin and into trucks.

In both elevators receiving consists of a hopper truck pulling inside the elevator passageway and positioning over the grate above the receiving bin. (See Figure 1 and 2 for view of "C" interior) The receiving bin discharges to the leg receiver boot by a closed gravity chute and this operation is a closed equipment enclosure. Grain is lifted to the top of the elevator and the grain is transferred to the distributor receiver, also enclosed and inside of the silo structure. The distributor routes the grain to whichever bin is chosen and to allow grain to flow down a closed gravity chute. (See Figure 5) Exterior bins are loaded from the distributor by an enclosed gravity chute from the distributor to the enclosed auger and thence by closed gravity chutes to the silo (See Figures 6 and 7). The overhead distributor and leg top are an enclosed device where the grain is transferred to the distributor. In "C" elevator, the grain goes directly to one of the head house bins by closed gravity feed from the distributor. The entire structure that is at and below the head house is enclosed (See Figure 17).

In the "B" house, a similar setup is present. During truck loading grain is transferred from either an overhead bin or one of the outside silos. If an outside annex silo beyond the head house is chosen, then grain is transferred to an enclosed reclaim auger that runs inside a tunnel in the basement underneath the silos that brings the grain to the leg receiver boot where it is transferred inside of an equipment receiver enclosure (See Figures 8-12). The auger is enclosed inside of the outer tube (see Figure 10). Grain is raised to the top of the enclosed distributor and thence by gravity through an enclosed pipe to the truck load bin. All of these movements are inside the elevator structure and are inside of enclosed equipment enclosures. In "B" there will be grain transferred to the outside annex silos. By this I mean those silos that extend beyond the head house part of the overall structure both east-west and north-south. For these silos, there will be a bin vent to let displaced air escape during silo filling and this is a fugitive emission point on the top of the silo. This vent is not controlled. Note that there are windows and man doors in both head houses. Also note in Figure 17 photo there is a walkway from the top of the B elevator to the top of the C elevator so that personnel can move from one head house to the other without having to take the man lift down to ground level and back up the other side.

Except for truck receiving and truck loading periods, PM emissions are nonexistent since the elevator is not operated. For modeling purposes, I have included all emission points in the model file even if the emission is insignificant in order to avoid confusion between calculations in the spreadsheet and not finding a corresponding entry in the modeling files. I have set both the loading operation and the receiving operation as though they were running continuously 365 days per year (which they are not!). As described in the emission estimation this cannot physically happen especially for harvest receiving since it is confined to specify harvest months. By running the model for receiving as though it occurred year round, this allows the elevator to receive grain from another source should that circumstance happen.

The elevator leg capacities are 6500 bushels/hr and 7500 bushels/hr respectively for the "B" and the "C" elevator. Emissions for roads were based on 6 trucks per hour. This equates to approximately 6000 bushels per hour. Elevator operation emissions were based on 6000 bushels

per hour for both the "C" and the "B" elevators. In both runs for the "C" building, the road emissions only occur on the portion of the road leading directly to the "C" structure and exiting on the other side of the passageway. In both runs for the "B" building, the road emissions only occur on the portion of the road leading directly to the "B" structure and exiting on the other side. This avoids the potential for double counting road emissions and corresponds to the actual operation.

Choke Flow

Grain receiving is accomplished using choke flow of the grain from the hopper trucks. When the first truck of the day pulls in to unload, it will drop grain into an empty receiving bin until grain reaches the truck hopper bottom. For the remainder of receiving by that truck, the flow of grain is choked by the grain blockage at the hopper bottom and grain flows rather than drops and it is pulled from the bottom of the bin due to gravity and the grain lift from the leg (bucket elevator) . This practice eliminates a grain drop and keeps any dust inside of the hopper. The grain is removed by the leg lift. The bin will be left full for the remainder of the days' receiving. The next truck that comes in and thereafter for the day, the bin will be full of grain and a very short time period will occur from when the truck hopper is opened before choking occurs. Choke flow control is a standard practice and is considered to be 90% effective in controlling dust. The attached Texas TCEQ guidance for grain elevator documents 90% control. Refer to the utube video link https://www.youtube.com/watch?v=zwhRv8xMxvg for choke flow in an empty receiving bin.

