



**APPLICATION FOR PERMIT MODIFICATION
AUTHORITY TO CONSTRUCT
PERMIT NO. 2080**

EAST MOUNTAIN TRANSFER STATION
Tijeras, New Mexico

August 28, 2026

Mr. Michael McKinstry
Albuquerque/Bernalillo County Air Quality Program
Permitting Section
One Civic Plaza NW
3rd floor, Room 3023
Albuquerque, NM 87102

Re: East Mountain Transfer Station:
ATC Permit Modification Application
Response to AQP's 2nd Administrative Incompleteness Determination
Permit No. 2080-M1 [040683.23]

Dear Mr. McKinstry,

On behalf of our client, Bernalillo County (the "County"), Parkhill is pleased to provide the Albuquerque/Bernalillo County Air Quality Program (AQP) with the attached Response to the AQP's 2nd Administrative Incompleteness Determination dated August 7, 2026 in response to the County's July 6, 2026 Revised Application for Permit Modification to ATC Permit 2080 for the East Mountain Transfer Station (EMTS) located at 711 (and 715) NM Hwy 333 in Tijeras, New Mexico (the facility occupies two parcels) submitted in response to the AQP's February 26, 2025 1st Administrative Incompleteness Determination. The initial Application for Modification was submitted on January 27, 2025 in response to changes made to the facility's green waste grinding equipment, and pursuant to discussions during the pre-application meeting held on March 8, 2023, between the County, Parkhill, and AQP.

The numbered items below correspond with the July 2, 2026 2nd Administrative Incompleteness Determination. Responses are provided *in italics* following each numbered request.

Original wet-ink signatures were not provided on the Application, Review Checklist, and Compliance History Disclosure Forms in the hardcopy submittal as required. Please provide wet-ink signatures on the Application, Review Fee Checklist, and Compliance History Disclosure Forms.

The Application, Review Fee Checklist, and Compliance History Disclosure Forms are provided with wet signatures as part of this Application Package.

1. Unit 1 Executive Order U-R-001-0461 seems to have inaccurate details. The engine for Unit 1 is a 475-kW unit, but the Executive Order appears to be for engines greater than 560 kW. Please provide an Executive Order that accurately reflects Unit 1.
 - a. This same issue appears to be present on the EPA Certificate of Conformity for Unit 1. The certificate lists an engine size of 560<kW<=900.

The correct forms reflecting emission rates appropriate to Unit 1 rating (130<kW<=560) are included in this Response.

2. The applicant is using emission factors from both Tables 6 and 8, Interim Tier 4 Exhaust Emission Standards. The Program cannot accept emission factors from different tables for different pollutants. The applicant should use emission factors only from Table 6. When emission standards are revised, the emission limits must be updated throughout the submittal. Modeling does not need to be redone after switching to lower emissions using only Table 6.

For Unit 1, emission calculations have been revised to use only emission rates from Table 6 or approved alternate.

Items 3-6 refer to additional review of the modeling submitted for the East Mountain Transfer Station.

3. This 2nd submittal is missing the CO and PM_{2.5} ROI modeling files. These other pollutant models are described in the modeling report, but only NO₂ is included in the ROI and NAAQS modeling files. This 2nd submittal is supposed to be a complete resubmittal with all required components, not relying on anything from the 1st submittal. This was clearly stated in the first bullet point in the Apr. 24, 2026, email from Mike McKinstry to Bernalillo County and Parkhill. "The 2nd submittal must be a complete application package with all required components." All modeling files listed in Section 5.0 should have been included with this 2nd submittal. They need to be included with the 3rd submittal.

Complete modeling files listed in Section 5.0 and used in this application are provided on the included thumb drive as part of the most recent modeling as requested.

4. Section 4.3 of the modeling report states that Cirrus used 1/3 arc-second NED files downloaded from USGS to generate elevations instead of the 1 arc-second NED files from the CABQ website, and Section 5.0 says the USGS files were not submitted. If different NED files from those provided on the CABQ website are used, please provide those NED files as part of the submittal.

The 1/3 arc-second NED DEM files downloaded from USGS and utilized in the modeling are provided on the included thumb drive.

5. Section 4.5 of the modeling report states that Cirrus determined there were no building downwash effects from the structures at the EMTS in the ROI models, so they did not use building downwash in the CIA models. Please provide an explanation that clarifies how it was determined that there were no building downwash effects.

Reviewing the BPIP-Prime files, it was determined there were no building downwash effects associated with the structures at the facility (see the "EMTS – BPIP-Prime.SO" file provided with the ROI and NAAQS modeling files). As a result, cumulative impact modeling was conducted without building downwash. Note that when BPIP-Prime identifies no downwash effects, BEEST does not include downwash data in the model input file, even if downwash is requested during the build.

6. Why is Section 2.1-Alternative Operating Scenario missing from this 2nd submittal modeling report? Is the alternative operating scenario no longer requested or desired?

Section 2.1-Alternative Operating Scenarios was unintentionally omitted from the ADM Report in the 2nd submittal modeling report and has been reinstated in the provided revision.

Thank you for your review of this submittal, please feel free to reach out to me via email or phone with any further questions or comments. We look forward to working with the AQP on this Permit Modification.

Sincerely,

PARKHILL



Andy Yuhas, PG
Professional Geologist | Associate

Enclosures:

1. ATC Permit Modification Application 2nd Resubmittal, Permit No. 2080; Text, Tables, Figures, Attachments.
2. Two Hard Copies, one wet signature original and one working copy.
3. One complete digital copy including emissions calculations and ADM modeling data on a thumb drive
4. One digital copy of Air Dispersion Modeling files and data

cc: Mr. Gabriel Villegas, Manager, Bernalillo County Solid Waste Department
(w/attachments)

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SECTION 1.0: GENERAL INFORMATION

1.1 Executive Summary

This application proposes the modification of Authority to Construct (ATC) Permit #2080 for the East Mountain Transfer Station (EMTS) located at 711/715 NM highway 333, Tijeras, New Mexico 87059 (The facility occupies two parcels). The Transfer Station is owned and operated by Bernalillo County, New Mexico (the County), and was issued Permit #2080 on July 19, 2010 for a single diesel-powered horizontal green waste grinder, utilized for converting green and woody waste delivered to the transfer station into mulch to be used by the City of Albuquerque, Bernalillo County, and private customers.

Modifications to the Permit are comprised of replacement of the original diesel-powered horizontal green waste grinder operated at the facility with a newer unit, and the addition of a second diesel-powered horizontal grinder to the site's operations. Updated emissions for both units are provided within this application to accurately characterize total emissions from engines at EMTS. The addition of a second grinder to the EMTS does not require an increase in the requested maximum allowable operational hours for grinding activities at the facility, as the total requested cumulative operational hours between the two units will remain at 800 hours per year.

As required for an application for permit modification, updated air dispersion modeling has been completed and is included in this submittal. The modeling report (**Section 4**) details model inputs and modeled concentrations associated with the proposed modifications. The report also demonstrates compliance with all applicable National and New Mexico Ambient Air Quality Standards (NAAQS and NMAAQs). At the direction of the Albuquerque-Bernalillo County Air Quality Program (AQP), sulfur dioxide (SO₂) modeling was not required due to extremely low emissions of the pollutant due to the use of ultra-low sulfur diesel fuels.

The site's uncontrolled and controlled emissions associated with this proposed modification are included on AQP-provided forms in Appendix A and are summarized on **Table 1.2.1**.

1.1.1 Alternative Operating Scenarios

Once per year, the County may operate one of their grinders at a remote location within the County for the purpose of Christmas tree or green yard waste grinding/recycling. The event would be conducted at one of two locations as listed below (not simultaneously). Public access to the equipment would not be allowed, and safe separation distance would be further ensured by requiring stockpiling of the trees/green waste by the public during the two weeks prior to the grinding event when the grinder was not present. The grinder would then be transported to the site at the end of those two weeks and used to grind the accumulated material for one day of operation at the remote site of choice. Additional safety measures during the grinding day would be achieved by installing physical safety barriers (cones and caution tape, or similar) and warning signage a minimum of 100 feet from the grinding and loading equipment on every side.

Location #1:

North Valley
Raymond G. Sanchez Community Center
9800 4th St. NW #2125
Albuquerque, NM 87114

Location #2:

South Valley Multipurpose Senior Center
2008 Larrazolo Rd. SW
Albuquerque, NM 87105

1.2 Tables of Uncontrolled and Controlled Emissions

TABLE 1.2.1
Controlled and Uncontrolled Emissions

Pollutant		NO _x		CO		SO _x		VOC		PM ₁₀		PM _{2.5}		HAP	
Units		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Emission Unit 1 MY2013 Grinder	Uncontrolled Emissions	2.09	9.17	3.67	16.05	0.0073	0.0320	0.20	0.87	0.021	0.09	0.021	0.09	0.0169	0.0740
	Controlled Emissions ¹	2.09	0.84	3.67	1.47	0.0073	0.00292	0.20	0.08	0.021	0.008	0.021	0.008	0.0169	0.00675
Emission Unit 2 MY2019 Grinder	Uncontrolled Emissions	4.61	20.21	4.61	20.21	0.0087	0.0380	0.25	1.10	0.053	0.23	0.053	0.23	0.0201	0.0878
	Controlled Emissions ¹	4.61	1.85	4.61	1.85	0.0087	0.00347	0.25	0.10	0.053	0.021	0.053	0.021	0.0201	0.00802

NOTES:

1. Controlled Emissions calculated assuming maximum operational hours of 800 hours per year of either unit. Cumulative annual operational will not exceed 800 hours

1.3 Changes in Emissions from previous Permit

Depending on the regulated pollutant emission rate being calculated, sitewide emissions estimates both increased and decreased when compared to the original Permit. Reductions in emissions in NO_x, SO₂, VOC, TSP, PM₁₀, and PM_{2.5}, and slight increases in emissions of CO and VHAP have been estimated. The source of the reductions is attributable to the replacement of older engines with more efficient modern engines which are equipped with emissions control technologies required by USEPA regulations, and combustion of lower-sulfur fuels. The reason for the emission increases are mainly a result of increased horsepower of the new units. **Table 1.3.1** provides detailed emissions changes resulting from this application for modification.

TABLE 1.3.1
Change in Emissions from Current ATC Permit

Pollutant	NO _x		CO		SO _x		VOC		PM ₁₀		PM _{2.5}		HAP	
Units	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Current permitted Emissions	6.17	2.47	3.65	1.46	5.1	2.04	0.44	0.18	0.21	0.08	0.21	0.08	NA	NA
Proposed Revision	4.61	1.85	4.61	1.85	0.0087	0.00347	0.25	0.10	0.053	0.021	0.053	0.021	0.0201	0.00802
Change Increase/Decrease	-1.56	-0.62	0.96	0.39	-5.09	-2.04	-0.19	-0.08	-0.157	-0.059	-0.157	-0.059	0.0201	0.00802

SECTION 2.0: DESCRIPTION OF FACILITY AND EMISSIONS INFORMATION

2.1 Facility Description

The Description below details the process of accepting, stockpiling, and grinding of green and woody wastes, as well as storing completed chipped material (mulch) at EMTS, which is a portion of the overall operations conducted at the facility. Only emissions from the grinder's engines are subject to air quality permitting.

The East Mountain Transfer Station (EMTS) is a municipal solid waste transfer station located at 711/715 Highway 333, Tijeras in Bernalillo County, New Mexico 87059 (The facility occupies two parcels). The facility is owned and operated by the Bernalillo County Public Works (BCPW) department. The EMTS facility includes an enclosed tipping floor/loadout tunnel (Transfer station) building, a cashier booth, a covered public recycling drop-off and storage area, an uncovered chipping area, and several uncovered storage bunkers and piles for chipped and unchipped green waste, woody C&D waste, manure, bulky waste and white goods.

EMTS is constructed, operated, monitored, and inspected in compliance with a Solid Waste Facility Permit granted in 2023 by the New Mexico Environment Department (NMED) Resource Recovery Bureau (RRB) pursuant to the New Mexico Solid Waste Rules (NMSWR, 20.9.2-20.9.10 NMAC).

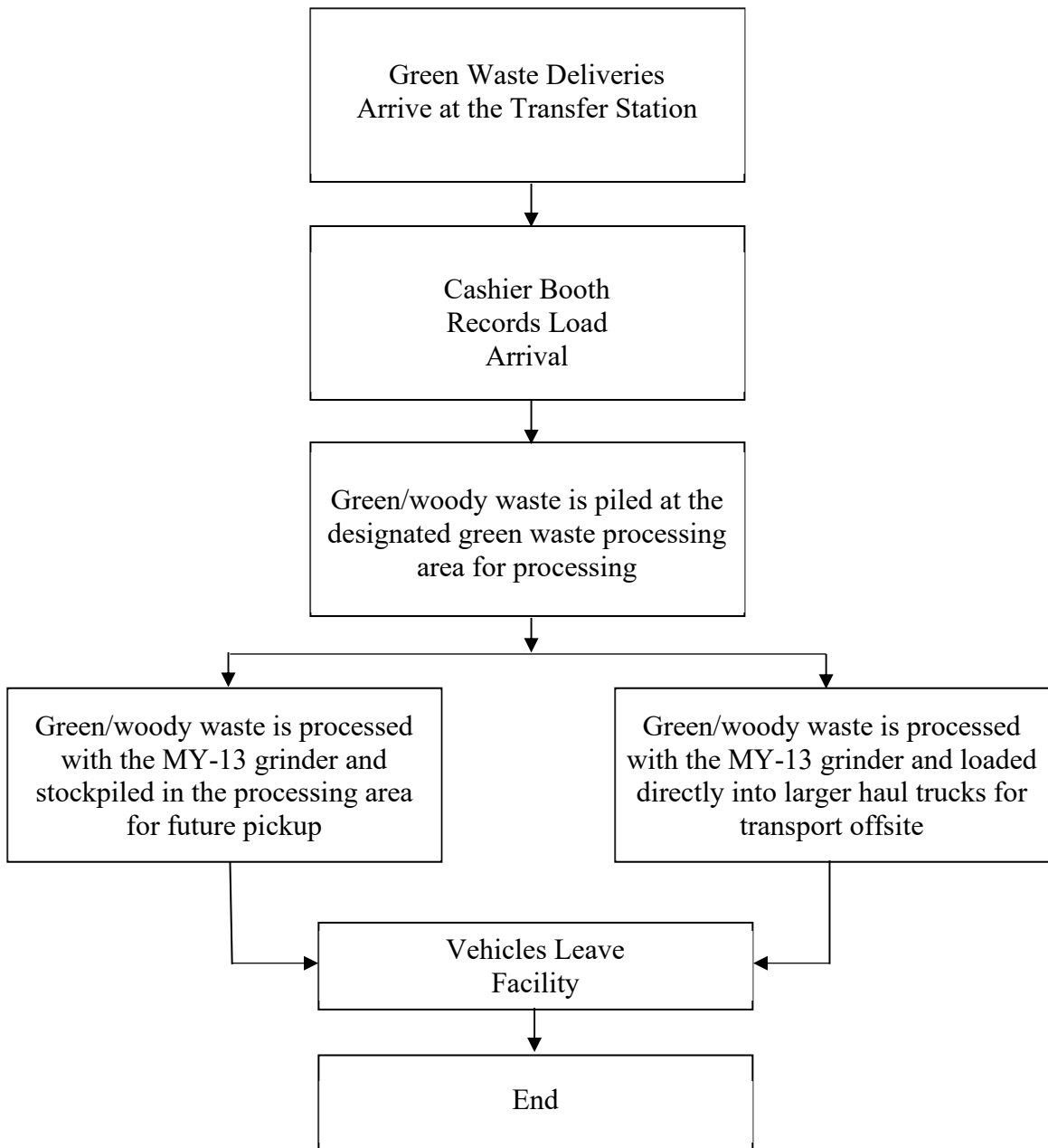
2.1.1 Green and woody waste acceptance, processing Description (Process Flow)

Green and woody wastes are delivered to EMTS by the public as part of the regular MSW stream, and clean loads of these materials are diverted by transfer station staff to the green and woody waste stockpiles, located near the facility's grinders (Exhibit D). The following sequence of activities occur while processing these materials:

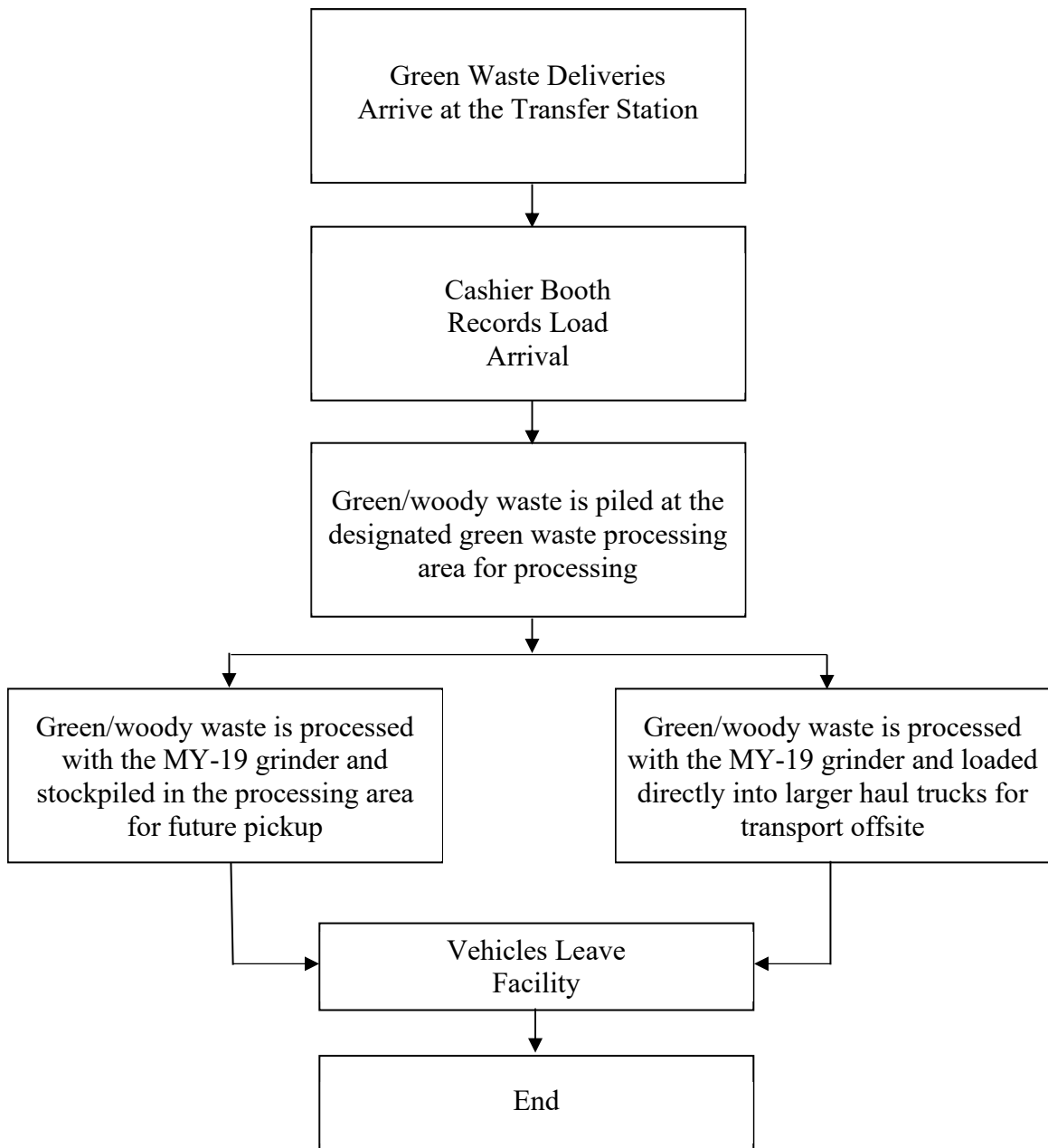
- Green and woody wastes are diverted at the cashier's booth to the green and woody waste stockpiles positioned near the grinders.
- Upon accumulation of a sufficient volume of green and woody waste, transfer station staff begin the grinding process by starting one of the grinders. Grinders are never operated simultaneously.
- A front-end loader (John Deere 544K or similar) is used to load green and woody waste into the operating grinder from the nearby stockpiles.
- Grinder processing (grinding) is started, processing the wastes from their raw form into chipped woody material
- Processed material travels out of the grinder on an integrated conveyor belt and is stacked in completed material stockpiles suitable for use as mulch, composting feedstock, landscaping material, or erosion/dust control.
- Stockpiled processed materials are given to citizens, City entities, County departments, or New Mexico Department of Transportation to be used in various projects.