Truck loading of grain is similarly choked. A flexible chute extends from the overhead loading bin to the truck bin. Grain is loaded and then as it rises, the grain covers the end of the flexible chute as grains continues to flow into the truck bin. The chute is slowly lifted and the truck pulls forward to maintain choke flow during the loading.

In-plant Roads

CrossRoads had initially committed to use calcium chloride on the base coarse roads to control road dust from the truck travel. This is a very good dust suppression method. They have experience with this in other operations and can attest to its effectiveness. However the Bureau would not allow 90% control efficiency for its use because it is not in a table of road efficiencies that they use. In order to use 90%, they would have required application of water, which effectively eliminates the effectiveness of the calcium chloride. Therefore, the emission estimate for roads uses only base coarse plus water at 80% control efficiency relative to a bare dirt road. Calcium chloride application will not be used.

Modeling Organization

The operations at the site are manned by limited staff and they will only operate one elevator at a time and not both simultaneously. This can be a permit condition. Further, truck receiving and truck loading are mutually exclusive activities. The passageway receiving/loading area in both "C" and "B" have doors at both ends. Both for receiving or loading the west end doors could be closed during those operations and then opened to let out the truck. I have opted to take no credit

for this limited building enclosure and instead used zero PM capture efficiency as if both doors are open. If needed, the 50% capture in the table e-mailed by the Bureau on 5/20/2016 may have to be relied upon, but it is not currently planned.

The normal operating hours of the elevator during non-harvest periods is 7 am to 5 pm. Note that there are two extra months in the Aermod Summer factor set and two extra months in the Fall factor set that have operating hours specified outside of the normal "END" factor operating hours but which are actually from 7 am to 5 pm. This is just the result of specifying seasons instead of using the more complicated but accurate months factor sets.

Modeling was conducted in four modeling runs. Two runs deal with the operation of loading separately from the "C" and the "B" elevators but not both elevators together. The loading activity can occur throughout the year except that it never occurs during harvest. For modeling, the Aermod model was run as if loading could occur year round even during harvest. This provides two additional modeled months of truck loading that do not actually occur. If needed to show compliance with standards, CrossRoads would accept a permit condition that loading cannot occur during harvest and then I would drop the harvest months from the model, but that is not needed in the current modeling demonstration to show compliance with standards. The second set of two runs deal with the grain receiving separately to the "C" and the "B" elevators. In all four runs, loading and receiving are from either "C" or "B" but not both together at the same time. For receiving, the model was run for the full year even though it is not likely for grain receiving to happen beyond the harvest periods and receiving is limited by the storage capacity of the silos and bins. Note in the plot plan that here are numerous other structures and bins on the property and these are not used.

The "C" and the "B" elevator model runs were accomplished by using two factor sets within each run. The first set used the Aermod SEASHR factor set. As the factor set names implies, the factor is broken into seasons and into hours of the day within the seasons. Elevator operation, when it occurs, always begins at 7 am year round. During non-harvest times, elevator operation ends at 5 pm. During the wheat harvest June (summer factor) the ending time was 9 pm (21 hrs) and during the October harvest (Fall factor) the ending time was 6 pm (18hr). The second factor set in each model run is the Aermod HROFDY set and in that factor set, all hours were set to zero. For this latter factor set named "OUT", all emission points that are not included in the model run associated with loading or with receiving respectively and with either the "C" or "B" elevator building and elevator road segments respectively, were included in this set.

<u>Loading Sources</u>

"B" "Load" SEASHR factor group included emission points = [EP11A1, EP11A2, EP11B, EP12, EP14A, EP14B, EP15A, EP15B, R1A1, R1A2, R1B, R2A1, R2A2, R41-R44, R51,R52].

"C" "Load" SEASHR factor group included emission points = [EP2A1, EP2A2, EP2b, EP3, EP4, EP6A, EP6B, R1A1, R1A2, R1B, R2A1, R2A2, R2B1, R2B2, R31, R32]

<u>Receiving Sources</u>

"B" "Receiving" SEASHR factor group included emission points = [EP10A, EP10B, EP11A1, EP11A2, EP11B, EP12, EP13, R1A1, R1A2, R1B, R2A1, R2A2, R41-R44, R51,R52].

"C" "Receiving" SEASHR factor group included emission points = [EP1A, EP1B, EP2A1. EP2A2, EP2B, EP3, EP4, R1A1, R1A2, R1B, R2A1, R2A2, R2B1, R2B2, R31, R32]

The SEASHR factor set for all four model runs is:

	SEASHR Factors			
	Winter	Spring	Summer	Fall
Hr				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	1	1	1	1
9	1	1	1	1
10	1	1	1	1
11	1	1	1	1
12	1	1	1	1
13	1	1	1	1
14	1	1	1	1
15	1	1	1	1
16	1	1	1	1
17	1	1	1	1
18	0	0	1	1
19	0	0	1	0
20	0	0	1	0
21	0	0	1	0
22	0	0	0	0
23	0	0	0	0
24	0	0	0	0

The number in the factor set is a multiplier against the factor emission rate for each of the emissions included in the set. So for example, if EP1A is included, then for the season "winter", the emission associated with EP1A would be multiplied by either 0 or 1 for the specified hours in the winter set.

There is one other operation that could occur, but that case has no direct concentration contact with the outside. There is a gravity chute that runs from the overhead bins at the "B" building to the receiving pit of the "C" building that allows grain to be transferred to the "C" elevator from "B" (See Figure 14 or 15). In this case, both doors in the receiving passageway would be closed and the leg lift, distributor and bin loading all are either double controlled or occur in the

enclosed building. No trucks are involved in this mode and hence no road traffic. The estimated emissions are smaller than either receiving or truck loading and have not been modeled.

Volume Source Parameters

For this site all emissions are fugitive PM. From the Google Earth view of this site, it is obvious that there are many significant structures present that will influence dispersion. Yet for fugitive emissions, the Aermod model does not know the structures exist even though they are entered into the model. The only time that the AERMOD model emission is affected by structures (downwash) is if the emission is from a stack. A quick look at the BEEST model output view display shows that Aermod simply runs the emission in a straight line right through the structure as though it were not there. As a consequence, for all volume sources (fugitive) the user must resort to setting the parameters Sigma-yo and Sigma-Zo and the release height that define the volume emission source commensurate to simulate wake effects that are quite obviously present with these large silo structures, out buildings and storage bins. The wakes and eddies will mix the fugitive emissions. They will not remain at ground level due to the wakes. I chose values for the low level fugitives at values to simulate wake effects based on my professional engineering judgment and with observations accumulated over the years.

Modeling Results

Model runs were set up to run both CrossRoads sources only and to run for CrossRoads plus surrounding sources (cumulative). The source only runs were used to (a) establish that the outermost concentrations of the receptor grid were not significant and that the grid covered the Radius of Impact ("ROI") of the plant; (b) establish that the maximum concentrations with respect to the PSD Class II increment would be met by the source alone. I believe that it is clear that the PSD increment does not need to be considered since the grain elevator was constructed circa 1960 and operated up until 2006 and so baseline emissions would have been established during that time. Since CrossRoads operation does not use many of the structures and does not use rail loading, its emissions are a subset of the baseline emissions and would not consume increment. None the less, the increments were compared to the model results to be safe.