2.2 Process Flow Sheets

2.2-1
MY 2013 Horizontal Grinder Process Flow Diagram
(Emission Unit 1)



2.2-2
MY 2019 Horizontal Grinder Process Flow Diagram
(Emission Unit 2)



2.3 Air Pollutant Emissions and Calculation Methodology

2.3.1 Emissions from Grinder Engines

- Calculations of HAP emissions from the grinder engines are based on available published emission rates in AP-42, section 3.3, Table 2.
- PM, NO_x, and CO emissions are based on emission rates provided in 40 CFR §1039.
 - Emission rates provided in Tables 6 of 40 CFR §1039.102 are used for emissions generated by the MY 2013 grinder (Unit 1).
 - Emission rates provided in Table 1 of 40 CFR §1039.101 are used to estimate Emissions generated by the MY 2019 grinder (Unit 2).
- SO₂ emissions are calculated using mass balance equations which assume a fuel sulfur content of 0.0015% (15 ppm) for ultra-low sulfur diesel fuel, and manufacturer provided fuel usage rates.

As required, uncontrolled emissions values are based on a scenario where both grinders are operating 24 hours per day, 7 days per week for the year. Controlled emissions values are based on the operation of grinders for only 800 total hours per year (approximately 15.4 hours per week). During routine operations, only one grinder will be utilized at a time. The two grinders will never be operated simultaneously, and the total combined operational hours for both grinders shall not exceed 800 hours per year. Therefore, the total requested emissions in this Modification are equivalent to the Unit with the highest emissions (Unit 2, MY2019 Grinder) being operated 800 hours per year.

Supporting documentation utilized in this Application is provided in the next section.

2.4 Supporting Information

AP-42 Sections

Emission rates from AP-42 section 3.3 were used to estimate CO₂ and HAP emissions from the operation of the diesel grinder engines.

EPA CFR sections

Code of Federal Regulations (CFR) Section 40, §1039.101 Table 1, and §1039.102 table 6 were utilized in estimating NO_x, CO, PM and VOC emissions from engine operations for the Units.

Equipment data and certification forms

Manufacturer certification documents from US EPA and the California Air Research Board (CARB) have been utilized in estimating hourly fuel consumption used in calculation of other emissions.

AP-42
Table 3.3-2

Table 3.3-2. SPECIATED ORGANIC COMPOUND EMISSION
FACTORS FOR UNCONTROLLED DIESEL ENGINES^a

EMISSION FACTOR RATING: E

Pollutant	Emission Factor (Fuel Input) (lb/MMBtu)
Benzene ^b	9.33 E-04
Toluene ^b	4.09 E-04
Xylenes ^b	2.85 E-04
Propylene	2.58 E-03
1,3-Butadiene ^{b,c}	<3.91 E-05
Formaldehyde ^b	1.18 E-03
Acetaldehyde ^b	7.67 E-04
Acrolein ^b	<9.25 E-05
Polycyclic aromatic hydrocarbons (PAH)	
Naphthalene ^b	8.48 E-05
Acenaphthylene	<5.06 E-06
Acenaphthene	<1.42 E-06
Fluorene	2.92 E-05
Phenanthrene	2.94 E-05
Anthracene	1.87 E-06
Fluoranthene	7.61 E-06
Pyrene	4.78 E-06
Benzo(a)anthracene	1.68 E-06
Chrysene	3.53 E-07
Benzo(b)fluoranthene	<9.91 E-08
Benzo(k)fluoranthene	<1.55 E-07
Benzo(a)pyrene	<1.88 E-07
Indeno(1,2,3-cd)pyrene	<3.75 E-07
Dibenz(a,h)anthracene	<5.83 E-07
Benzo(g,h,i)perylene	<4.89 E-07
TOTAL PAH	1.68 E-04

^a Based on the uncontrolled levels of 2 diesel engines from References 6-7. Source Classification Codes 2-02-001-02, 2-03-001-01. To convert from lb/MMBtu to ng/J, multiply by 430.

^b Hazardous air pollutant listed in the *Clean Air Act*.

^c Based on data from 1 engine.

40 CFR 1039

Emission Rate Tables

1039.101 Table 1

1039.102 Table 6

1039.102(e)(2) Alternate NOx standard allowance

PM, NO_x, NMHC and CO emission rates used for Unit 2 (MY 2019 Grinder) emissions calculations

Table 1 of §1039.101—Tier 4 Exhaust Emission Standards After the 2014 Model Year, g/kW-hr^a

Maximum Engine Power	Application	PM	NO _x	NMHC	NO _x +NMHC	CO
kW < 19	All	0.40 ^b	-	-	7.5	6.6 ^c
19 ≤ kW < 56	All	0.03	-	-	4.7	5.0 ^d
56 ≤ kW < 130	All	0.02	0.40	0.19	-	5.0
130 ≤ kW ≤ 560	All	0.02	0.40	0.19	-	3.5
kW > 560	Generator sets	0.03	0.67	0.19	-	3.5
kW > 560	All except generator sets	0.04	3.5	0.19	-	3.5

^aNote that some of these standards also apply for 2014 and earlier model years. This table presents the full set of emission standards that apply after all the transition and phase-in provisions of §1039.102 expire.

^bSee paragraph (c) of this section for provisions related to an optional PM standard for certain engines below 8 kW.

^cThe CO standard is 8.0 g/kW-hr for engines below 8 kW.

^dThe CO standard is 5.5 g/kW-hr for engines below 37 kW.

PM, NO_x, NMHC and CO Emission rates used for Unit 1 (MY 2013 Grinder) emissions calculations

Table 6 of §1039.102—Interim Tier 4 Exhaust Emission Standards (g/kW-hr): 130 < kW < 560

Model years	Phase-in Option	PM	NO_x	NMHC	NO_x+NMHC	CO
2011-2013	Phase-in	0.02	0.40	0.19	-	3.5
	Phase-out	0.02	-	-	4.0	3.5
2014	All engines	0.02	0.40	0.19	-	3.5

- (d) **Banked credits and alternate phase-in for 56-130 kW engines.** For engines in the 56-130 kW power category, you may use only one of the following additional provisions:
- (1) For model years 2012 through 2014, you may use banked NO_x + NMHC credits from any Tier 2 engine at or above 37 kW certified under the standards identified in appendix I of this part to meet the NO_x phase-in standards or the NO_x + NMHC phase-out standards under paragraphs (b) and (c) of this section, subject to the additional ABT provisions in § 1039.740.
 - (2) Instead of meeting the phase-in requirements of paragraph (c)(1) of this section, you may certify engine families representing at least 25 percent of your U.S.-directed production volume for each model year from 2012 through 2014 to the applicable phase-in standards in Tables 4 and 5 of this section, except as allowed by paragraph (c)(3) or (e) of this section. Any engines not certified to the phase-in standards must be certified to the corresponding phase-out standards. Engines certified under this paragraph (d)(2) may generate NO_x emission credits only for averaging within the same power category during the same model year. For engines certified under this paragraph (d)(2), the 2014 model year may not extend beyond December 30, 2014.
- (e) **Alternate NO_x standards.** For engines in 56-560 kW power categories during the phase-in of Tier 4 standards, you may certify engine families to the alternate NO_x or NO_x + NMHC standards in this paragraph (e) instead of the phase-in and phase-out NO_x and NO_x + NMHC standards described in Tables 4 through 6 of this section. Engines certified to an alternate NO_x standard under this section must be certified to an NMHC standard of 0.19 g/kW-hr. Do not include engine families certified under this paragraph (e) in determining whether you comply with the percentage phase-in requirements of paragraphs (c) and (d)(2) of this section. Except for the provisions for alternate FEL caps in § 1039.104(g), the NO_x and NO_x + NMHC standards and FEL caps under this paragraph (e) are as follows:
- (1) For engines in the 56-130 kW power category, apply the following alternate NO_x standards and FEL caps:
 - (i) If you use the provisions of paragraph (d)(1) of this section, your alternate NO_x standard for any engine family in the 56-130 kW power category is 2.3 g/kW-hr for model years 2012 and 2013. Engines certified to this standard may not exceed a NO_x FEL cap of 3.0 g/kW-hr.
 - (ii) If you use the provisions of paragraph (d)(2) of this section, your alternate NO_x standard for any engine family in the 56-130 kW power category is 3.4 g/kW-hr for model years 2012 through 2014. Engines below 75 kW certified to this standard may not exceed a NO_x FEL cap of 4.4 g/kW-hr; engines at or above 75 kW certified to this standard may not exceed a NO_x FEL cap of 3.8 g/kW-hr.
 - (iii) If you do not use the provisions of paragraph (d) of this section, you may apply the alternate NO_x standard and the appropriate FEL cap from either paragraph (e)(1)(i) or (ii) of this section.
 - (2) For engines in the 130-560 kW power category, the alternate NO_x standard is 2.0 g/kW-hr for model years 2011 through 2013. Engines certified to this standard may not exceed a NO_x FEL cap of 2.7 g/kW-hr.
 - (3) You use NO_x + NMHC emission credits to certify an engine family to the alternate NO_x + NMHC standards in this paragraph (e)(3) instead of the otherwise applicable alternate NO_x and NMHC standards. Calculate the alternate NO_x + NMHC standard by adding 0.1 g/kW-hr to the numerical value of the applicable alternate NO_x standard of paragraph (e)(1) or (2) of this section. Engines

Manufacturer Engine Certification Forms



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2013 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990

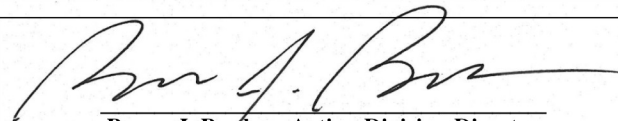
EMISSION UNIT #1
OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: Caterpillar Inc.
(U.S. Manufacturer or Importer)

Certificate Number: DCPXL18.1HPA-005

Effective Date:
08/14/2012

Expiration Date:
12/31/2013


Byron J. Bunker, Acting Division Director
Compliance Division

Issue Date:
08/14/2012

Revision Date:
N/A

Model Year: 2013

Manufacturer Type: Original Engine Manufacturer

Engine Family: DCPXL18.1HPA

Mobile/Stationary Indicator: Both

Emissions Power Category: 130<kW<=560

Fuel Type: Diesel

After Treatment Devices: Diesel Oxidation Catalyst, PTOX-DPF-Active

Non-after Treatment Devices: Engine Design Modification, Electronic/Electric EGR - Cooled,
Electronic Control

FELs: NOx 1.9 g/kW-hr, PM 0.01 g/kW-hr

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Parts 60 and 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Parts 60 and 1039 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Parts 60 and 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Parts 60 and 1039.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Parts 60 and 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Parts 60 and 1039.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

This certificate of conformity is conditional upon compliance of said manufacturer with the averaging, banking and trading provisions of 40 CFR Part 1039, Subpart H. Failure to comply with these provisions may render this certificate void *ab initio*.

California Environmental Protection Agency Air Resources Board	CATERPILLAR INC.	EXECUTIVE ORDER U-R-001-0460 New Off-Road Compression-Ignition Engines
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Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2013	DCPXL18.1HPA	18.1	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Oxidation Catalyst, Engine Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer			Crane, Pump, Compressor, Commercial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Interim Tier 4 ALT NO _x	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	1.9	N/A	N/A	0.01	N/A	N/A	N/A
		CERT	0.05	1.7	--	0.3	0.002	--	--	--

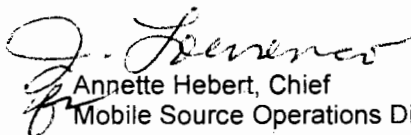
BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 27th day of August 2012.


Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Template

U-R-001-0460

EMISSION UNIT #1

8/16/2012

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
DCPXL18.1HPA	Cert Test 1	C18	426@2000	258	174	2172@1300	409	179	DFI,TC,ECM,CAC,EGR,PTOX,OC
DCPXL18.1HPA	Cert Test 2	C18	488@2000	297	200	2413@1300	456	200	DFI,TC,ECM,CAC,EGR,PTOX,OC
DCPXL18.1HPA	1 - 630/1900	C18	426@2000	258	174	2172@1300	406	178	DFI,TC,ECM,CAC,EGR,PTOX,OC
DCPXL18.1HPA	2 - 600/1900	C18	406@2000	244	164	2068@1300	384	164	DFI,TC,ECM,CAC,EGR,PTOX,OC
DCPXL18.1HPA	3 - 700/1900	C18	488@2000	297	200	2413@1300	450	197	DFI,TC,ECM,CAC,EGR,PTOX,OC
DCPXL18.1HPA	4 - 630/1900	C18	426@2000	258	174	2172@1300	406	178	DFI,TC,ECM,CAC,EGR,PTOX,OC
DCPXL18.1HPA	5 - 700/1900	C18	488@2000	297	200	2413@1300	450	197	DFI,TC,ECM,CAC,EGR,PTOX,OC



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2019 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT**

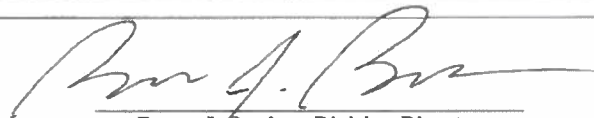
**OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105**

Certificate Issued To: Caterpillar Inc.
(U.S. Manufacturer or Importer)

Certificate Number: KCPXL18.1HXF-019

Effective Date:
07/27/2018

Expiration Date:
12/31/2019


Byron J. Bunker, Division Director
Compliance Division

Issue Date:
07/27/2018

Revision Date:
N/A

Model Year: 2019

Manufacturer Type: Original Engine Manufacturer

Engine Family: KCPXL18.1HXF

Vermeer: HG6000 7/1 2027 Cat C18 Engine S/N BDN04216

Mobile/Stationary Indicator: Both

Emissions Power Category: 560<kW<=900

Fuel Type: Diesel

After Treatment Devices: Diesel Oxidation Catalyst

Non-after Treatment Devices: Electronic Control, Electronic/Electric EGR - Cooled

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Parts 60 and 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Parts 60 and 1039 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Parts 60 and 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Parts 60 and 1039.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Parts 60 and 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Parts 60 and 1039.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

 CALIFORNIA AIR RESOURCES BOARD	CATERPILLAR INC.	EXECUTIVE ORDER U-R-001-0556 New Off-Road Compression-Ignition Engines
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Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2019	KCPXL18.1HXF	18.1	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Oxidation Catalyst, Exhaust Gas Recirculation			Pump, Compressor, Commercial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

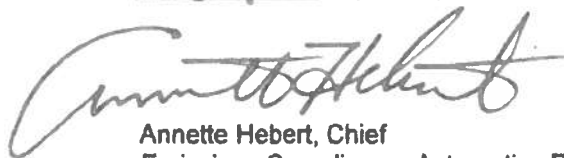
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
ELSE > 560 kW	Tier 4 Final	STD	0.19	3.5	N/A	3.5	0.04	N/A	N/A	N/A
		CERT	0.03	2.9	—	0.00	0.04	—	—	—

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 21 day of September 2018.



Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT 1 OF 1

Engine Model Summary Template 4-R-001-0556

8/21/2018

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
KCPXL18.1HXF	Cert Test 1	C18	798@1800	451	273	2694@1300	498	217	DFI,TC,ECM,CAC,EGR,OC
KCPXL18.1HXF	1	C18	798@1800	451	273	2694@1300	498	217	DFI,TC,ECM,CAC,EGR,OC
KCPXL18.1HXF	2	C18	754@1800	439	266	2578@1300	480	210	DFI,TC,ECM,CAC,EGR,OC
KCPXL18.1HXF	3	C18	754@1800	439	266	2578@1300	480	210	DFI,TC,ECM,CAC,EGR,OC
KCPXL18.1HXF	4	C18	756@1950	416	273	2575@1300	476	208	DFI,TC,ECM,CAC,EGR,OC
KCPXL18.1HXF	5	C18	802@1950	436	286	2693@1300	494	216	DFI,TC,ECM,CAC,EGR,OC

Engine Model	RPM	HP	-- Exhaust --	
			Intake Temp. (°F)	Flow (CFM)
ALLIS CHALMERS				
10000.....	2200	145	265	
11000.....	2200	220	560	
16000.....	2100	250	420	
17000 MKII ..	2100	300	780	
2000.....	2100	59	97	
21000 MKII ..	2100	375	875	
213.....	3600	32	75	
2200.....	2100	55	97	
25000 MKII ..	2100	450	1050	
2800.....	2600	85	200	
2900.....	2600	135	340	
320.....	3600	53	114	
3400.....	2400	125	240	
3500.....	2400	175	380	
3700.....	2400	200	400	
426.....	3600	72	150	
433I.....	2400	100	247	
433T.....	2400	90	242	
6000.....	2200	104	218	
61000.....	2100	800	2300	
6138I.....	2100	450	1060	
6138LT.....	2100	325	790	
6138T.....	2100	375	875	
649I.....	2600	155	430	
649T.....	2600	135	390	
65000.....	2100	900	2400	
670I.....	2400	200	490	
670T.....	2400	175	460	
685I.....	2200	266	680	
685T.....	2200	220	555	
7000.....	2200	160	300	
D175.....	2200	52	85	
D262.....	2200	78	128	
D344.....	1800	88	143	

CASE				
301BD.....	2200	94	153	1000 414
336BD.....	2200	104	171	1000 462
336BDT.....	2200	126	267	850 648
451BD.....	2200	142	360	1000 973
451BDT.....	2200	181	380	900 957
504BD.....	2200	155	275	950 718
504BDT.....	2200	221	440	900 1108
504BDTI.....	2200	256	600	950 1567
A267D.....	2000	73	123	1000 333
A284.....	2000	136	1000	368
A377.....	1800	139	1000	376
A451D.....	2000	145	200	1000 541
G188.....	2000	49	82	1000 222
G188D.....	2250	62	138	1000 373

CATERPILLAR				
1160.....	2800	225	410	1050 1146
1673T.....	2200	250	600	950 1567
1674TA.....	2200	270	690	900 1738
1693TA.....	2100	1080	900	2720
3116.....	2600	200	618	856 1511
	2600	250	713	867 1755
	2450	275	685	929 1773
	2600	300	745	984 2006

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
CATERPILLAR CONTINUED					
3126B	2200	175	1239	660	2640
	2300	190	1355	716	3017
	2200	210	1327	741	3031
	2200	230	593	808	1471
	2200	250	635	821	1595
	2200	275	649	867	1683
	2200	300	660	916	1778
	2400	330	709	931	1937
3140	2800	410	1000	1109	
3145	2800	410	1050	1146	
3150	2800	410	1000	1109	
3160	2800	410	1080	1169	
3176	1800	275	692	676	1458
	1800	300	738	693	1579
	1800	350	802	760	1819
	1800	365	805	808	1900
3204NA	2400	66	193	980	515
3208ATAC	 up to 300	950			
3208N	2200	165	325	1076	930
3208NA	2800	210	410	1000	1109
3208T	2800	250	646	900	1627
	2200	215	591	855	1443
3208T-DIATAAC	2600	275	752	854	1837
	2800	300	871	874	2162
3208T-DIT	2600	250	649	976	1740
3304B	 up to 165	950			
3304NA	2200	102	206	1050	576
3304T	2200	165	264	900	665
3306	1900	300	745	1019	2059
3306B	1800	285	745	825	1781
	1800	300	777	843	1887
3306NA	2200	150	325	950	849
3306T	2200	250	600	900	1511
	 up to 300	850			
3306TA	2200	270	624	950	1629
3406	1900	425	1109	880	2758
3406B	1800	300	930	655	1917
	1800	330	986	705	2125
	1800	350	1016	739	2255
	1800	400	1052	753	2364
	1800	425	1077	806	2532
	1900	460	1108	847	2694
3406E	1800	355	967	762	2301
	1800	375	1023	899	2717
	1800	435	1066	901	2872
	1800	455	1083	919	2925
	1800	475	1105	937	3017
	1800	500	1119	954	3098
	1800	575	1164	959	3236
	1800	600	1164	959	3236
3406T	2100	339	910	900	2292
3406TA	2100	375	1000	900	2519
3408T	2100	425	980	900	2468
3408TA	2100	475	1220	900	3073
3412T	2100	650	1719	870	4234
3412TA	2100	750	2426	900	6420
3508	1800	1000	2490	900	6271
3512	1800	1500	3695	900	9306
3516	1800	2000	4830	900	12164
3606	1000	2475	5850	850	14192
3608	1000	3330	7235	800	16882
3612	1000	4950	11700	800	27300
3616	1000	6655	14470	800	33763

Engine Model	RPM	HP	Intake CFM	-- Exhaust --	
				Temp. (°F)	Flow (CFM)
CATERPILLAR CONTINUED					
5.4-6	2000	437	1041	950	2718
5.4-8	1900	614	1477	950	3857
5.4V12	1900	896	1936	900	4876
5.75-6	1330	317	780	950	2037
6.25-6	1375	440	1111	950	2901
C-10	1800	305	755	821	1888
	1800	335	766	918	2078
	1800	350	752	892	1997
	1800	370	766	918	2078
C-12	1800	335	805	876	2110
	1800	355	815	859	2121
	1800	380	826	898	2202
	1800	395	833	924	2265
	1800	410	836	937	2287
	1800	425	815	922	2220
	1800	430	826	948	2276
	1800	455	819	953	2269
C-15	1800	355	963	762	2294
	1800	375	1023	899	2714
	1800	435	1066	902	2830
	1800	455	1083	919	2925
	1800	475	1105	937	3017
	1800	500	1119	954	3098
C-16	1800	575	1154	941	3165
	1800	600	1164	959	3236
D330NA	2200	100	227	1050	635
D330T	2200	165	418	950	1091
D333NA	2200	150	349	1000	944
D333T	2200	250	613	900	1544
D334TA	2200	280	689	950	1799
D336TA	2200	350	895	950	2337
D342NA	1300	200	418	1050	1169
D342T	1300	300	887	950	2316
D343T	2000	315	786	950	2052
D343TA	2000	425	996	900	2508
D346TA	2000	565	1350	900	3400
D348TA	2000	850	2048	900	5158
D349TA	2000	1130	2827	900	7120
D353TA	1300	490	1091	900	2748
D379TA	1300	650	1501	900	3780
D398TA	1300	975	2323	900	5851
D399T	1300	1300	3009	900	7578

CONTINENTAL MOTORS					
E201.....	2400	104	1100	300	
F124.....	2400	65	1100	188	
F135.....	2000	40	1100	168	
F140.....	2400	84	1100	243	
F162.....	2400	60	1100	243	
F186.....	2400	101	1100	292	
F209.....	2400	109	1100	315	
F226.....	2400	115	1100	332	
F227.....	2400	78	1100	335	
F244.....	2400	126	1100	364	
F245.....	2400	88	1100	367	
G134.....	2000	58	1100	168	
G157.....	2000	68	1100	196	
H227.....	2000	96	1100	277	
H243.....	2000	104	1100	300	
H260.....	2000	112	1100	324	
J382.....	2000	160	1100	462	
L478.....	2400	162	1100	766	
M271.....	2400	141	1100	407	
M290.....	2400	151	1100	436	

2.5 Emissions Calculations

The following tables provide the emissions calculations for both potential (uncontrolled) emissions rates (each engine operating at full capacity 24 hours per day, 365 days per year), and calculations for requested allowable emissions (each engine operating 800 hours per year). Engines will not be operated simultaneously at any time, and total combined operational hours annually will not exceed 800 hours. Actual maximum (controlled) requested emissions will be equal to the highest emitting unit (Unit 2) operating 800 hours per year.

Table 2.5.1 – Emission Unit 1, Uncontrolled Emissions Calculations

Table 2.5.2 – Emission Unit 2, Uncontrolled Emissions Calculations

Table 2.5.3 – Emission Unit 1, Controlled Emissions Calculations

Table 2.5.4 – Emission Unit 2, Controlled Emissions Calculations

TABLE 2.5.1

Uncontrolled Emissions

Emission Unit 1 - MY 2013 Horizontal Grinder Engine Emissions Estimates (Operational Max - PER)								
Emission Factors based on US EPA Interim Tier 4 standards for engines of this power range (i.e., 130<kW<=560)								
Horsepower: Prime Power Rating provided by equipment supplier (CAT C18 Tier 4 interim engine, 475kW, 638hp)								
Unit fuel consumption****: 34.4 gallons/hour by supplier/vendor documentation								
Diesel No. 2 HHV 0.1295 MMBtu/gallon								
Model Year: 2013								
Vermeer: HG6000 S/N: 1058 Cat C18 Engine S/N: BDN01715								
Horizontal Grinder Engine Emissions (PER)								
Parameter	Emission Factor (g/kW-hr)	Rated Power Class**	Engine Power Rating (kW)	g/lb	hrs/yr *	lb/ton	Emissions (lbs/hr)	Emissions (tons/yr)
Hydrocarbons (VOCs) **	0.19	130 ≤ kW < 560	475	453.6	8760	2,000	0.20	0.87
NOx ***	2.00						2.09	9.17
CO **	3.5						3.67	16.05
PM (TSP, PM ₁₀ , and PM _{2.5}) **	0.02						0.021	0.09
CO ₂ ¹	699.5						732.50	3208.35
SO ₂ ²	0.00164						0.0073	0.0320
Individual HAPs (AP-42 Section 3.3)	Emission Factor (lb/MMBtu/hr)	Gallons/hour	MMBtu/gal	g/lb	hrs/yr *	lb/ton	Emissions (lbs/hr)	Emissions (tons/yr)
Benzene (HAP/VOC)	9.33E-04	34.4	0.1295	453.6	8760	2,000	4.16E-03	1.82E-02
Toluene (HAP/VOC)	4.09E-04						1.82E-03	7.98E-03
Xylenes (HAP/VOC)	2.85E-04						1.27E-03	5.56E-03
1,3-Butadiene (HAP)	3.91E-05						1.74E-04	7.63E-04
Formaldehyde (HAP)	1.18E-03						5.26E-03	2.30E-02
Acetaldehyde (HAP)	7.67E-04						3.42E-03	1.50E-02
Acrolein (HAP)	9.25E-05						4.12E-04	1.80E-03
Naphthalene (HAP)	8.48E-05						3.78E-04	1.65E-03
Total HAPs							1.69E-02	7.40E-02
Notes: g = grams kW = kilowatt hp = horsepower NA = Not Assigned HHV = High Heating Value (heat content) ** As defined in 40 CFR 1039.102 Table 6 (Attachment C.3) *** As allowed by 40 CFR 1039.102(e)(2), Unit 1 is certified using the Alternate NOx standard for this Tier 4 Interim model year and horsepower range rather than the 109.102 Table 6 value. **** Grinder fuel consumption is approximately 34.4 gallons/hour as documented by vendor/supplier ¹ Emission factor from AP-42 Section 3.3. CO ₂ not subject to Tier 4 Interim Exhaust Emission Standards. ² Estimated ultra low sulfur diesel emission factor: [(7.1 lb/gal x 0.000015 S) / (129,500 Btu/gal) = 8.22e-10 lb S/BTU] [(8.22e-10 lb S/Btu x 1,000,000 Btu/MMBTU) x (2 lb SO ₂ /lb S) = 1.64e-3 lb/MMBtu] <i>Note: The heat content of ultra low sulfur diesel is estimated at 129,500 Btu/gal</i>								

TABLE 2.5.2

Uncontrolled Emissions

Emission Unit 2 - MY 2019 Horizontal Grinder Engine Emissions Estimates (Operational Max - PER)								
Emission Factors based on US EPA Tier 4 Final Standards for engines of this power range and Manufacturer Certification								
Horsepower: Prime Power Rating listed by equipment manufacturer (CAT C18 Tier 4 final engine, 598kW, 802hp)								
Unit fuel consumption***: 40.86 gallons/hour by manufacturer certification								
Diesel No. 2 HHV 0.1295 MMBtu/gallon								
Model Year: 2019								
Vermeer: HG6000		S/N: 2027		Cat C18 Engine		S/N: BDN04216		
Horizontal Grinder Engine Emissions (PER)								
Parameter	Emission Factor (g/kW-hr)	Rated Power Class**	Engine Power Rating (kW)	g/lb	hrs/yr *	lb/ton	Emissions (lbs/hr)	Emissions (tons/yr)
Hydrocarbons (VOCs) **	0.19	> 560	598	453.6	8760	2,000	0.25	1.10
NOx **	3.5						4.61	20.21
CO **	3.5						4.61	20.21
PM (TSP, PM ₁₀ , and PM _{2.5}) **	0.04						0.053	0.23
CO ₂ ¹	699.5						922.22	4039.33
SO ₂ ²	0.00164						0.0087	0.0380
Individual HAPs (AP-42 Section 3.3)	Emission Factor (lb/MMBtu/hr)	Gallons/hour	MMBtu/gal	g/lb	hrs/yr *	lb/ton	Emissions (lbs/hr)	Emissions (tons/yr)
Benzene (HAP/VOC)	9.33E-04	40.86	0.1295	453.6	8760	2,000	4.94E-03	2.16E-02
Toluene (HAP/VOC)	4.09E-04						2.16E-03	9.48E-03
Xylenes (HAP/VOC)	2.85E-04						1.51E-03	6.61E-03
1,3-Butadiene (HAP)	3.91E-05						2.07E-04	9.06E-04
Formaldehyde (HAP)	1.18E-03						6.24E-03	2.73E-02
Acetaldehyde (HAP)	7.67E-04						4.06E-03	1.78E-02
Acrolein (HAP)	9.25E-05						4.89E-04	2.14E-03
Naphthalene (HAP)	8.48E-05						4.49E-04	1.97E-03
Total HAPs							2.01E-02	8.78E-02
Notes:								
g = grams								
kW = kilowatt								
hp = horsepower								
NA = Not Assigned								
HHV = High Heating Value (heat content)								
** As defined in 40 CFR 1039.101 Table 1 for Tier 4 Final engines with minimum power rating >560 kW								
*** Grinder fuel consumption is approximately 40.86 gallons/hour as documented by Manufacturer								
¹ Emission factor from AP-42 Section 3.3. CO2 not subject to Tier 4 Exhaust Emission Standards.								
² Estimated ultra low sulfur diesel emission factor: [(7.1 lb/gal x 0.000015 S) / (129,500 Btu/gal) = 8.22e-10 lb S/BTU] [(8.22e-10 lb S/Btu x 1,000,000 Btu/MMBTU) x (2 lb SO2/lb S) = 1.64e-3 lb/MMBTU] <i>Note: The heat content of ultra low sulfur diesel is estimated at 129,500 Btu/gal</i>								

Controlled Emissions

Emission Unit 1 - MY 2013 Horizontal Grinder Engine Emissions Estimates (Requested Operational Hours)								
Emission Factors based on US EPA Interim Tier 4 standards for engines of this power range (i.e., 130<kW<=560)								
Horsepower: Prime Power Rating provided by equipment supplier (CAT C18 Tier 4 Interim engine, 475kW, 638hp)								
Unit fuel consumption****: 34.4 gallons/hour by supplier/vendor documentation								
Diesel No. 2 HHV 0.1295 MMBtu/gallon								
Model Year: 2013								
Vermeer: HG6000		S/N: 1058	Cat C18 Engine	S/N: BDN01715				
Horizontal Grinder Engine Emissions (PER)								
Parameter	Emission Factor (g/kW-hr)	Rated Power Class**	Engine Power Rating (kW)	g/lb	hrs/yr *	lb/ton	Emissions (lbs/hr)	Emissions (tons/yr)
Hydrocarbons (VOCs) **	0.19	130 ≤ kW < 560	475	453.6	800	2,000	0.20	0.08
NOx ***	2.00						2.09	0.84
CO **	3.5						3.67	1.47
PM (TSP, PM ₁₀ , and PM _{2.5}) **	0.02						0.021	0.008
CO ₂ ¹	699.5						732.50	293.00
SO ₂ ²	0.00164						0.0073	0.00292
Individual HAPs (AP-42 Section 3.3)	Emission Factor (lb/MMBtu/hr)	Gallons/hour	MMBtu/gal	g/lb	hrs/yr *	lb/ton	Emissions (lbs/hr)	Emissions (tons/yr)
Benzene (HAP/VOC)	9.33E-04	34.4	0.1295	453.6	800	2,000	4.16E-03	1.66E-03
Toluene (HAP/VOC)	4.09E-04						1.82E-03	7.29E-04
Xylenes (HAP/VOC)	2.85E-04						1.27E-03	5.08E-04
1,3-Butadiene (HAP)	3.91E-05						1.74E-04	6.97E-05
Formaldehyde (HAP)	1.18E-03						5.26E-03	2.10E-03
Acetaldehyde (HAP)	7.67E-04						3.42E-03	1.37E-03
Acrolein (HAP)	9.25E-05						4.12E-04	1.65E-04
Naphthalene (HAP)	8.48E-05						3.78E-04	1.51E-04
Total HAPs							1.69E-02	6.75E-03
Notes: g = grams kW = kilowatt hp = horsepower NA = Not Assigned HHV = High Heating Value (heat content) * The emissions values above are calculated for 800 hours operation for Emission Unit 1 ** As defined in 40 CFR 1039.102 Table 6 (Attachment C.3) *** As allowed by 40 CFR 1039.102(e)(2), Unit 1 is certified using the Alternate NOx standard for this Tier 4 Interim model year and horsepower range rather than the 109.102 Table 6 value. **** Grinder fuel consumption is approximately 34.4 gallons/hour as documented by vendor/supplier ¹ Emission factor from AP-42 Section 3.3. CO ₂ not subject to Tier 4 Interim Exhaust Emission Standards. ² Estimated ultra low sulfur diesel emission factor: [(7.1 lb/gal x 0.000015 S) / (129,500 Btu/gal) = 8.22e-10 lb S/BTU] [(8.22e-10 lb S/Btu x 1,000,000 Btu/MMBTU) x (2 lb SO ₂ /lb S) = 1.64e-3 lb/MMBTU] <i>Note: The heat content of ultra low sulfur diesel is estimated at 129,500 Btu/gal</i>								

Controlled Emissions

$$\text{Btu/MMBTU} \times (2 \text{ lb SO}_2/\text{lb S}) = \mathbf{1.64e-3 \text{ lb/MMBTU}}$$

Note: The heat content of ultra low sulfur diesel is estimated at 129,500 Btu/gal

**SECTION 3.0: OPERATION PLAN – AIR EMISSIONS DURING STARTUP,
SHUTDOWN AND MALFUNCTION (SSM)**

3.1 Emissions During SSM

Measures to be taken to reduce emissions during periods of startup and shutdown of the grinders consist of following: Manufacturer recommendations specific to engine operation (idle time observation, warm-up procedures, glow plugs, intake air heaters), Fuel type (ULSD), , and Adhering to recommended maintenance schedules. Excess emissions during malfunctions are mitigated by immediately shutting down the malfunctioning Unit, taking it out of service, and performing repairs prior to putting the equipment back into service. Engines are not operated while malfunctioning or in an error state, and are not permitted to be re-started until necessary repairs are made and documented.

SECTION 4.0: AIR DISPERSION MODELING ANALYSIS AND REPORT

- Protocol (Approved by AQP on August 10, 2023)
- Air Dispersion Modeling Report (Revised August 2026)

Protocol (Approved by AQP on August 10, 2023)

July 26, 2023

Mr. Kyle Tumpane
Air Quality Program
1 Civic Plaza
Albuquerque, New Mexico 87102

Re: 40683.23 East Mountain Transfer Station
Air Dispersion Modeling Protocol – July 2023 Revisions

Dear Mr. Tumpane:

Bernalillo County East Mountain Transfer Station (EMTS) is preparing to submit a Permit Application to the Albuquerque-Bernalillo County Air Quality Program (AQP) requesting a modification to their existing Authority to Construct (ATC) Permit. In support of this application, air dispersion modeling will be conducted for nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter less than or equal to 10 microns (PM₁₀), and particulate matter less than or equal to 2.5 microns (PM_{2.5}). The analysis will evaluate compliance with the National Ambient Air Quality Standards (NAAQS) and New Mexico Ambient Air Quality Standards (NMAAQS). This protocol outlines the proposed air dispersion modeling techniques that will be used to assess impacts around the facility.