The significance levels and PSD Class II increments are shown in Table 1 as follows:

Table 1

Concentration in micrograms/m^3

	S.L(annual/24 hr)	PSD Class II Increment(annual/24 hr)
TSP	1/5	none
PM10	1/5	17/30
PM2.5	0.3/1.2	4/9

The chart below shows the result of the verification that the concentrations of the PM pollutants are below the significance levels shown in the table above for either of the annual or the 24-hour periods at the outermost row/column of the Cartesian grid.

Table 2 Model Concentration at Outer Boundary of Cartesian Grid is Significant (Yes/no)

	B-Sig Level	C-Sig Level		B-Sig Level	C-Sig Level
Loading			Receiving		
TSP	yes	yes	TSP	yes	no
PM-10	no	no	PM-10	no	no
PM2.5	no	no	PM2.5	no	no

While no concentrations are listed, this summary of a review of all model source only PM concentrations states that they are not significant levels at the outermost receptor grid boundary or they are significant. This has bearing only on the subsequent cumulative model results which follows in that the Hi-Pro surrounding source located SSE of the CrossRoads plant produces high PM concentrations on the southern outermost receptor grid boundary. It turns out that this is entirely the result of Hi-Pro emissions.

The model concentration results from the source only runs for loading and for receiving of grain at each of the "C" elevator and the "B" elevator are shown in the following table below. The table also shows that the source only maximum impacts comply with the PSD Class II increment (PM-10 and PM2.5).

Table 3 CrossRoads Only PM Concentrations, (ug/m^3)

Loading			Receiving		
B-loading	annual	24-hour (2nd)	B-Receiving	annual	24-hour (2nd)
TSP	25.3	80.5 (1st)	TSP	12.9	40.6 (1st)
PM10	10.5	30.6	PM10	4.5	12.8
PM2.5	1.75	5.1	PM2.5	0.72	2.1
C-loading			C-Receiving		
TSP	23.7	61.4 (1st)	TSP	14.9	39 (1st)
PM10	8.9	22.4	PM10	5.2	13
PM2.5	1.44	3.65	PM2.5	0.82	2.1

CrossRoads by itself meets the PSD Class II increment for PM10 and PM2.5 for all situations except for the 24-hour PM-10 for B-Loading. Loading produces higher concentrations than does receiving. B-loading produces higher concentrations than does C-loading. Not much stock should be placed in the annual results since both receiving and loading were run 365 days per year, whereas, receiving happens primarily during only two months, and loading trucks 365 (including when receiving at harvest occurs) is physically impossible since it results in more grain shipped out than is taken in. Therefore, for the overall cumulative analysis of standards and increments with all surrounding sources, only the B-loading modeling run needs to be considered. Note that PSD emissions ought to be a subset of the Naaqs emissions, so that if increment is met when considering surrounding sources, then no further analysis is needed.

Again a cautionary note about these results is in order - the NMED Air Quality Bureau has only allowed control for full equipment enclosure and only at 95%, and it has not allowed for the double containment that is present. The effect of this is in effect not recognizing the presence of the elevator structure in which the equipment enclosure resides. For example, grain reclaim

occurs inside an fully enclosed auger in a concrete tunnel underneath the silo structure with no contact possible to the outside air (see Figure 10). Yet the effect of the Bureaus' insistence of not recognizing the double containment means that the auger reclaim emissions are treated as though they were above ground and located outside and with no silo is present and leaking grain dust to the outside. Consequently, the resulting high emissions used in the model and the inflated concentration results should not be given much weight.

All Source (Cumulative) Run Results

No PM background has been added to the results in the table 4 below. These concentrations do include all surrounding sources and one surrounding source in particular causes high concentrations at the outermost southern ring. This is likely due to a combination of merging this source and running the source 24 hours per day/ 365 days per year.

Table 4 Maximum Concentrations from "B" loading Operations including Surrounding Sources

Max anywhere with Surrounding Sources (ug/m^3)			Max near Property with Surrounding Sources (ug/m^3)		
	Annual	24-hour (2nd High)		Annual	24-hour (2nd High)
TSP	33.86[(a)]	140.3[(a)]	TSP	32.1	86.7 (1st)
PM10	12.67*/8.4[(b)]	47.94[(a)]/27.3[(b)]	PM10	13.26*[(c)]	33.46
PM2.5	3.56[(a,c)]	11.5[(a)]/7.11[(b)]	PM2.5	2.83[(c)]	8.07[(c)]

* PM10 Naaqs was rescinded.
(a) Due to Hi-Pro source; CrossRoads impact is not significant.
(b) At 2nd from outermost receptor, meet the PSD increment
(c) Meets PSD Class II increment

This table shows that near the CrossRoads plant, the PSD Class II increments for PM2.5 are met. The PSD Class II increment for PM-10 is met for the annual period but due to the artificially inflated emissions the PSD Class II increment for PM10 24-hour period is not modeled to be met. At the outermost southern grid boundary and the second row north of the outer southern grid boundary, the high concentrations are due to surrounding sources and not from CrossRoads. At the second southern grid row, even though the high concentrations are due to surrounding sources and CrossRoads impacts are not significant, the PM10 and PM2.5 PSD Class II increments are met. As stated earlier, PSD increment does not apply to this permit as the emissions are either a subset of baseline emissions or are baseline emissions and baseline emissions do not consume increment.

For TSP, the model was set to select the 1st through 7th high values to output. For each of the days that produced the high concentration, the date associated with each of these seven high values was run. It is quite clear from those model day only runs that all of the high concentrations on the southern boundary are due principally to the Hi-Pro neighboring source and that CrossRoads does not impact those locations at anything close to significance. This same

conclusion can be reached by inspecting the "All" Group and the Surrounding source Group ("SURR").

Due to this observation, only the concentrations near the plant property need to be evaluated with respect to the Naaqs or state ambient standards since the concentrations decrease as one moves away from the facility and the outer receptors are not significant. The final results including background concentrations and surrounding source contributions is shown in the following table. Background concentrations were obtained from the NMED Air Quality Bureau Modeling Guideline (2014) from Hobbs, which is the nearest monitoring location to Clovis. Clovis background concentrations should all be lower due to the heavy agricultural ground cover.

Table 5 Total Cumulative PM Concentrations (ug/m^3)

Pollutant	Facility Only Concentration	Facility Plus Surrounding	Background Concentration	Total Concentration	Ambient Standard	Class II Increment
TSP 24-hr 1st H	80.5	86.7	51.9	138.6	150	
annual	25.3	32.1	21.1	53.2	60	
PM10 24-hr	30.6	33.46	46.2	79.7	150	30
annual	10.5	13.26	none	13.26	none	17
PM2.5 24-hr 1st	5.56	9.7	12.4	22.1	35	
2nd	5.14	8.07	12.4	20.5	35	9
4th	4.57	7.36	12.4	19.8	35	
6th	4.15	6.66	12.4	19.1	35	
annual	1.75	2.83	6.2	9.0	12	4

The conclusion from the model is that both the Naaqs and the NMaaqs are met from operation of the grain elevator facility. Since the grain elevator was built and operated from 1960 until 2006 and the minor source baseline date was triggered on Feb. 20, 1979, baseline emissions were established. CrossRoads is using only a portion of the original main silo storage and several other silos and rail loading that were previously used are not being used for this operation. It follows that CrossRoads emissions would be less than the baseline emissions and therefore, PSD increment does not apply.

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-A: Identification	
1	Name of facility: CrossRoads-Ag West
2	Name of company: CrossRoads Agriculture
3	Current Permit number: None
4	Name of applicant's modeler: Bruce R. Nicholson, PE
5	Phone number of modeler: (505) 982-2737 phone or (505) 670-5519 cell
6	E-mail of modeler: Brucnichol@aol.com

16-B: Brief			
1	Why is the modeling being done? Choose an item. *Restarting a grain elevator that has been shut down.*		
2	Describe the permit changes relevant to the modeling. NA		
3	What geodetic datum was used in the modeling? Choose an item. *NAD83*		
4	How long will the facility be at this location? *Permanent*		
5	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?		No
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). *This facility was built and operated from circa*		