1.0 Introduction

EMTS currently operates under ATC permit 2080, issued by the AQP July 19, 2010 (there are no other permits for the facility). It is a green waste processing facility (other waste disposal operations at the facility occur indoors and use paved roads). The facility is located at the following address:

711 Highway 333
Tijeras, New Mexico 87059

The facility is currently permitted for the following equipment/sources: one wood chipper/horizontal grinder (powered by a 630 hp diesel-fired internal combustion engine). The permit application will replace this one grinder with two new grinders: one model year 2013 horizontal grinder (powered by a 475 kilowatt (kW) diesel-fired internal combustion engine) and one model year 2019 horizontal grinder (powered by a 598 kW diesel-fired internal combustion engine).

Per direction provided by the AQP, material handling and vehicle traffic will not be included in the modeling analysis. A copy of the email providing this determination is attached.

Tables 1 - 3 identify the existing and proposed emission rates associated with the facility.

Table 1: Proposed Unit 1 and 2 Emission Rates

Pollutant	Unit 1 Emissions (lb/hr)	Unit 1 Emissions (ton/yr)	Unit 2 Emissions (lb/hr)	Unit 2 Emissions (ton/yr)
NO ₂	0.84	0.34	4.61	1.85
CO	3.67	1.47	4.61	1.85
SO ₂	0.0073	0.0029	0.0087	0.0035
PM ₁₀	0.042	0.017	0.053	0.021
PM _{2.5}	0.042	0.017	0.053	0.021

Table 2: Emission Rate Comparisons (ton/yr)

Pollutant	Current Emissions (ton/yr)	New Emissions (ton/yr)	Emissions Increase (ton/yr)
NO ₂	2.47	1.85	-0.62
CO	1.46	1.85	0.39
SO ₂	2.04	0.0035	-2.0365
PM ₁₀	0.08	0.021	-0.059
PM _{2.5}	0.08	0.021	-0.059

Table 3: Emission Rate Comparisons (lb/hr)

Pollutant	Current Emissions (lb/hr)	New Emissions (lb/hr)	Emissions Increase (lb/hr)
NO ₂	6.17	4.61	-1.56
CO	3.65	4.61	0.96
SO ₂	5.1	0.0087	-5.09
PM ₁₀	0.21	0.053	-0.157
PM _{2.5}	0.21	0.053	-0.157

The identified New Emissions in Tables 2 and 3 are the highest for a single engine.

As SO₂ emissions after the modification will be 0.0087 pounds per hour (this is a change from the 0.007 pounds per hour identified in the previous version of this protocol), a waiver for the modeling of SO₂ is requested-(per the AQP Air Dispersion Modeling Guidelines).

2.0 Facility

The EMTS is located at approximately 376,026 meters Easting, 3,884,914 meters Northing, Zone 13, North American Datum 1983 (NAD83), at an elevation of approximately 6,480 feet above mean sea level. The facility is located in a rural area. A plot plan is attached. It shows the layout of sources and buildings. It is consistent with the latest Google Earth, Google Maps, and the City's Advanced Map Viewer. The facility is enclosed by a 6-foot chain link fence.

3.0 Standards

Table 4 identifies the applicable significant impact levels (SIL), NAAQS, and NMAAQs.

Table 4: SIL, NAAQS, & NMAAQS

Pollutant	Averaging Period	SIL ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)	NMAAQS ($\mu\text{g}/\text{m}^3$)
NO ₂	Annual	1.0	--	94.02
NO ₂	1-Hour	7.52	188.03	--
CO	8-Hour	500	--	9,960.1
CO	1-Hour	2,000	--	14,997.5
PM _{2.5}	Annual	0.2	12	--
PM _{2.5}	24-Hour	1.2	35	--

All significant impacts will be determined using high-first-high impacts. In addition, special processing will be disabled for NO₂ and PM_{2.5}.

Compliance with the NO₂ annual NMAAQS demonstrates compliance with the NO₂ annual NAAQS. Compliance with the NO₂ 1-hour NAAQS demonstrates compliance with the NO₂ 24-hour NMAAQS. The high-eighth-high daily maximum NO₂ 1-hour average impacts will be used to evaluate compliance with the NO₂ 1-hour NAAQS.

Compliance with the CO 8-hour and 1-hour NMAAQS demonstrates compliance with the CO 8-hour and 1-hour NAAQS. The high-first-high CO 8-hour and 1-hour average impacts will be used to evaluate compliance with the CO 8-hour and 1-hour NMAAQS, respectively.

Since the PM_{2.5} emission rates at the facility are equal to the PM₁₀ emission rates, consistent with the AQP modeling guidelines, compliance with the PM_{2.5} 24-hour NAAQS demonstrates compliance with the PM₁₀ 24-hour NAAQS.

The high-eighth-high 24-hour average impacts will be used to evaluate compliance with the PM_{2.5} 24-hour NAAQS.

Since NO₂ and SO₂ emissions from the facility do not exceed 40 tons per year, the modeling will not account for secondary particulate formation.

Non-attainment modeling impacts will not be considered.

The EMTS is currently and will continue to be a PSD minor source. Per direction received from the AQP, PSD increment consumption modeling is not required and will not be conducted.

4.0 Dispersion Model

Both significant and cumulative impact modeling will be conducted using the latest version of the AMS/EPA Regulatory Model (AERMOD). The Beeline Software BEEST for Windows modeling manager will be used to prepare the input files and manage processing. Except as noted in the NO_x to NO₂ Conversion section below, Environmental Protection Agency (EPA) recommended defaults will be used. As the facility is located in a rural area, urban area modeling will not be conducted.

5.0 Methodology

The modeling will be conducted in accordance with this protocol and the current AQP and NMAQB modeling guidelines. First, emissions from the new equipment will be modeled to determine if there are significant impacts. Where impacts are less than the SIL, no additional modeling will be conducted. Second, where impacts exceed the SIL, cumulative impacts for comparison with the NAAQS and NMAAQS will be determined using facility impacts plus neighboring source impacts plus background concentrations.

6.0 Facility Sources

The modeled emission rates will be the pounds per hour emission rates identified in Table 1. Modeling will be conducted using stack parameters provided by manufacturers as identified in Table 5 below.

Table 5: Engine Stack Parameters

Unit	Stack Type	Stack Height (ft)	Stack Exit Temperature (°F)	Stack Exit Velocity (fps)	Stack Flow Rate (acfm)	Stack Inside Diameter (acfm)
1	Vertical	≥11	959	275	3236	0.5
2	Vertical	≥12.5	971	551	4582	0.42

The grinders will be permitted to operate a combined 800 hours per year. The facility will operate Monday through Sunday from 0700 to 1715. The grinders will operate five hours per day from 0800 through 1300. They will not operate simultaneously.

Each of the grinders will be permitted to operate in either of the two green waste processing locations (see the attached site plan). Each engine will be modeled as operating from each corner of the two green waste processing locations, for a total of eight locations per engine.

The grinder engines will be modeled as point sources (no other source types are required for the facility). The stacks will vent vertically and there will be no rain caps. The maximum hourly emission rate will be modeled for all operational hours. There will be no averaging of emissions over non-operational hours. The facility can accept setback conditions, if needed.

7.0 Building Downwash

The EPA Building Profile Input Program - Prime (BP-Prime) will be used to evaluate structures for building downwash impacts. All structures close enough (of sufficient height and/or width) to produce downwash effects from the stacks will be included in the evaluation.

8.0 Receptor Selection

A Cartesian grid with variable receptor spacing will be used to evaluate significant impacts around the facility. The grid will contain receptors with 25-meter spacing around the fence line, 50-meter spacing from the fence line out to at least 500 meters, 100-meter spacing from the 500 meters beyond the fence line out to at least 1,000 meters, 250-meter spacing from 1,000 meters beyond the fence line out to at least 3,000 meters, and 500-meter spacing from 3,000 meters beyond the fence line out to at least 5,000 meters. If the significant impact areas extend beyond 5,000 meters from the fence line, the grid will also include receptors with 1,000-meter spacing sufficient to cover the entire significant impact area.

Cumulative impact modeling will be conducted using only those receptors from the grid defined in the paragraph above for which there were significant impacts. If maximum cumulative impacts greater than or equal to 75 percent of the applicable standard are calculated at receptors located in the 100-meter, 250-meter, 500-meter, or 1,000-meter interval portions of the grid, then refined grids with 50-meter spacing will be centered on these receptors to identify the local high. These refined grids will be large enough to include adjacent receptors in all directions (200 meters square in the 100-meter interval portion of the grid, 500 meters square in the 250-meter interval portion of the grid, 1,000 meters square in the 500-meter interval portion of the grid, and 2,000 meters square in the 1,000-meter interval portion of the grid). Note: These refined grids will include only those receptors for which there are significant impacts.

The coordinate system used to reference source, structure, and receptor locations will be of the Universal Transverse Mercator (UTM) convention (NAD83). Terrain elevation data will be obtained from National Elevation Dataset (NED) data (1/3 second) taken from the United States Geological Survey (USGS) website.

The AERMOD Terrain Preprocessor (AERMAP) will be used to calculate the receptor elevations and terrain maximums. The domain used to calculate terrain maximums will be sufficient to identify all terrain nodes that create a slope greater than or equal to 10 percent.

It is assumed that the above referenced grid is sufficient to identify impacts on the property of nearby sources. Impacts inside the property of nearby facilities will be evaluated by the same methods used at all other receptor locations.

9.0 Meteorological Data

Modeling will be conducted using GCC Portland Cement Plant meteorological data provided by the AQP.

10.0 Neighboring Sources

NAAQS and NMAAQs cumulative impacts will be evaluated using neighboring sources identified by the AQP. It is assumed the AQP will include data from nearby permits that are worthy of inclusion. It will be assumed the neighboring sources operate 8,760 hours per year, unless the AQP data indicate otherwise.

11.0 Background Concentrations

Compliance with the NAAQS and NMAAQs will be evaluated using the concentrations identified by the AQP as seen in Table 6 below.

Table 6: Background Concentrations

Pollutant	Averaging Period	Background Concentration (μgm^3)	Source of Data
NO ₂	Annual	19.0	Del Norte
NO ₂	1-Hour	84.6	Del Norte
CO	8-Hour	1,336	Del Norte
CO	1-Hour	1,870	Del Norte
PM _{2.5}	Annual	5.1	Foothills
PM _{2.5}	24-Hour	15.0	Foothills

12.0 NO_x to NO₂ Conversion

NO_x impacts will be converted to NO₂ impacts using the Ambient Ratio Method 2 (ARM2). If a minimum NO₂/NO_x in-stack ratio of less than 0.5 is used, justification will be provided using data from the EPA scam website. Note that if the in-stack ratio is less than 0.5, the model must be run without the EPA default.

It is not anticipated that a more refined approach will be needed to demonstrate compliance with the NO₂ standards. If a more refined approach is needed, it will be coordinated with the AQP in advance.

13.0 Dry Plume Depletion

It is not anticipated that dry plume depletion will be required to demonstrate compliance with the standards. If it is needed, the particle size distributions will be obtained from the AQP.

14.0 Alternative Operating Scenario

Once per year, the County may operate one of their grinders at a remote location within the County for the purpose of Christmas tree or green yard waste grinding/recycling. The event would be conducted at one of two locations as listed below (not simultaneously). Public access to the equipment would not be allowed, and safe separation distance would be further ensured by requiring stockpiling of the trees/green waste by the public during the two weeks prior to the grinding event when the grinder was not present. The grinder

would then be transported to the site at the end of those two weeks, and used to grind the accumulated material for one day of operation at the remote site of choice. Additional safety measures during the grinding day would be achieved by installing physical safety barriers (cones and caution tape, or similar) and signage a minimum of 100 feet from the grinding and loading equipment on every side.

Option #1:

North Valley
Raymond G. Sanchez Community Center
9800 4th St. NW #2125
Albuquerque, NM 87114

Option #2:

South Valley Multipurpose Senior Center
2008 Larrazolo Rd. SW
Albuquerque, NM 87105

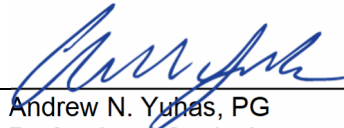
It is not proposed that modeling will be conducted for either of these temporary locations.

Thank you for your attention to this matter. If you have any questions or comments, please contact me at 505.504.7765.

Sincerely,

PARKHILL

By

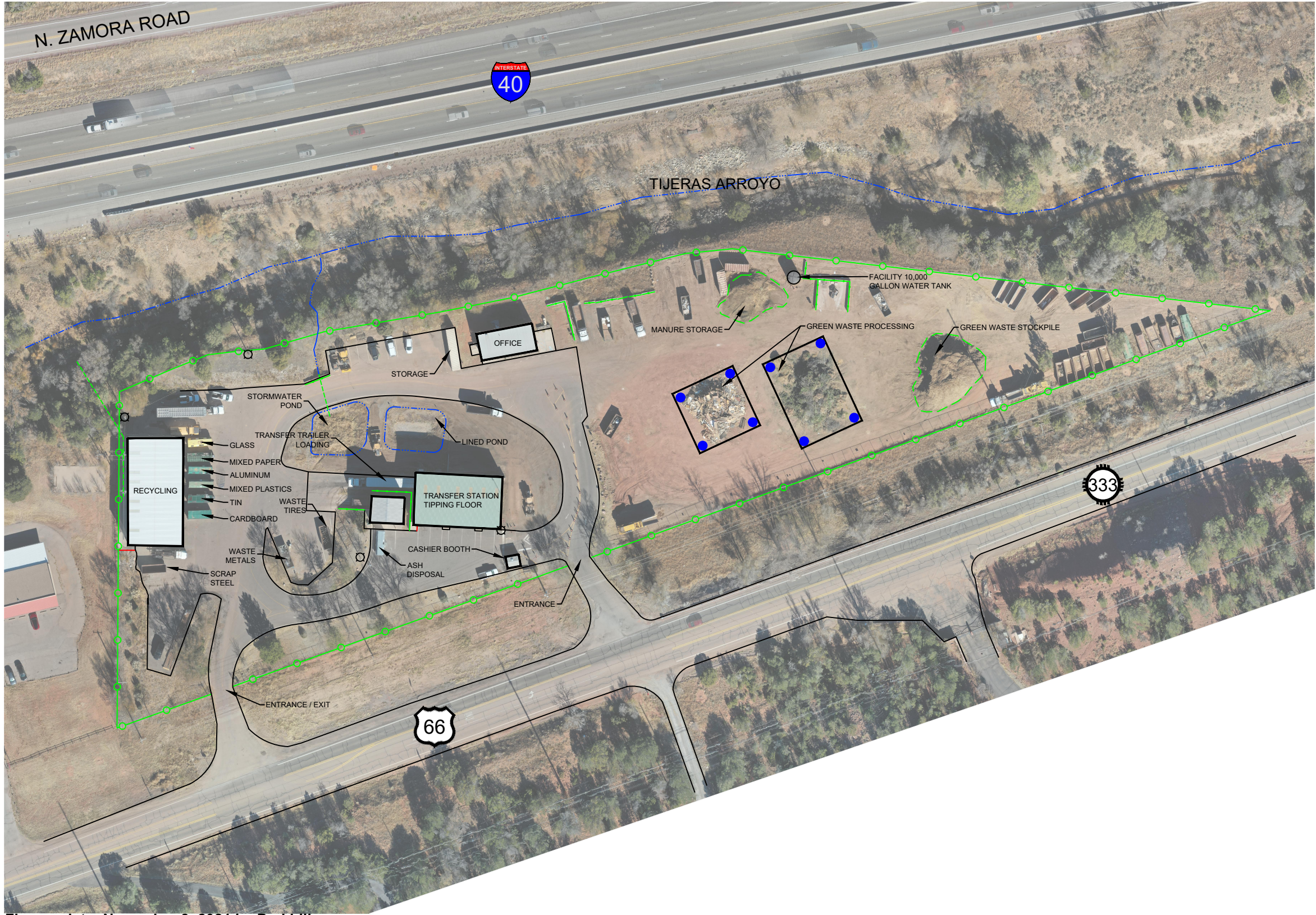


Andrew N. Yuhas, PG
Professional Geologist

ANY/pg
Enclosures

Facility Layout (Plot Plan)

FILE NAME: \\projects-dfs\projects\2023\40683.23\03_DSGN\01_DWG\050_CIVIL\02_CONTENT\EMTS PLOT PLAN 11x17.dwg PRINTED: Tuesday, July 18, 2023 - 4:56pm



LEGEND	
	EXISTING PERIMETER FENCE
	PAVED ROAD
	POND
	STREAM
	CULVERT
	LIGHT POLE
	BUILDING
	HORIZONTAL GRINDER ENGINE POTENTIAL LOCATIONS

Flyover date: November 8, 2021 by Parkhill

PLOT PLAN

**Email Communications
(AQP/Parkhill/Bernalillo County)**

Andrew N. Yuhas

From: Tumpane, Kyle <ktumpane@cabq.gov>
Sent: Thursday, April 6, 2023 2:19 PM
To: Andrew N. Yuhas; Lopez, Angela; Stonesifer, Jeff W.
Cc: Gabriel Villegas; jnewby@cirrusllc.com; Matt Kingsley
Subject: RE: East Mountain Transfer Station ATC Permit - modeling and characterization questions

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Filed by Newforma

Mr. Yuhas,

Thank you for providing that truck traffic information. That is a low travel distance and a low emission rate by my quick calculations. I think the truck traffic can be excluded from modeling. However, please include the information below in the modeling protocol with your proposal to exclude the truck traffic from modeling so that we have a record of this in one document and so we can give you final confirmation of the decision as part of our modeling protocol review. We do not have set de minimis levels for exclusion from modeling so we need to review and decide based on emission rates and justification on a case by case basis.

After checking with Angela Lopez, the truck traffic should not need to be in the application. However, as part of the protocol review we can also provide final feedback on whether the truck traffic should be included in the application and emission calculations after consulting with the permit writers once we have all the information on the facility.

Thank you,
Kyle

From: Andrew N. Yuhas <ayuhas@Parkhill.com>
Sent: Tuesday, April 4, 2023 3:17 PM
To: Tumpane, Kyle <ktumpane@cabq.gov>; Lopez, Angela <angelalopez@cabq.gov>; Stonesifer, Jeff W. <JStonesifer@cabq.gov>
Cc: Gabriel Villegas <gvillegas@bernco.gov>; jnewby@cirrusllc.com; Matt Kingsley <mkingsley@Parkhill.com>
Subject: RE: East Mountain Transfer Station ATC Permit - modeling and characterization questions

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Good afternoon Mr. Tumpane,

I have looked into the typical truck traffic transporting chipped green waste away from the East Mountain Transfer Station (trucks in and out), and have the following data points (based on 2021/2022 records).