	1960 until it closed in 2006. The facility will now resume a smaller limited operation. *The minor source baseline date for PM was Feb. 20, 1979.*
8	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits). *None, nearest is Salt Creek at 137.3 km*
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. *None*

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). *Do not know the modeling history of this facility. It was previously owned by Gavilon under permit number 2910 but was closed in 2006 and removed from their permit.*

	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
	CO			
	NO_2			
	SO_2			
	H_2S			
	PM2.5	Unknown		
	PM10	Unknown		
	TSP	Unknown		
	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	Pollutant not emitted or not changed.
	CO					
	NO_2					
	SO_2					
	H_2S					
	PM2.5			X		
	PM10			X		
	TSP			X		
	Lead					
	Ozone					
	State air toxic(s) (20.2.72.402 NMAC)					

16-E: New Mexico toxic air pollutants modeling

1	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. ***There are no TAP pollutants from the grain elevator.***
	List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.

	Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor

16-F: Modeling options

1	What model(s) were used for the modeling? Why? *Aermod*
2	What model options were used and why were they considered appropriate to the application? *Aermod factor set SEASHR and factor set HROFDY. These were used to create runs where just one elevator operates at one time and to include or exclude emission points so that grain receiving or grain loading could be modeled separately as these activities are mutually exclusive activities.*

16-G: Surrounding source modeling

1	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. *No changes were made to the surrounding sources inventory.*
2	Date of surrounding source retrieval. *May 12, 2016 supplied by Eric Peters.*

	AQB Source ID	Description of Corrections

16-H: Building and structure downwash

1	How many buildings are present at the facility?	*Two main grain elevators and one office building, 5 grain storage vessels (unused), one grain loadout building (unused) and one storage building (unused).*

2	How many above ground storage tanks are present at the facility?	5	
3	Was building downwash modeled for all buildings?		No
4	If not, explain why. *All source emissions are fugitive.*		
5	Building comments		

16-I: Receptors and modeled property boundary

1	A physical barrier (fence line) to which public entry is effectively precluded (restricted area) in order to exclude receptors from the facility property. If the facility does not have a fence line, then receptors shall be placed within the property boundaries of the facility. Use of natural barriers such as cliffs to restrict public access must be pre-approved by the Minor Source Program Manager. **What is the question for yes/no?** Describe the fence or other physical barrier at the facility that defines the restricted area. *The facility cannot be fenced due to railway ROW and city street ROW. Receptors have been placed within the property, being mindful that no receptor is placed in the immediate proximity of any emission point.*	Yes	No
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?		No
3	Are restricted area boundary coordinates included in the modeling files? *yes there are **25** discrete receptors within the property.*	Yes	
4	Describe the receptor grids and their spacing. *A pseudo fence was created along the property boundary and grid spacing along the "fence" is 25 m, then distance grid spacing of 25m to 75M, 50m to 100m and finally 100m to 300m. Total receptors are 243 receptors including the receptors that are within the property.*		
5	Describe receptor spacing along the fence line. *At 25m*		
6	Describe the PSD Class I area receptors. *None, nearest class one area is 137 km distance and pollutants are no longer significant past about 200m.*		

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.		No
2	If so, describe.		
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	

16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).

	There are four (4) model cases run. The site has two grain elevators but only one elevator building will be used at any given time, not both simultaneously. This results in two (2) model runs, one for operations at each building. Grain receiving during harvest precludes truck grain loading during that same time. In fact truck receiving and truck loading are mutually exclusive activities since the receiving and loading area are the same. Two model runs were created to address truck receiving and truck loading. This results in four (4) run files. One case not evaluated because its emissions are less than any of the four listed above occurs if grain is fed by gravity pipe from the B elevator bin to the C receiving pit. In that case, both end doors in C are closed.		
2	Which scenario produces the highest concentrations? Why? *Truck loading from building "B" produced the highest concentrations.*		
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)	Yes, refer to attached discussion.	
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: *See modeling report attachment, this table does not work.*		

5

Hour of Day	Factor	Hour of Day	Factor								
1		13									
2		14									
3		15									
4		16									
5		17									
6		18									
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: Refer to the attached model narrative.