Truck/Trailer specs:

- 30' live bottom trailer
- Day-cab tractor
- Average trailer load: 15 yd³
- Truck/trailer weight: 15 short tons

- Average Truck Trips/day = 8.31
- Average Truck Trips/year = 272.5

- Round trip distance on dirt = 600 feet
- Annual Vehicle Miles Traveled on dirt = 30.97

- Round trip distance on pavement = 400 feet
- Annual Vehicle Miles Traveled on pavement = 20.64

Overall not a very high traffic volume.

Thanks again,
Andy Yuhas

Andrew N. Yuhas, PG
Professional Geologist

Parkhill
505.504.7765 | ayuhas@Parkhill.com

From: Tumpane, Kyle <ktumpane@cabq.gov>

Sent: Friday, March 31, 2023 12:39 PM

To: Andrew N. Yuhas <ayuhas@Parkhill.com>; Lopez, Angela <angelalopez@cabq.gov>; Stonesifer, Jeff W. <JStonesifer@cabq.gov>

Cc: Gabriel Villegas <gvillegas@bernco.gov>; jnewby@cirrusllc.com; Matt Kingsley <mkingsley@Parkhill.com>

Subject: RE: East Mountain Transfer Station ATC Permit - modeling and characterization questions

Mr. Yuhas,

I do recall asking about whether there are haul trucks that deliver the green waste by dumping and are loaded with the processed material to take away. The delivery and loading of that green waste material does not need to be quantified, as discussed below, but I don't think any conclusion has been reached about whether the dust from the trucks driving on site would need to be accounted for.

The last thing I have on this topic is that you were going to check with Bernalillo County about traffic count, travel distance, and trailer size and get back to us in a few days. What we are interested in is dump truck size vehicles or larger. Vehicles like pickups, either citizens or Bernalillo County, would not be included. How far and how fast any large trucks travel would be important information to determine if the fugitive emissions need to be modeled or not. Also, during the pre-application meeting it was mentioned that more of the site might be paved. I don't remember where that paving was going to be, but if the areas large trucks drive on are paved then the truck traffic can generally be excluded from modeling and there will likely just be some standard conditions in the permit requiring the roads to be kept clean.

Thank you,
Kyle

From: Andrew N. Yuhas <ayuhas@Parkhill.com>

Sent: Friday, March 31, 2023 12:06 PM

To: Tumpane, Kyle <ktumpane@cabq.gov>; Lopez, Angela <angelalopez@cabq.gov>; Stonesifer, Jeff W. <JStonesifer@cabq.gov>

Cc: Gabriel Villegas <gvillegas@bernco.gov>; jnewby@cirrusllc.com; Matt Kingsley <mkingsley@Parkhill.com>

Subject: RE: East Mountain Transfer Station ATC Permit - modeling and characterization questions

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Kyle,

Thank you for responding to my questions, and in such good detail. I have no further questions regarding the items addressed in your response, and the County has provided me with the locations proposed for operation. I will reconnect with the County regarding safety and access restriction measures taken so they can be included in the protocol.

An additional question did come up while thinking about this. At one point in our conversation, the subject of particulate (fugitive) emissions from green waste delivery and pickup vehicles was brought up, but we never came to a conclusion as to whether or not they needed to be characterized/modeled. Have you folks had any conversations on that subject? In the original Permit Application it was not addressed, but I want to cover all the bases before submitting a protocol and application.

Thank you,
Andy Yuhas

Andrew N. Yuhas, PG
Professional Geologist

Parkhill
505.504.7765 | ayuhas@Parkhill.com

From: Tumpane, Kyle <ktumpane@cabq.gov>

Sent: Friday, March 31, 2023 11:49 AM

To: Andrew N. Yuhas <ayuhas@Parkhill.com>; Lopez, Angela <angelalopez@cabq.gov>; Stonesifer, Jeff W. <JStonesifer@cabq.gov>

Cc: Gabriel Villegas <gvillegas@bernco.gov>; jnewby@cirrusllc.com

Subject: RE: East Mountain Transfer Station ATC Permit - modeling and characterization questions

Mr. Yuhas,

Here are responses to your questions.

1. The AQP has decided not to require calculation or modeling of the particulate emissions from green waste grinding due to the lack of reliable emission factors and the fact that the green waste is not being processed dry and does not include sand and gravel.
2. The AQP does not have an answer yet regarding the question of whether a single day off-site event would have to be modeled if this was a portable stationary source. It is unlikely modeling will be required because the emissions would be intermittent but we do not have a firm decision or answer yet. As mentioned in the Modeling Guidelines email I sent on Mar. 9, 2023 please include this possibility in the modeling protocol, including the potential locations and any procedures that would be followed, such as the public not being allowed within X feet of the equipment while it is operating, for the off-site operation, and we will consider it during the protocol review and provide a response then.
3. No, the scooping and dumping of the green waste material into the grinder will not need to be calculated or modeled for the same reason as above, no reliable emission factor could be found for particulate emissions from the activity. Also, according to 20.11.41.2.F(2)(c) NMAC "Exemptions: The following sources and activities shall not be reported in the permit application. Emissions from such activities shall not be included in the calculation of the facility-wide potential emission rate under Paragraphs (1)-(5) of Subsection B and Subsection C of 20.11.41.2 NMAC. The following activities may be commenced or changed without a permit or permit modification under 20.11.41 NMAC if the emissions and activities are not subject to any requirement under a local board regulation, the New Mexico Air Quality Control Act, NMSA 1978, NSPS or NESHAP: exhaust emissions from forklifts, courier vehicles, front end loaders, graders, carts, and maintenance trucks;..." Therefore, the exhaust emissions from the front loader are not part of the facility-wide potential emission rate.

Please let us know if you have any additional questions.

Thank you,
Kyle

**ONE
ALBUQUE
RQUE**



KYLE TUMPANE

environmental health scientist | environmental health department

o 505.768.2872

From: Andrew N. Yuhas <ayuhas@Parkhill.com>

Sent: Tuesday, March 21, 2023 11:35 AM

To: Lopez, Angela <angelalopez@cabq.gov>; Tumpane, Kyle <ktumpane@cabq.gov>; Stonesifer, Jeff W. <JStonesifer@cabq.gov>

Cc: Gabriel Villescás <gvillescás@bernco.gov>; jnewby@cirrusllc.com

Subject: East Mountain Transfer Station ATC Permit - modeling and characterization questions

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Good morning,

After our pre-application meeting, I was left with a few questions regarding emissions calculations, modeling, and what will be required in both the final permit modification application and the modeling protocol.

1. Has AQP decided if they require characterization of particulate matter from green waste grinding? I still have not been able to find a reliable source for emissions factors for processing this kind of material, only references to non-green waste factors that are likely not representative.
2. If the County wants to operate their grinder off-site a one day per year, will AQP require modeling for that day at the chosen location or can a waiver be approved? The 2 potential locations are:
 - a. **Site #1.**
North Valley -Raymond G. Sanchez Community Center
9800 4th St NW, Albuquerque, NM 87114
 - b. **Site #2.**
South Valley Multipurpose Senior Center
2008 Larrazolo Rd SW, Albuquerque, 87105

**The county would gather the material for two weeks and bring the horizontal mulcher down and clear the stockpiles in one day of operation per location.
3. Will the operation of equipment used to load the grinder (i.e., handling) need to be quantified for the modeling and permit (particulate emissions)? Again, there are not emissions factors specific to this activity that I am aware of.

Thank you,
Andy Yuhas

Andrew N. Yuhas, PG
Professional Geologist

Parkhill
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Air Dispersion Modeling Report
(Revised August, 2026)

Air Dispersion Modeling Analysis (Revision 2)

Note: The revision 1 & 2 changes to this analysis are identified in bold italicized font. The updates are in response to AQP comments.

1.0 Applicant and Consultant Information

Name of Facility: East Mountain Transfer Station
Name of Company: County of Bernalillo Solid Waste Department
Permit Number: ATC Permit 2080 (issued July 19, 2010)

Modeling Contact Name: James Newby
Modeling Contact Phone Number: (801) 294-3024
Modeling Contact Email Address: jnewby@cirrusllc.com

2.0 Facility and Operations Description

The East Mountain Transfer Station (EMTS) is a municipal solid waste transfer station which also operates a green waste processing facility (waste disposal operations at the facility occur indoors and use paved roads). The facility is located at the following address:

711 Highway 333
Tijeras, New Mexico 87059

The facility is located at approximately 376,072 meters Easting, 3,884,910 meters Northing, Zone 13, North American Datum 1983 (NAD83), at an elevation of approximately 6,473 feet above mean sea level. It is located in a rural area. A plot plan is attached. It shows the UTM location of the facility, buildings, emissions points, fence line and property boundary. It is consistent with the latest Google Earth, Google Maps, and the City's Advanced Map Viewer. The facility is enclosed by a 6-foot chain link fence.

The EMTS is currently permitted for the following equipment/sources: one wood chipper/horizontal grinder (powered by a 630 hp diesel-fired internal combustion engine). The permit application will replace the current grinder with two newer grinders: one model year 2013 horizontal grinder (powered by a 475 kilowatt (kW) diesel-fired Tier 4 interim complaint compression-ignition combustion engine) and one model year 2019 horizontal grinder (powered by a 598 kW diesel-fired Tier 4 final compliant compression-ignition internal combustion engine).

The facility will operate at this location for an indefinite period of time.

2.1 Alternative Operating Scenarios

Once per year, the County may operate one of their grinders at a remote location within the County for the purpose of Christmas tree or green yard waste grinding/recycling. The event would be conducted at one of two locations as listed below (not simultaneously). Public access to the equipment would not be allowed, and safe separation distance would be further ensured by

requiring stockpiling of the trees/green waste by the public during the two weeks prior to the grinding event when the grinder was not present. The grinder would then be transported to the site at the end of those two weeks, and used to grind the accumulated material for one day of operation at the remote site of choice. Additional safety measures during the grinding day would be achieved by installing physical safety barriers (cones and caution tape, or similar) and signage a minimum of 100 feet from the grinding and loading equipment on every side.

Option #1:

North Valley
Raymond G. Sanchez Community Center
9800 4th St. NW #2125
Albuquerque, NM 87114

Option #2:

South Valley Multipurpose Senior Center
2008 Larrazolo Rd. SW
Albuquerque, NM 87105

Due to the short period of operation (1-day) and controlled sites proposed, AQP indicates that modeling is not likely to be required for the individual sites. It should be feasible, as a single day of operation could not contribute significantly to the annual distribution of daily maximum 1-hour concentrations.

3.0 Modeling Requirements Description

Air dispersion modeling was conducted for nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter less than or equal to 10 microns (PM₁₀), and particulate matter less than or equal to 2.5 microns (PM_{2.5}). The analysis evaluates compliance with the National Ambient Air Quality Standards (NAAQS) and New Mexico Ambient Air Quality Standards (NMAAQS).

Per direction received from the AQP, sulfur dioxide (SO₂) modeling was not required.

Table 1 identifies the applicable significant impact levels (SIL), NAAQS, and NMAAQS.

Table 1: SIL, NAAQS, & NMAAQS

Pollutant	Averaging Period	SIL ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)	NMAAQS ($\mu\text{g}/\text{m}^3$)
NO ₂	Annual	1.0	--	94.02
NO ₂	1-Hour	7.52	188.03	--
CO	8-Hour	500	--	9,960.1
CO	1-Hour	2,000	--	14,997.5
PM _{2.5}	Annual	0.13	9.0	--
PM _{2.5}	24-Hour	1.2	35	--

All significant impacts were determined using high-first-high impacts. In addition, special processing was disabled for NO₂ and PM_{2.5}.

Compliance with the NO₂ annual NMAAQs demonstrates compliance with the NO₂ annual NAAQS. Compliance with the NO₂ 1-hour NAAQS demonstrates compliance with the NO₂ 24-hour NMAAQs. The high-eighth-high daily maximum NO₂ 1-hour average impacts were used to evaluate compliance with the NO₂ 1-hour NAAQS.

Compliance with the CO 8-hour and 1-hour NMAAQs demonstrates compliance with the CO 8-hour and 1-hour NAAQS.

Since the PM_{2.5} emission rates at the facility are equal to the PM₁₀ emission rates, consistent with the NMAQB modeling guidelines, compliance with the PM_{2.5} 24-hour NAAQS demonstrates compliance with the PM₁₀ 24-hour NAAQS.

Since NO₂ and SO₂ emissions from the facility do not exceed 40 tons per year, the modeling did not account for secondary particulate formation.

Non-attainment modeling impacts were not considered.

Prevention of significant deterioration (PSD), New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP) were not applicable.

4.0 Model Inputs

4.1 Model Inputs (General Modeling Approach)

Significant and cumulative impact modeling were conducted using the latest version of the AMS/EPA Regulatory Model (AERMOD). The Beeline Software BEEST for Windows modeling manager was used to prepare the input files and manage processing.

Modeling was conducted in accordance with the approved protocol and current AQP and NMAQB modeling guidelines. First, emissions from the new equipment were modeled to determine if there were significant impacts. Where impacts were less than the SIL, no additional modeling was conducted. Second, where impacts exceeded the SIL, cumulative impacts for comparison with the NAAQS and NMAAQs were determined using facility impacts plus neighboring source impacts plus background concentrations.

The Environmental Protection Agency (EPA) recommended defaults were used. As the facility is located in a rural area, urban area modeling was not conducted.

Per direction provided by the AQP, material handling and vehicle traffic will not be included in the modeling analysis.

The grinder engines are being permitted to operate a combined 800 hours per year. Since the engines are being permitted to operate five hours per day from 0800 through 1300, they were modeled as operating during that time (using the HROFDY emission rate flag). Since the engines will ***never be operated*** simultaneously, they were modeled separately.

Both engines are being permitted to operate in either of the two green waste processing locations. Therefore, each engine was modeled as operating from each corner of the two green waste processing locations, for a total of eight locations per engine.

Note: It is understood that the locations of the engines may be used to establish setbacks from the fence as conditions of the permit.

The Unit 1 parameters and locations were identified as ENG_1A thru ENG_1H. The Unit 2 parameters and locations were identified as ENG_2A thru ENG_2H. See the Point Sources tab in the "**EMTS – Modeling Data & Results - Rev 2 (2026-08).xlsx**" workbook provided with this report.

The modeled emission rates were those identified in Table 2 below.

Table 2: Unit 1 and 2 Emission Rates

Pollutant	Unit 1 Emissions (lb/hr)	Unit 2 Emissions (lb/hr)
NO ₂	0.84	4.61
CO	3.67	4.61
SO ₂	0.0073	0.0087
PM ₁₀	0.042	0.053
PM _{2.5}	0.042	0.053

Gravitational settling/plume depletion was not used.

NO_x impacts were converted to NO₂ impacts using the Ambient Ratio Method 2 (ARM2). **The default minimum and maximum NO₂/NO_x in-stack ratios were used.**

Compliance with the NAAQS and NMAAQs were evaluated using background concentrations identified by the AQP as seen in Table 3 below.

Table 3: Background Concentrations

Pollutant	Averaging Period	Background Concentration (µgm³)	Source of Data
NO ₂	Annual	18.0	Del Norte
NO ₂	1-Hour	83.1	Del Norte

Note that the background concentrations in Table 3 are slightly lower than those identified in the modeling protocol. The AQP provided updated background concentrations in December 2023.

There were no significant CO or PM_{2.5} impacts; consequently, background concentrations for these pollutants were not needed.

Since all significant impacts occurred within the 50-meter interval portion of the receptor grid, no special receptors were added inside the property of nearby facilities.

4.2 Model Inputs (Meteorological and Ozone Data)

Modeling was conducted using GCC Portland Cement Plant meteorological data provided by the AQP. These data are available for the period from 09/01/2018 through 08/31/2020.

Since significant impact modeling looks for maximum impacts during each year (no averaging over the two years), it was conducted using two meteorological data files, the first for the period 09/01/2018 through 8/31/2019 and the second for the period 09/01/2019 through 08/31/2020. Also, since cumulative NO₂ annual average impacts are not averaged over the two years, the two separate meteorological data files were used for this modeling.

Since cumulative NO₂ 1-hour average impacts are averaged over the two years, a single meteorological data file, 09/1/2018 through 08/31/2020, was used for this modeling.

4.3 Model Inputs (Receptors and Terrain)

A Cartesian grid with variable receptor spacing was used to evaluate significant impacts around the facility. The grid contained receptors with 25-meter spacing around the fence line, 50-meter spacing from the fence line out to at least 500 meters, 100-meter spacing from the 500 meters beyond the fence line out to at least 1,000 meters, 250-meter spacing from 1,000 meters beyond the fence line out to at least 3,000 meters, and 500-meter spacing from 3,000 meters beyond the fence line out to at least 5,000 meters.

For the NO₂ annual average modeling, 32 significant impact areas were identified (16 for each year of meteorological data). For simplicity, the cumulative NO₂ annual average modeling was conducted using all receptors within the largest of the 32 significant impact areas (with a radius of 240.9 meters).

For the NO₂ 1-hour average modeling, **32 significant impact areas were also identified (16 for each year of meteorological data). For simplicity, the cumulative NO₂ 1-hour average modeling was conducted using receptors within the largest of the 32 significant impact areas (with a radius of 556.5 meters).** Note, however, that for all 32 significant impacts areas there were no significant impacts south of 3,884,600 meters Northing. ***Therefore, to reduce modeled impacts, all receptors south of 3,884,600 meters Northing were removed from the grid.***

See the Receptors tab in the “**EMTS – Modeling Data & Results – Rev 2 (2026-08).xlsx**” workbook provided with this report.

Complex terrain was assumed.

The coordinate system used to reference source, structure, and receptor locations was of the Universal Transverse Mercator (UTM) convention. Terrain elevation data was obtained from National Elevation Dataset (NED) data (1/3 second resolution DEMs) downloaded from the United States Geological Survey (USGS) website. The AERMOD Terrain Preprocessor (AERMAP) was used to calculate receptor elevations and terrain maximums. The domain used to calculate terrain maximums was sufficient to identify all terrain nodes that create a slope greater than or equal to 10 percent.

It was assumed that the above referenced grid was sufficient to identify impacts on the property of nearby sources.

4.4 Model Inputs (Emissions)

The grinder engines were modeled as point sources (no other source types are required for the facility). The stacks will vent vertically and there will be no rain caps. The maximum hourly emission

rate was modeled for all operational hours. There was no averaging of emissions over non-operational hours. No setback conditions were required.

Table 4 identifies the grinder engine stack parameters used in the modeling. Tables 5 & 6 identify the emission rates and changes resulting from the modification. The identified Emission Rates in Tables 5 and 6 are the highest for a single engine.