6	Were different emission rates used for short-term and annual modeling?		No, but they could have been
7	If yes, describe.		

16-L: NO_2 Modeling - This section does not apply

1	Which types of NO_2 modeling were used? Check all that apply. *None, there are no combustion sources present.*	
		100% NO_X to NO_2 conversion
		ARM
		PVMRM
		OLM

		ARM2
		Other:
2	Describe the NO_2 modeling.	
3	In-stack NO_2/NO_X ratio(s) used in modeling.	
4	Equilibrium NO_2/NO_X ratio(s) used in modeling.	
5	Describe/justify the use of the ratios chosen.	
6	Describe the design value used for each averaging period modeled. 1-hour: Choose an item.	

16-M: Particulate Matter Modeling

1	Select the pollutants for which plume depletion modeling was used.		
		PM2.5	
		PM10	
		TSP	
	X	None	
2	Describe the particle size distributions used. 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.		No

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. *Does not apply.*		
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. ***N/A***		
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	
4	Provide a cross-reference table between unit numbers if they do not match. It's ok to place the table below section 16-N for easier formatting.		
5	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match?	Yes	
6	If not, explain why.		

7	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled? ***N/A***	Yes	No
8	Which units consume increment for which pollutants? *None since grain elevator was built and operated prior to PSD and present operation emissions are a subset of the baseline emissions.*		
9	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions 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	
11	If not please explain how increment consumption status is determined for the missing installation dates.		

16-O: Flare Modeling - Does not apply

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)

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? *For road volume sources, the every other method was used to establish how many road volume sources to use. In a couple of cases the number of road volume sources was increased.* *All emissions at this site (both road and process) are fugitive. There are 5 large grain storage vessels(tanks), and two very large-tall grain silo structures and a large out building, a storage building and an office building. For fugitive sources Aermod does not know that these structures are present. Yet significant wake effects are present that will dilute the fugitive emissions. Thus judgments were used to establish appropriate release heights, and sigma-yo and sigma-zo values.*	Yes	
2	If the dimensions of volume sources are different from standard dimensions in the AQB Modeling Guidelines, describe how the dimensions were determined. *See attached modeling discussion.*		
3	Describe the determination of sigma-Y and sigma-Z for fugitive sources. *Refer to the attached model discussion.*		
4	Describe how the volume sources are related to unit numbers. Or say they are the same. *They are the same except for those that occur at the elevator passageway. In those cases the emissions were split at each end of the building passageway assuming that both doors will be open. Otherwise, the base unit number was retained. See separate discussion. For example, EP1 was split into EP1A, EP1B. Road2 has 4 individual volume sources. Refer to the model Beest View Display for details.*		
5	Describe any open pits. *None*		
6	Describe emission units included in each open pit. *N/A*		

16-Q: Background Concentrations

1	Identify and justify the background concentrations used. *Background concentrations for TSP, PM10 and PM2.5 were taken from the Modeling Guideline for the Hobbs site, which is the closest to Clovis.*		
2	Were background concentrations refined to monthly or hourly values?		No

16-R: Meteorological Data

1	Identify and justify the meteorological data set(s) used. *The Empire Abo Aermod dataset was used for this modeling. Clovis is in the same general meteorological regime as most of the SW part of the state that is largely governed by gulf coast flow. This dataset is representative of the area including Clovis and was prepared by the NMED Air Quality Bureau.*
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. *Dataset prepared by the Air Quality Bureau.*

16-S: Terrain

1	Was complex terrain used in the modeling? If no, describe why. *No terrain was used because the area is flat and all emission sources are fugitive.*
2	What was the source of the terrain data? *Not applicable.*

16-T: Modeling Files

1 Describe the modeling files: *For the culpability portion there were individual days run to demonstrate that one particular surrounding source was the cause of high concentrations at the outermost receptor and that the permitee's emissions were not significant. Refer to the attached model documentation for complete discussion.*

File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
Loadingall/C-loading-all	TSP, PM10, PM2.5	Cumulative/culpable
Loadingall/B-loading-all	TSP, PM10, PM2.5	Cumulative/culpable
Receivingall/B-Receiving-all	TSP, PM10, PM2.5	Cumulative/culpable
Receivingall/C-Receiving-all	TSP, PM10, PM2.5	Cumulative/culpable
Loading/B-Loading	TSP, PM10, PM2.5	Source only (ROI grid coverage, other)
Loading/C-Loading	TSP, PM10, PM2.5	Source only
Receiving/B-Receiving	TSP, PM10, PM2.5	Source only
Receiving/B-Receiving	TSP, PM10, PM2.5	Source only

16-U: PSD New or Major Modification Applications - *Not Applicable*

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
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes	No
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed?		

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. *Refer to the attached discussion for model results. These form tables do not work well with the discussion of modeling.*
2	Identify the maximum concentrations from the modeling analysis. *The maximum concentrations occur on the property or near the property boundary, once the issue with the neighboring source is settled.*

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

16-W: Location of maximum concentrations

1	Identify the locations of the maximum concentrations. *These locations are for the B-loadingall run (with all surrounding sources). Highest in grid is due to Hi-Pro source where CrossRoads is not significant.*

Pollutant	Period	UTM East (m)	UTM North (m)	Elevation (ft)	Distance (m)	Radius of Impact (ROI) (m)
TSP	annual	665565.07	3807734.91	4258.5	on prop	
TSP	24-hour	665565.07	3807734.91	4258.5	on prop	
PM10	24-hour	665575.66	3807690.04	4258.5	6.25 south	
PM2.5	annual	665565.07	3807734.91	4258.5	on prop	
PM2.5	24-hour 6th	665581.90	3807750.50	4258.5	on prop	

16-X: Summary/conclusions

1	A statement that modeling requirements have been satisfied and that the permit can be issued. The modeling demonstrates that all standards will be met and that this facility will not cause or contribute to any violations of ambient air quality standards. *The modeling analysis has demonstrated that all NMAAQS and NAAQS for particulate matter will be met as the result of operating the subject grain elevator.*

This is the first try at using this new set of tables and I can say positively that it is a huge waste of paper since the modeling analysis cannot be crammed into a set of arbitrary Q and A tables and many of the table questions could be accomplished as one line questions instead of taking much more room with a table. A model report, whether the Bureau likes it or not, is needed; forms do not adequately replace narrative.

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.

To save paper and to standardize the application format, delete this sentence and the samples in the Compliance Test History Table, and begin your submittal for this attachment on this page.

Compliance Test History Table **(Modify this sample table to suit your facility)**

Unit No.	Test Description	Test Date
	This is a new permit. No tests have yet been established.	None

This is a new permit and no previous emissions tests have been conducted. All emissions are fugitive and consequently there are no tests (stacks) that can be tested. Most emission points are located within the concrete elevator structure and so it is not appropriate to do visible emission tests within the structure. Visible emission Method 22 might be a valid test for the fugitives at the property line.

Section 20

Other Relevant Information

Other relevant information. 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.

Section 22: Certification

Company Name: CrossRoads Agriculture

I, Albert Tourangeau, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 31 day of May, 2016, upon my oath or affirmation, before a notary of the State of

_____.

*Signature

5/31/16
Date

Albert Tourangeau
Printed Name

President of operations
Title

Scribed and sworn before me on this 31 day of MAY, 2016.

My authorization as a notary of the State of NM expires on the

14 day of MARCH, 2017.

Notary's Signature

5.31.16
Date

Shawn Nunnery
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.