Table 4: Engine Stack Parameters

Unit	Stack Type	Stack Height (ft)	Stack Exit Temperature (°F)	Stack Exit Velocity (fps)	Stack Flow Rate (acfm)	Stack Inside Diameter (m)
1	Vertical	≥11.0	959	275	3236	0.50
2	Vertical	≥12.5	971	551	4582	0.42

Table 5: Emission Rates (ton/yr)

Pollutant	Current Emissions (ton/yr)	New Emissions (ton/yr)	Emissions Increase (ton/yr)
NO ₂	2.47	1.85	-0.62
CO	1.46	1.85	0.39
SO ₂	2.04	0.0035	-2.0365
PM ₁₀	0.08	0.021	-0.059
PM _{2.5}	0.08	0.021	-0.059

Table 6: Emission Rates (lb/hr)

Pollutant	Current Emissions (lb/hr)	New Emissions (lb/hr)	Emissions Increase (lb/hr)
NO ₂	6.17	4.61	-1.56
CO	3.65	4.61	0.96
SO ₂	5.1	0.0087	-5.09
PM ₁₀	0.21	0.053	-0.157
PM _{2.5}	0.21	0.053	-0.157

Requested operating hours are discussed in Section 4.1, Model Inputs (General Modeling Approach).

NAAQS and NMAAQs cumulative impacts were evaluated using neighboring sources identified by the AQP. The source locations, parameters, emissions rates, and operating times were identical to those provided by the AQP. See the Neighboring Sources tabs in the “**EMTS – Modeling Data & Results – Rev 2 (2026-08).xlsx**” workbook provided with this report. Note that since NO₂ was the only pollutant for which significant impacts were identified, only two neighboring sources were actually included in the modeling.

4.5 Model Inputs (Building Downwash)

The EPA Building Profile Input Program - Prime (BPIP-Prime) was used to evaluate structures for building downwash impacts. All EMTS structures close enough (of sufficient height and/or width) to produce downwash effects from the stacks were included in the evaluation.

Reviewing the BPIP-Prime files, it was determined there were no building downwash effects associated with the structures at the facility (see the “EMTS – BPIP-Prime.SO” file provided with the ROI and NAAQS modeling files). As a result, cumulative impact modeling was conducted without building downwash. Note that when BPIP-Prime identifies no downwash effects, BEEST does not include downwash data in the model input file, even if downwash is requested during the build.

It was suggested that building #4 might need to be expanded to match aerial imagery. Building #4 has been reviewed and no correction is needed. The area east of the building is a pad, not part of the building.

5.0 Modeling Files Description

The following files are included with this analysis:

EMTS – AERMAP Files – Rev 2 (2026-08).zip – All AERMAP input and output files, excluding the USGS data files

EMTS – USGS DEM Files – Rev 2 (2026-08).zip – USGS data files (.tif)

EMTS – AERMOD Files – ROI – Rev 2 (2026-08).zip – CO, NO₂ and PM_{2.5} AERMOD ROI files, including BPIP-Prime files

EMTS – AERMOD Files – NAAQS – Rev 2 (2026-08).zip – NO₂ AERMOD NAAQS and NMAAQs files, including BPIP-Prime files

EMTS – Meteorological Data – Rev 2 (2026-08) – Meteorological data files

EMTS – Modeling Data & Results – Rev 2 (2026-08).zip – Excel workbook containing modeling data and results

EMTS – Modeling Protocol – Rev 2 (2026-08).zip – Modeling protocol and approval files

EMTS – Modeling Report Files – Rev 2 (2026-08).zip – Modeling report files

6.0 Modeling Results

Because of the way AERMOD calculates NO₂ impacts when using ARM2, the modeling in this revision was modified to use separate runs for each engine location when calculating NO₂ impacts.

Significant Impact Modeling

Four model runs were conducted to evaluate the CO and PM_{2.5} significant impacts, two for each pollutant (one for each year). There were no significant CO or PM_{2.5} impacts.

Thirty-two model runs were conducted to evaluate NO₂ significant impacts, two for each engine location (one for each year). There were significant NO₂ 1-hour and annual average impacts.

Table 7 summarizes the high significant impacts. The high impacts for each pollutant, averaging period, engine location, and year are provided at the end of this report as Attachment A and on the Standards & Results tab of the “EMTS – Modeling Data & Results -Rev 2 (2026-08).xlsx” workbook provided with this report.

Table 7: Significant Impacts

Pollutant	Averaging Period	SIL ($\mu\text{g}/\text{m}^3$)	Modeled Impact ($\mu\text{g}/\text{m}^3$)
CO	1-Hour	2,000	318.79
CO	8-Hour	500	69.86
NO₂	1-Hour	7.52	139.05
NO₂	Annual	1.0	3.78
PM_{2.5}	24-Hour	1.2	0.27
PM_{2.5}	Annual	0.13	0.06

All significant impact modeling was conducted using first-high impacts.

Cumulative NO₂ Modeling (NAAQS & NMAAQs)

For each averaging period, as explained above, cumulative impact modeling was conducted using receptors from the largest of the significant impact areas in the ROI modeling.

Twenty-one model runs were used to evaluate cumulative NO₂ annual average NMAAQs impacts, based on the engine locations and years. Note that there were eleven scenarios/years for which there were no significant impacts.

Sixteen model runs were used to evaluate cumulative NO₂ 1-hour average NAAQS impacts, one for each engine location.

Table 8 summarizes the high impacts. The high impacts for each averaging period, engine location, and year are provided at the end of this report in Attachment B and on the Standards & Results tab of the “EMTS – Modeling Data & Results -Rev 2 (2026-08).xlsx” workbook provided with this report.

Table 8: Cumulative Impacts

Pollutant	Averaging Period	Modeled Impact ($\mu\text{g}/\text{m}^3$)	Background Concentration ($\mu\text{g}/\text{m}^3$)	Total Impact ($\mu\text{g}/\text{m}^3$)
<i>NO₂</i>	<i>1-Hour</i>	<i>70.31</i>	<i>83.1</i>	<i>153.41</i>
<i>NO₂</i>	<i>Annual</i>	<i>5.98</i>	<i>18.0</i>	<i>23.98</i>

Table 9 identifies the location of the highest impacts and compares the highest impacts with the standards. ***Again, the locations of the high impacts and comparisons with the standards for each averaging period, engine location, and year are provided at the end of this report in Attachment B and on the Standards & Results tab of the “EMTS – Modeling Data & Results – Rev 2 (2026-08).xlsx” workbook provided with this report.***

Table 9: Location of High Impacts & Comparison to Standards

Pollutant	Averaging Period	Meters Easting (m)	Meters Northing (m)	NAAQS ($\mu\text{g}/\text{m}^3$)	NMAAQS ($\mu\text{g}/\text{m}^3$)	Total Impact ($\mu\text{g}/\text{m}^3$)
<i>NO₂</i>	<i>1-Hour</i>	<i>376,150</i>	<i>3,884,950</i>	<i>188.03</i>	<i>--</i>	<i>153.41</i>
<i>NO₂</i>	<i>Annual</i>	<i>376,132</i>	<i>3,884,948</i>	<i>--</i>	<i>94.02</i>	<i>23.98</i>

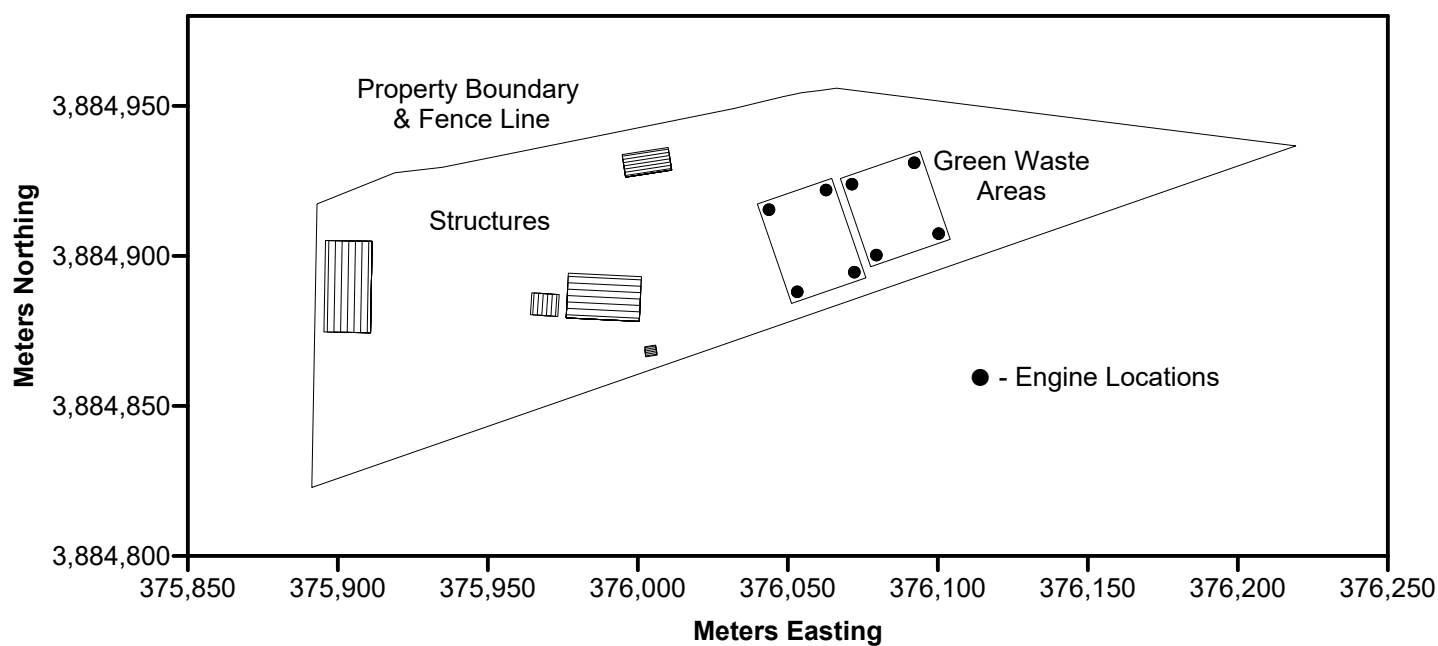
7.0 Summary/Conclusions

The modeling requirements have been satisfied and a permit can be issued.

FIGURE 1

Plot Plan

County of Bernalillo Solid Waste Department
Bernalillo County East Mountain Transfer Station



Universal Transverse Mercator Coordinates, Zone 12, NAD83

Figure 1
Plot Plan

ATTACHMENT A

Significant Impact Summary Table

ATTACHMENT A - Significant Impact Summary

Pollutant	Scenario	Standard	Averaging Period	Significant Impact Level (ug/m^3)	ROI		ROI	
					2018 - 2019		2019 - 2020	
					Facility High Impact (ug/m^3)	Radius of Impact (m)	Facility High Impact (ug/m^3)	Radius of Impact (m)
NO2	1A	NAAQS	1-Hour	7.52	33.273	176.6	65.669	147.4
NO2	1B	NAAQS	1-Hour	7.52	17.627	178.4	20.861	152.7
NO2	1C	NAAQS	1-Hour	7.52	24.286	173.7	23.720	157.3
NO2	1D	NAAQS	1-Hour	7.52	31.884	154.4	64.834	139.4
NO2	1E	NAAQS	1-Hour	7.52	34.847	163.8	45.279	130.4
NO2	1F	NAAQS	1-Hour	7.52	27.777	182.2	24.075	148.5
NO2	1G	NAAQS	1-Hour	7.52	39.508	179.3	28.505	131.1
NO2	1H	NAAQS	1-Hour	7.52	34.935	151.2	56.583	149.9
NO2	2A	NAAQS	1-Hour	7.52	114.180	536.9	134.438	447.0
NO2	2B	NAAQS	1-Hour	7.52	82.661	544.5	98.771	431.1
NO2	2C	NAAQS	1-Hour	7.52	104.044	494.3	98.426	438.2
NO2	2D	NAAQS	1-Hour	7.52	115.708	556.5	139.050	436.5
NO2	2E	NAAQS	1-Hour	7.52	113.021	524.0	138.777	420.5
NO2	2F	NAAQS	1-Hour	7.52	109.745	502.6	103.838	429.4
NO2	2G	NAAQS	1-Hour	7.52	112.243	482.4	115.821	441.5
NO2	2H	NAAQS	1-Hour	7.52	114.872	545.2	137.432	429.8
NO2	1A	NMAAQS	Annual	1.00	0.917	N/A	1.008	49.7
NO2	1B	NMAAQS	Annual	1.00	0.823	N/A	0.861	N/A
NO2	1C	NMAAQS	Annual	1.00	0.920	N/A	0.958	N/A
NO2	1D	NMAAQS	Annual	1.00	0.926	N/A	1.014	54.3
NO2	1E	NMAAQS	Annual	1.00	0.814	N/A	0.891	N/A
NO2	1F	NMAAQS	Annual	1.00	0.980	N/A	1.031	64.9
NO2	1G	NMAAQS	Annual	1.00	1.103	60.9	1.148	60.9
NO2	1H	NMAAQS	Annual	1.00	0.816	N/A	0.917	N/A
NO2	2A	NMAAQS	Annual	1.00	3.167	206.4	3.405	206.4
NO2	2B	NMAAQS	Annual	1.00	3.323	222.9	3.460	222.9
NO2	2C	NMAAQS	Annual	1.00	3.528	202.9	3.692	202.9
NO2	2D	NMAAQS	Annual	1.00	3.108	206.8	3.340	206.8
NO2	2E	NMAAQS	Annual	1.00	2.969	197.5	3.233	226.0
NO2	2F	NMAAQS	Annual	1.00	3.628	194.1	3.778	240.9
NO2	2G	NMAAQS	Annual	1.00	3.543	219.0	3.717	219.0
NO2	2H	NMAAQS	Annual	1.00	3.293	220.1	3.434	220.1

ATTACHMENT A - Significant Impact Summary

Pollutant	Scenario	Standard	Averaging Period	Significant Impact Level (ug/m^3)	ROI		ROI	
					2018 - 2019		2019 - 2020	
					Facility High Impact (ug/m^3)	Radius of Impact (m)	Facility High Impact (ug/m^3)	Radius of Impact (m)
CO	1A	NMAAQS	1-Hour	2000.00	161.522	N/A	318.790	N/A
CO	1B	NMAAQS	1-Hour	2000.00	85.570	N/A	101.268	N/A
CO	1C	NMAAQS	1-Hour	2000.00	117.899	N/A	115.148	N/A
CO	1D	NMAAQS	1-Hour	2000.00	154.782	N/A	314.736	N/A
CO	1E	NMAAQS	1-Hour	2000.00	169.164	N/A	219.806	N/A
CO	1F	NMAAQS	1-Hour	2000.00	134.844	N/A	116.874	N/A
CO	1G	NMAAQS	1-Hour	2000.00	191.791	N/A	138.379	N/A
CO	1H	NMAAQS	1-Hour	2000.00	169.593	N/A	274.680	N/A
CO	2A	NMAAQS	1-Hour	2000.00	136.818	N/A	204.278	N/A
CO	2B	NMAAQS	1-Hour	2000.00	91.846	N/A	109.746	N/A
CO	2C	NMAAQS	1-Hour	2000.00	116.352	N/A	109.362	N/A
CO	2D	NMAAQS	1-Hour	2000.00	140.332	N/A	238.557	N/A
CO	2E	NMAAQS	1-Hour	2000.00	134.242	N/A	235.775	N/A
CO	2F	NMAAQS	1-Hour	2000.00	127.323	N/A	115.977	N/A
CO	2G	NMAAQS	1-Hour	2000.00	132.553	N/A	140.596	N/A
CO	2H	NMAAQS	1-Hour	2000.00	138.393	N/A	223.951	N/A
CO	1A	NMAAQS	8-Hour	500.00	53.589	N/A	48.907	N/A
CO	1B	NMAAQS	8-Hour	500.00	39.874	N/A	36.838	N/A
CO	1C	NMAAQS	8-Hour	500.00	48.616	N/A	46.861	N/A
CO	1D	NMAAQS	8-Hour	500.00	50.980	N/A	49.995	N/A
CO	1E	NMAAQS	8-Hour	500.00	44.805	N/A	47.985	N/A
CO	1F	NMAAQS	8-Hour	500.00	54.899	N/A	47.469	N/A
CO	1G	NMAAQS	8-Hour	500.00	69.858	N/A	63.394	N/A
CO	1H	NMAAQS	8-Hour	500.00	45.201	N/A	49.216	N/A
CO	2A	NMAAQS	8-Hour	500.00	38.842	N/A	36.927	N/A
CO	2B	NMAAQS	8-Hour	500.00	39.287	N/A	36.900	N/A
CO	2C	NMAAQS	8-Hour	500.00	45.884	N/A	39.312	N/A
CO	2D	NMAAQS	8-Hour	500.00	39.245	N/A	35.461	N/A
CO	2E	NMAAQS	8-Hour	500.00	36.788	N/A	38.778	N/A
CO	2F	NMAAQS	8-Hour	500.00	48.931	N/A	41.111	N/A
CO	2G	NMAAQS	8-Hour	500.00	55.752	N/A	42.142	N/A
CO	2H	NMAAQS	8-Hour	500.00	36.480	N/A	38.790	N/A

ATTACHMENT A - Significant Impact Summary

Pollutant	Scenario	Standard	Averaging Period	Significant Impact Level (ug/m^3)	ROI		ROI	
					2018 - 2019		2019 - 2020	
					Facility High Impact (ug/m^3)	Radius of Impact (m)	Facility High Impact (ug/m^3)	Radius of Impact (m)
PM2.5	1A	NAAQS	24-Hour	1.2	0.204	N/A	0.187	N/A
PM2.5	1B	NAAQS	24-Hour	1.2	0.152	N/A	0.141	N/A
PM2.5	1C	NAAQS	24-Hour	1.2	0.185	N/A	0.181	N/A
PM2.5	1D	NAAQS	24-Hour	1.2	0.194	N/A	0.191	N/A
PM2.5	1E	NAAQS	24-Hour	1.2	0.171	N/A	0.183	N/A
PM2.5	1F	NAAQS	24-Hour	1.2	0.209	N/A	0.181	N/A
PM2.5	1G	NAAQS	24-Hour	1.2	0.266	N/A	0.242	N/A
PM2.5	1H	NAAQS	24-Hour	1.2	0.172	N/A	0.188	N/A
PM2.5	2A	NAAQS	24-Hour	1.2	0.149	N/A	0.142	N/A
PM2.5	2B	NAAQS	24-Hour	1.2	0.151	N/A	0.141	N/A
PM2.5	2C	NAAQS	24-Hour	1.2	0.176	N/A	0.151	N/A
PM2.5	2D	NAAQS	24-Hour	1.2	0.150	N/A	0.136	N/A
PM2.5	2E	NAAQS	24-Hour	1.2	0.141	N/A	0.149	N/A
PM2.5	2F	NAAQS	24-Hour	1.2	0.188	N/A	0.158	N/A
PM2.5	2G	NAAQS	24-Hour	1.2	0.214	N/A	0.162	N/A
PM2.5	2H	NAAQS	24-Hour	1.2	0.140	N/A	0.149	N/A
PM2.5	1A	NAAQS	Annual	0.13	0.051	N/A	0.056	N/A
PM2.5	1B	NAAQS	Annual	0.13	0.046	N/A	0.048	N/A
PM2.5	1C	NAAQS	Annual	0.13	0.051	N/A	0.053	N/A
PM2.5	1D	NAAQS	Annual	0.13	0.051	N/A	0.056	N/A
PM2.5	1E	NAAQS	Annual	0.13	0.045	N/A	0.050	N/A
PM2.5	1F	NAAQS	Annual	0.13	0.054	N/A	0.057	N/A
PM2.5	1G	NAAQS	Annual	0.13	0.061	N/A	0.064	N/A
PM2.5	1H	NAAQS	Annual	0.13	0.045	N/A	0.051	N/A
PM2.5	2A	NAAQS	Annual	0.13	0.040	N/A	0.044	N/A
PM2.5	2B	NAAQS	Annual	0.13	0.042	N/A	0.044	N/A
PM2.5	2C	NAAQS	Annual	0.13	0.045	N/A	0.047	N/A
PM2.5	2D	NAAQS	Annual	0.13	0.040	N/A	0.043	N/A
PM2.5	2E	NAAQS	Annual	0.13	0.038	N/A	0.041	N/A
PM2.5	2F	NAAQS	Annual	0.13	0.046	N/A	0.048	N/A
PM2.5	2G	NAAQS	Annual	0.13	0.045	N/A	0.047	N/A
PM2.5	2H	NAAQS	Annual	0.13	0.042	N/A	0.044	N/A

ATTACHMENT B

Cumulative Impact Summary Table

ATTACHMENT B - Cumulative Impact Summary

Pollutant	Scenario	Standard	Averaging Period	Standard (ug/m^3)	Cumulative Impact						Location of High Impacts	
					2018-2020	2018-2019	2019-2020				Meters Easting (m)	Meters Northing (m)
					High Impact (ug/m^3)	High Impact (ug/m^3)	High Impact (ug/m^3)	Background Concentration (ug/m^3)	Total Impact (ug/m^3)	Total Impact (%)		
NO2	1A	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1B	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1C	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1D	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1E	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1F	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1G	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	1H	NAAQS	1-Hour	188.03	43.76	N/A	N/A	83.1	126.86	67.47	375900	3884600
NO2	2A	NAAQS	1-Hour	188.03	56.80	N/A	N/A	83.1	139.90	74.40	376102	3884896
NO2	2B	NAAQS	1-Hour	188.03	63.56	N/A	N/A	83.1	146.66	78.00	376110	3884951
NO2	2C	NAAQS	1-Hour	188.03	67.99	N/A	N/A	83.1	151.09	80.35	376110	3884951
NO2	2D	NAAQS	1-Hour	188.03	60.63	N/A	N/A	83.1	143.73	76.44	376126	3884904
NO2	2E	NAAQS	1-Hour	188.03	58.31	N/A	N/A	83.1	141.41	75.21	376154	3884945
NO2	2F	NAAQS	1-Hour	188.03	68.67	N/A	N/A	83.1	151.77	80.72	376132	3884948
NO2	2G	NAAQS	1-Hour	188.03	70.31	N/A	N/A	83.1	153.41	81.59	376150	3884950
NO2	2H	NAAQS	1-Hour	188.03	62.26	N/A	N/A	83.1	145.36	77.31	376154	3884945
NO2	1A	NMAAQS	Annual	94.02	N/A	N/A	3.26	18.0	21.26	22.61	376102	3884896
NO2	1B	NMAAQS	Annual	94.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NO2	1C	NMAAQS	Annual	94.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NO2	1D	NMAAQS	Annual	94.02	N/A	N/A	3.26	18.0	21.26	22.62	376126	3884904
NO2	1E	NMAAQS	Annual	94.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NO2	1F	NMAAQS	Annual	94.02	N/A	N/A	3.23	18.0	21.23	22.58	376132	3884948
NO2	1G	NMAAQS	Annual	94.02	N/A	2.80	3.35	18.0	21.35	22.71	376132	3884948
NO2	1H	NMAAQS	Annual	94.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NO2	2A	NMAAQS	Annual	94.02	N/A	4.91	5.66	18.0	23.66	25.16	376126	3884904
NO2	2B	NMAAQS	Annual	94.02	N/A	5.01	5.65	18.0	23.65	25.16	376110	3884951
NO2	2C	NMAAQS	Annual	94.02	N/A	5.23	5.89	18.0	23.89	25.41	376132	3884948
NO2	2D	NMAAQS	Annual	94.02	N/A	4.86	5.59	18.0	23.59	25.09	376149	3884912
NO2	2E	NMAAQS	Annual	94.02	N/A	4.72	5.48	18.0	23.48	24.97	376149	3884912
NO2	2F	NMAAQS	Annual	94.02	N/A	5.33	5.98	18.0	23.98	25.51	376132	3884948
NO2	2G	NMAAQS	Annual	94.02	N/A	5.25	5.92	18.0	23.92	25.44	376150	3884950
NO2	2H	NMAAQS	Annual	94.02	N/A	5.02	5.65	18.0	23.65	25.16	376176	3884942

SECTION 5.0: REGULATORY APPLICABILITY

5.0 DEMONSTRATION OF COMPLIANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS

This section lists each state and federal air quality regulation that may apply to the EMTS and/or equipment that are applicable sources of regulated air pollutants.

STATE REGULATIONS

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
20.11.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Sources Within Bernalillo County.
20.11.2 NMAC	Fees	Yes	Facility	This facility is subject to 20.11.2 NMAC. The issuance of Authority to Construct and Air Quality Construction Permits include annual permit fees.
20.11.3 NMAC	Transportation Conformity	No	N/A	The East Mountain Transfer Station is not proposing to develop a transportation Plan.
20.11.4 NMAC	General Conformity	No	N/A	The East Mountain Transfer Station is not proposing to develop a transportation Plan.
20.11.5 NMAC	Visible Air Contaminants	Yes	Units 1, 2	The diesel-fired engines proposed for operation are subject to this Rule per 20.11.15.13.C NMAC
20.11.6 NMAC	Emergency Action Plan	No	N/A	Rule applies only to the Director of the air pollution control agency of Bernalillo County, NM
20.11.7 NMAC	Variance Procedure	No	N/A	Bernalillo County is not requesting a variance as part of this Application.
20.11.8 NMAC	Ambient Air Quality Standards	Yes	Facility	Compliance with Ambient Air Quality Standards is demonstrated in the Air Dispersion Modeling Analysis Report (Submitted as part of this application)
20.11.20 NMAC	Fugitive Dust Control	No	N/A	None of the permitted units at the East Mountain Transfer Station are subject to the requirements of this Rule
20.11.21 NMAC	Open Burning	Yes	Facility	Facility is an applicable source that is not located on Indian Lands over which the Albuquerque/Bernalillo County air quality control board lacks jurisdiction. The East Mountain Transfer Station does not conduct open burning, and is not requesting permission to do so.
20.11.22 NMAC	Woodburning	No	N/A	The East Mountain Transfer Station is not a woodburning source, and is therefore not subject to the provisions of this Part
20.11.23 NMAC	Stratospheric Ozone Protection	No	N/A	The East Mountain Transfer Station does not engage in the sale, servicing, or wrecking of automotive air conditioning systems, or automotive air conditioner refrigerants.
20.11.39 NMAC	Permit Waivers and Air Quality Notifications for	No	N/A	The East Mountain Transfer Station is not one of the listed source categories required to register in this Rule, per 20.11.39.2.B(2)(b) NMAC.

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Certain Source Categories			
20.11.40 NMAC	Source Registration	Yes	Units 1, 2	The diesel-fired engines proposed for operation at the facility are subject to the requirements of this Part
20.11.41 NMAC	Construction Permits	Yes	Facility	This Regulation addresses pre-construction permitting of stationary air pollution sources. Permit #2080-1AR is issued to this facility, and this application is being submitted as an application for Permit Modification as defined by 20.11.41.2.A(3) NMAC.
20.11.42 NMAC	Operating Permits	No	N/A	The facility is not a major source or any other listed source required to obtain a permit under 20.11.42 NMAC.
20.11.46 NMAC	Sulfur Dioxide Emissions Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program	No	N/A	The East Mountain Transfer Station not participate in the western backstop sulfur dioxide trading program, and is therefore not subject to the provisions of this Part. Additionally, the facility does not have the potential to emit 100 tpy of SO ₂ as defined in 20.11.46.9 NMAC.
20.11.47 NMAC	Emissions Inventory	Yes	Facility	The facility will submit emissions inventory as requested by AQP.
20.11.49 NMAC	Excess Emissions	Yes	Units 1, 2	Units 1 and 2 are subject to 20.11.41 NMAC.
20.11.60 NMAC	Permitting in Nonattainment Areas	No	N/A	The East Mountain Transfer Station is not a new major stationary source or major modification of an existing major stationary source located in a nonattainment area, and is therefore, not subject to the provisions of this Part.
20.11.61 NMAC	Prevention of Significant Deterioration	No	N/A	The East Mountain Transfer Station is not a PSD major source before or after this Application for Permit Modification, and is therefore, not subject to the provisions of this Part.
20.11.62	Acid Rain	No	N/A	The East Mountain Transfer Station is not subject to the requirements of 40 CFR 72, and is therefore, not subject to the provisions of this Part.
20.11.63 NMAC	New Source Performance Standards for Stationary Sources	Yes	Units 1, 2	Units 1 and 2 are subject to the requirements of 40 CFR 60, Subpart IIII, and are therefore subject to the previsions of this part.
20.11.64 NMAC	Emission Standards for HAPS for Stationary Sources	Yes	Facility	The East Mountain Transfer Station is subject to the provisions of this part, but does not operate any emissions units subject to the provisions of this Part or 40 CFR 63.
20.11.65 NMAC	Volatile Organic Compounds	No	N/A	The East Mountain Transfer Station does not store or distribute gasoline or other organic fluids, and is not subject to this part.
20.11.67 NMAC	Equipment, Emissions, Limitations	No	N/A	The East Mountain Transfer Station does not operate any of the affected equipment listed in 20.11.67.2.A

<u>STATE REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				NMAC, and is, therefore, not subject to the provisions of this part.
20.11.68 NMAC	Incinerators and Crematories	No	N/A	The East Mountain Transfer Station does not operate an incinerator or crematory, and is not subject to the provisions of this part.
20.11.69 NMAC	Pathological Waste Desctructors	No	N/A	The East Mountain Transfer Station does not accept or destruct pathological wastes, and is not subject to the provisions of this part.
20.11.71 NAMC	Municipal Solid Waste Landfills	No	N/A	The facility is not a Municipal Solid Waste Landfill and is not subject to the requirements of this Part.
20.11.72 NMAC	Health, Environment, and Equity Impacts	Yes	Units 1, 2	The East Mountain Transfer Station is applying for the modification of an existing source, and is therefore, subject to the provisions of this Part. A demonstration of proximity to overburdened areas is made in Section 6.0, and a BACT analysis for the emission Units is provided in Section 7.0
20.11.90 NMAC	Source Surveillance; Administration and Enforcement	Yes	Facility	This facility is a stationary source of an air contaminant and is subject to the provisions of this part

FEDERAL REGULATIONS:

<u>FEDERAL REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	Compliance with NAAQS is demonstrated in the Air Dispersion Modeling Analysis Report (Submitted to AQP as part of this application)
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Facility	The facility will comply with applicable sections.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No	N/A	The facility does not own any storage vessels with capacities > 40,000 gallons.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	N/A	The facility does not own any storage vessels with capacities > 40,000 gallons.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	No affected units.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	Yes	Units 1, 2	Units 1 and 2 (diesel-powered internal combustion engines) are subject to the provisions of this part. The units are considered stationary compression ignition (RICE that commenced construction after April 1, 2006).
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal	No	N/A	No affected units

<u>FEDERAL REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Combustion Engines			
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	No affected units
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	No affected units
NSPS 40 CFR 60, Subparts Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	The East Mountain Transfer Station Is not a municipal solid waste landfill, and is not subject to the provisions of these parts.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	No affected facilities
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	N/A	No affected facilities
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	No affected facilities
MACT 40 CFR 63, Subpart A	General Provisions	Yes	Units 1, 2	Units 1 and 2 are subject to various subparts of 40 CFR 63, and are, therefore, subject to requirements of this part.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No	N/A	No affected facilities
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	No	N/A	No affected facilities
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional	No	N/A	No affected facilities

<u>FEDERAL REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Boilers & Process Heaters			
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	No affected facilities
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	None	The East Mountain Transfer Station does not operate any RICE that were constructed on or before June 12, 2006.
40 CFR 64	Compliance Assurance Monitoring	No	N/A	This facility does not have an emissions source subject to the provisions of 40 CFR 64.
40 CFR 68	Chemical Accident Prevention	No	N/A	The facility does not have more than a threshold quantity of a regulated substance as determined under 40 CFR 68.115, and, therefore, is not required to comply with the requirements of this part.
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	N/A	Does not apply to this application
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	No affected facilities
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	No affected facilities
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	N/A	No affected facilities
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	The East Mountain Transfer Station does not service or dispose of refrigerant-containing devices.

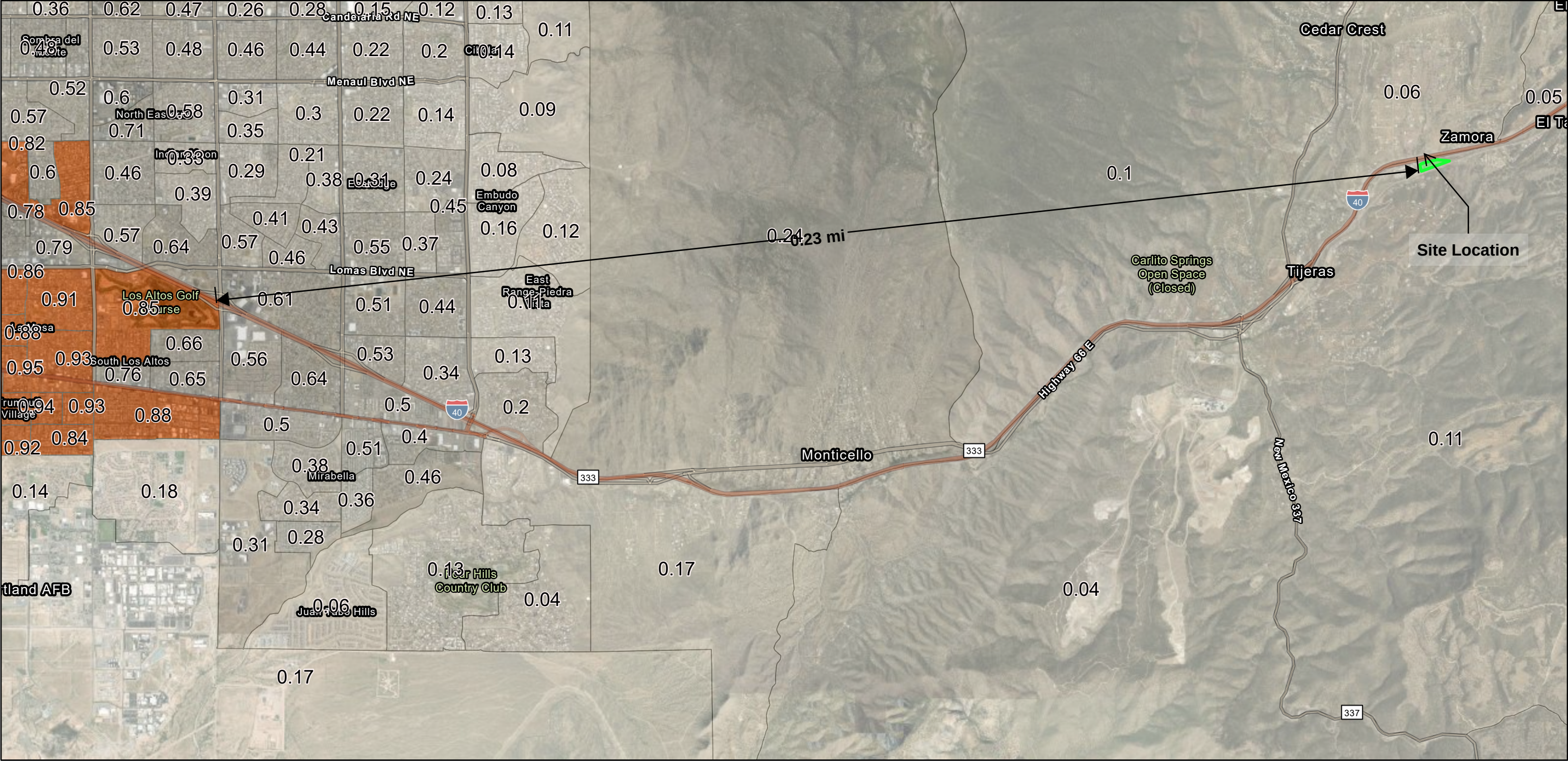
SECTION 6.0: OVERBURDENED AREA REQUIREMENTS

6.1 – Overburdened Area Separation Distance Determination

As defined by 20.11.72.7.D NMAC, “Overburdened Area” (OBA) means the twenty percent of census block groups in Bernalillo County that experience the highest cumulative environmental and public health stressors (using the most recent version of the Environmental Protection Agency’s Environmental Justice (EJ) Screen and New Mexico Department of Health’s New Mexico Indicator Based Information System (NMIBIS) as on-line resources), considering at least the following: environmental factors, health indicators, and social determinants of health indicators as defined in this regulation.

As shown in the most recent version of the Health, Environment, and Equity Impacts (HEEI) map (July 1, 2025), and indicated by the Albuquerque/Bernalillo County Health, Environment and Equity Impacts Rule Map published by the AQP and available at <https://dmdmaps.cabq.gov/maps/overburdened-areas/>, it has been determined that the EMTS is located in a census block (block group ID 350010038062) for which the OBA score is 11%. The OBA Score for this block group is NOT in the twenty percent of census block groups in Bernalillo County that experience the highest cumulative environmental and public health stressors (OBA Score of 80% or greater). Additionally, EMTS is not located within a one-mile radius of an overburdened area [20.11.72.6 NMAC]. As shown in **Figure 6.1**, the EMTS facility is located approximately 9.88 miles east of the nearest census block group with an OBA which is within the twenty percent of census block groups that experience the highest cumulative environmental and public health stressors (Block Group ID 350010007161).

EMTS Overburdened Areas Map



6/20/2026

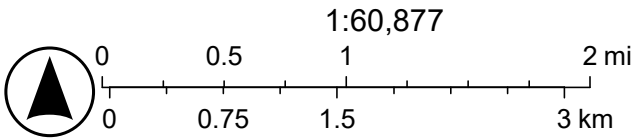
Overburdened Areas Score Percentile



High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, MRCOG-NM,BHI,BernCo GIS, Earthstar Geographics

Figure 6.1

6.2 – Best Available Control Technologies (BACT) Determination

“BACT” is defined by 20.11.72.7.A NMAC as an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification, which the director on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means which achieve equivalent results.

The facility Potential Emissions Rate (PER) operating 24 hours/day 8,760 hours/year for the combined emissions of HAPS listed in 20.11.72.8.D NMAC is approximately 0.1618 tons/year (363.2 lb/yr) if both units were run simultaneously for the entire period. The proposed operational restrictions provided in this Application (cumulative maximum operational hours) is proposed to be 800 hours per year combined operation. At the proposed 800 combined hours per year operations, maximum emissions of listed HAPs from the highest emitter (MY2019 Grinder Engine, Emission Unit 2) is calculated to be 0.00802 tons per year (16.04 lb/yr), a nearly 96% reduction in HAP emissions.

Emissions of NO_x, SO₂, CO, and PM/PM₁₀/PM_{2.5} exhibit similar reductions under the proposed operational restrictions in this Application. **Tables 2.5.1** through **2.5.4** contain the calculations of all NSR pollutant emissions from each unit resulting from the proposed modification for the facility.

BACT analysis requires the applicant to determine the best available technology to control emissions from a source. The BACT analyses for Units 1 and 2 are provided below.

Unit 1 BACT Analysis

1. Introduction and Emission Unit Description

The Unit 1 Model Year 2013 Caterpillar diesel-fired compression-ignition engine rated at 638 brake horsepower (475 kW). The engine is a Tier 4 Interim-Certified non-emergency, non-generator engine and will be limited to operate no more than 800 hours of operation per 12-month rolling period in combination with the MY 2019 diesel-powered grinder also operated at the site. The engine will combust only ultra-low sulfur diesel fuel, defined as diesel fuel with a maximum sulfur content of 15 ppm by weight (0.0015%).

This Best Available Control Technology analysis follows the five-step top-down BACT process:

1. identify all available controls
2. eliminate technically infeasible options
3. rank feasible options by effectiveness
4. evaluate economic/environmental/energy impacts, and
5. select the most effective option not eliminated through that review.

Available control options were identified using the types of sources referenced in that guidance, including EPA's RACT/BACT/LAER Clearinghouse (RBLC). For this application, the engine being evaluated is a Model Year 2013 Tier 4 Interim compliant engine in the 130-560 kW Tier 4 power category. Tier 4 Interim exhaust standards for engines in the 130-560 kW T4 Interim range are shown in Section 2, below

For stationary compression-ignition engines subject to 40 CFR Part 60, Subpart IIII, owners/operators must operate and maintain the engine to achieve applicable emission standards over the life of the engine and must use qualifying nonroad diesel fuel. EPA also states that Tier 4 standards rely on integrated engine and fuel controls and that ULSD has a maximum sulfur concentration of 15 ppm.

2. Potential Emission Basis

The potential emissions shown below are based on the applicable Tier 4 Interim emission standards listed in 40 CFR 1039, the engine rating of 638 bhp (475 kW), and the requested operating limit of 800 hours per year. These values represent the proposed BACT emission limits for the engine, and are also provided in Table 2.5.3.

Pollutant	Tier 4 Interim standard	Equivalent standard	Hourly emissions	Annual emissions at 800 hr/yr
NOx	2.0 g/kW-hr	1.49 g/bhp-hr	2.09 lb/hr	0.84 tpy
CO	3.5 g/kW-hr	2.61 g/bhp-hr	3.67 lb/hr	1.47 tpy
NMHC / VOC	0.19 g/kW-hr	0.142 g/bhp-hr	0.20 lb/hr	0.08 tpy
PM / PM ₁₀ / PM _{2.5}	0.04 g/kW-hr	0.0298 g/bhp-hr	0.042 lb/hr	0.017 tpy

Calculation basis: tons/year = standard (g/kW-hr) x 476 kW x 800 hr/yr x 0.00220462 lb/g / 2,000 lb/ton.

SO₂ emissions will be minimized through the exclusive use of ULSD fuel with sulfur content not exceeding 15 ppm. EPA diesel programs rely on the combination of Tier 4 engine standards and ULSD because high sulfur fuel can damage advanced emission control devices, and EPA identifies 15 ppm sulfur fuel as ULSD for diesel applications.

3. Top-Down BACT Analysis

Step 1 - Identify All Available Control Options

The following control options were identified for the Unit 1 diesel engine based on Tier 4 Interim engine standards, manufacturer information, EPA control technology information, and the EPA RBLC process. Highlighted control options have been identified by the manufacturer as already installed on the Unit or are currently practiced by the applicant.

Control option	Pollutants addressed	Description
Tier 4 Interim certified engine	NOx, CO, VOC/NMHC, PM	Use of a Model Year 2013 EPA-certified Tier 4 Interim engine meeting applicable standards for engines > 130 kW <560 kW category.
OEM combustion controls / electronic fuel controls / turbocharging / aftercooling	NOx, CO, VOC, PM, GHG	Manufacturer-designed combustion optimization to reduce criteria pollutants while maintaining engine efficiency.
Diesel oxidation catalyst	CO, VOC, soluble organic PM fraction	Retrofit Oxidation catalyst used to reduce CO, hydrocarbons, and a portion of diesel particulate matter.
Diesel particulate filter	PM, PM10, PM2.5	Retrofit wall-flow particulate filter, passive or active regeneration, used to capture diesel particulate matter.
Selective catalytic reduction	NOx	Retrofit catalytic NOx control using ammonia or urea-based reagent (DEF).
ULSD fuel, <=15 ppm sulfur	SO ₂ , sulfate PM, aftertreatment protection	Low sulfur fuel required to minimize sulfur emissions and protect advanced aftertreatment.
Good combustion practices and manufacturer-specified operation and maintenance	NOx, CO, VOC, PM, GHG	Proper operation, maintenance, load management, no unnecessary idling, no tampering, no bypass of emissions controls, and maintenance of emission-related components.
Operating-hour restriction	All pollutants	Annual operation limited to no more than 800 hours per 12-month rolling period.
Fuel switching or electrification	All combustion pollutants	Replacement of the diesel engine with natural gas or electric equipment.
Replacement	All pollutants	Replacement with a Tier 4 Final diesel engine or repowering with a newer certified engine package
Other add-on controls	PM, PM ₁₀ , PM _{2.5}	wet scrubbers, baghouses, electrostatic precipitators, thermal oxidizers, selective non-catalytic reduction (SNCR), and water/steam injection.

EPA's verified diesel-technology listings identify diesel retrofit technologies that can reduce PM, NOx, HC, and CO, but those listings also show that applicability is highly engine-specific. For example, EPA-verified DPF and DOC technologies are generally directed to earlier Tier 1, Tier 2, or Tier 3 engines and often require that the engine not already be certified or equipped with DPF, DOC, or SCR systems.

Step 2 - Eliminate Technically Infeasible Options

Technically Feasible or Potentially Feasible Options

Control option	Technical feasibility determination
Tier 4 Interim certified engine	Technically feasible. The engine is already certified as a Model Year 2013 Tier 4 Interim diesel engine. Use of the engine in its certified configuration, including the manufacturer's on-engine combustion and fuel control systems, is technically feasible and already incorporated into the source design.
OEM combustion controls / electronic fuel controls / turbocharging / aftercooling	Technically feasible. Manufacturer-designed combustion optimization to reduce criteria pollutants while maintaining engine efficiency. Currently installed on engine
ULSD fuel	Technically feasible. ULSD is currently used as required for this engine and emission control systems.
Good combustion practices and O&M	Technically feasible. These measures are standard operating practices.
800-hour annual operating limit	Technically feasible. The engine is equipped with a non-resettable hour meter or equivalent operating-hour tracking method.

Control option	Technical feasibility determination
SCR Retrofit	SCR is technically feasible in general for some diesel engines and EPA-verified SCR retrofit systems have demonstrated substantial NOx reductions. However, SCR retrofit feasibility depends on exhaust temperature, space, duty cycle, controls integration, urea/DEF handling, catalyst protection, and manufacturer approval. EPA's verified SCR example for 100-750 hp nonroad/stationary engines requires temperature data logging and specifies minimum exhaust-temperature conditions, operator-visible monitoring, and engine-eligibility review. SCR is therefore retained for economic and environmental review, but it is not assumed to be universally feasible without vendor confirmation for this specific certified Tier 4 Interim engine package.
Tier 4 Final replacement or electrification	Replacement with a newer engine or electric drive may be technically feasible as a source redesign or repower project, but it is not a simple add-on control for the existing certified engine. These options are retained for cost-benefit discussion but are not treated as technically equivalent bolt-on controls.

Options eliminated as technically infeasible or not applicable

Control option	Technical feasibility determination
Retrofit DPF or DOC	EPA-verified retrofit DPF and DOC technologies commonly require that the candidate engine not already be certified Tier 4 Interim. A retrofit DPF or DOC could affect the certified configuration.
Wet scrubbers, baghouses, electrostatic precipitators, and thermal oxidizers	These controls are not demonstrated or practical for a 638 bhp diesel engine exhaust stream. Diesel engine exhaust has high temperature, variable flow, low particulate loading after DPF control, and small total mass emissions. These controls are not technically appropriate for this emission unit considering the already low emissions and operations hours limitations.
SNCR	Selective Non-catalytic Reduction (SNCR) is not technically feasible for this engine because it requires a suitable high-temperature reaction zone and residence time that are not available in the compact, variable exhaust stream of a diesel compression-ignition engine.
Water/steam injection or major combustion redesign	Water injection or major combustion modification would alter the manufacturer-certified Tier 4 Interim configuration, may affect reliability, warranty, PM/CO emissions, and compliance certification, and is not proposed by the manufacturer as a certified retrofit control for this engine. This option is eliminated as technically infeasible for this certified engine package.

Step 3 - Rank Remaining Control Options by Control Effectiveness

The technically feasible controls listed above are ranked below by expected pollutant-specific effectiveness. The ranking is based on total expected control performance and the incremental benefit beyond the proposed Tier 4 Interim certified engine.

NOx Ranking

Rank	Control option	Expected effectiveness	Comment
1	Add-on SCR OR Tier 4 Final (T4F) certified engine replacement	High	Engine replacement with a T4F unit would be effective for NOx reduction, but must be evaluated for cost
2	Tier 4 Interim on-engine NOx Controls	High	Must be evaluated for cost, energy, environmental impacts, and compatibility,
3	Good combustion practices, O&M, and operating hours limitations	In-place, Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer is a very effective method to reduce NOx emissions, and is currently practiced with this Unit.

CO and VOC / NMHC ranking

Rank	Control option	Expected effectiveness	Comment
1	Manufacturer OEM DOC/CEM	Highest practical effectiveness	A Manufacturer DOC would be the most effective practical CO/NMHC control.
2	Additional add-on DOC	Low incremental benefit	Additional DOC would provide little additional benefit to the manufacturer unit if installed

Rank	Control option	Expected effectiveness	Comment
3	Good combustion practices, O&M and operating hours limitations.	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer is a very effective method to reduce CO/NMHC emissions, and is currently practiced with this Unit.

PM / PM₁₀ / PM_{2.5} ranking

Rank	Control option	Expected effectiveness	Comment
1	Add-on manufacturer DPF/CEM	Highest incremental PM reduction	DPFs can reduce PM by approximately 85-90 percent or more in verified applications.
2	Additional DPF installation	High	Further reductions of PM are proven, but the incremental benefit on a cost per ton basis are minimal
3	DOC	Moderate	DOCs can reduce a portion of diesel PM by reducing condensables, particularly the soluble organic fraction, but are less effective than DPFs for total PM.
4	Combustion of ULSD, good combustion practices, O&M, and operating hours limitations	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer and combusting only ULSD are very effective methods to reduce PM emissions, and is currently practiced with this Unit.

SO₂ ranking

Rank	Control option	Expected effectiveness	Comment
1	Combustion of ULSD fuel, <=15 ppm sulfur	Highest practical effectiveness	SO ₂ is controlled through fuel sulfur restriction. No add-on SO ₂ control is warranted for this diesel engine.
2	Good combustion practices, O&M, and operating hours limitations	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer and combusting only ULSD are very effective methods to reduce SO ₂ emissions, and is currently practiced with this Unit.

EPA-verified retrofit examples show DPF reductions of approximately 90 percent for PM, DOC reductions of 20 percent PM / 80 percent HC / 90 percent CO for certain engines, and SCR reductions of approximately 80 percent NO_x for certain 100-750 hp nonroad/stationary engines. EPA guidance also identifies DPFs as high-efficiency diesel PM controls but notes that they must be evaluated for specific engines, exhaust temperature, duty cycle, sulfur content, lubricant use, PM level, backpressure, monitoring, and cleaning requirements.

Step 4 - Economic, Environmental, and Energy Impact Evaluation

EPA's Control Cost Manual provides the standard framework for developing accurate and consistent air pollution control-device costs for pollutants including VOC, PM, NO_x, SO₂, and related pollutants. For this limited-use engine, cost-effectiveness is driven by the low annual operating limit. At 800 hours/year, the engine's annual activity is only approximately 380,000 kW-hr/year.

The Unit 1 engine is designed and manufactured to meet stringent Tier 4 Interim emission standards and will operate no more than 800 hours per year. The incremental annual emission reductions available from additional add-on controls are small. This substantially increases the cost per ton of any additional add-on control.

No jurisdiction-specific cost-effectiveness threshold is assumed in this analysis. The conclusions below are based on the specific annual emission reductions available from this engine and on the relative cost, energy, environmental, and operational impacts of each control option.

NOx - SCR Retrofit cost and impact review

Using the conservative Tier 4 Interim alternate screening value of 2.0 g/kW-hr NOx, total NOx maximum NOx emissions for the Unit 1 Tier 4 Interim engine are approximately 0.84 tpy at the permitted 800-hour annual operating limit. Assuming SCR achieves 80 percent NOx reduction, the maximum annual NOx reduction would be approximately 1.6 tons/year.

Because a project-specific SCR vendor quotation is not available, the following screening illustrates the cost-benefit relationship:

Annualized SCR Cost	Cost Effectiveness at 1.6 tpy Reduction
\$30,000/year	~\$18,750/ton NOx removed
\$50,000/year	~\$31,250/ton NOx removed
\$75,000/year	~\$46,875/ton NOx removed

EPA SCR cost information notes that SCR capital costs are generally high, that operation and maintenance costs include reagent, catalyst replacement, auxiliary power, and associated equipment, and that capacity factor significantly affects cost effectiveness (\$20,000 to over \$45,000/ton NOx removed, annualized cost). EPA also identifies potential SCR issues including ammonia slip, catalyst plugging, corrosion, pressure drop, reagent handling, and potential need for auxiliary power or exhaust treatment system design changes.

For this engine, SCR is not selected as BACT because the cost and collateral impacts are not justified by the small annual NOx reduction. In addition to capital cost, SCR would require catalyst housing, urea or ammonia reagent storage and delivery, ad-on controls integration, temperature management, additional backpressure evaluation, periodic catalyst maintenance or replacement, potential ammonia slip management, and additional compliance demonstration. These impacts are disproportionate for an engine limited to a maximum of 800 operating hours per year. **The selected NOx BACT for the Unit 1, Model Year 2013 Tier 4 Interim certified engine is: Good combustion practices, proper operation and maintenance, combustion of ULSD fuel, and the 800-hour annual operating limit.**

PM / PM₁₀ / PM_{2.5} - DPF cost and impact review

The Unit 1 Tier 4 Interim engine has a PM potential to emit of approximately 0.017 tpy at 800 hours per year. Assuming an add-on Diesel Particulate Filter (DPF) achieves 85 percent incremental PM reduction, the maximum additional PM reduction would be approximately $0.017 \times 0.85 = 0.014$ tpy.

EPA information indicates that DPFs typically reduce PM by approximately 85-90 percent or more, but also states that DPFs must be matched to the specific engine and duty cycle, require evaluation of exhaust temperature and backpressure, and require inspection, monitoring, and periodic ash cleaning. EPA also indicates that typical DPF costs of approximately \$5,000 to \$15,000 or more, with active DPF systems for large nonroad equipment costing up to approximately \$50,000.

Using the available annual PM reduction of only approximately 0.014 tpy, even the lower end of typical DPF capital cost results in very high cost effectiveness per ton before considering maintenance, cleaning, backpressure monitoring, downtime, or active-regeneration energy impacts. At \$5,000 to \$15,000 installed cost, annualized capital-only cost effectiveness is approximately \$36,000 to \$110,000 per ton of PM removed, assuming a 10-year equipment life. For an active DPF costing up to \$50,000, capital-only cost effectiveness would be approximately \$360,000 per ton of PM removed. Actual cost would be higher after adding maintenance and operating costs.

An add-on DPF is therefore not selected as BACT for this engine. **The selected PM BACT for the Unit 2 Tier 4 Interim certified engine is: Combustion of ULSD fuel, manufacturer-required operation and maintenance, and the 800-hour annual operating limit.**

CO and VOC / NMHC - DOC and combustion control review

A retrofit DOC would provide little or no incremental benefit to CO and VOC emissions, and would provide negligible PM reduction from the already-low PM baseline of 0.017 tpy. A 20 percent reduction from 0.017 tons/year PM would equal only about 0.0034 tons/year; at even \$5,000/year annualized cost, this would exceed approximately \$157,000 per ton of PM removed.

Retrofit DOC is therefore not selected as BACT. **The selected CO and VOC/NMHC BACT for the Unit 1 Tier 4 Interim certified engine is: Good combustion practices, proper operation and maintenance, Combustion of ULSD fuel, and the 800-hour annual operating limit.**

SO₂ - ULSD fuel review

SO₂ emissions are controlled most directly by limiting the sulfur content of the fuel combusted. The engine will combust only ULSD fuel containing no more than 15 ppm sulfur. EPA diesel fuel standards require ULSD for nonroad diesel fuel, and Caterpillar specifies ULSD fuel for the Tier 4 Interim engine configuration.

No add-on SO₂ control is technically or economically justified for this small diesel combustion source. **The selected SO₂ BACT is the exclusive use of ULSD fuel with sulfur content not exceeding 15 ppm.**

GHG - Energy efficiency and operating limitation review

Greenhouse gas emissions from the engine will be minimized through the use of manufacturer-specified maintenance, proper combustion practices, avoidance of unnecessary idling, and the 800-hour annual operating restriction. Add-on carbon capture is not technically feasible or cost-effective for this small, intermittently operated diesel engine because the exhaust flow is variable, annual utilization is low, and the project does not include CO₂ compression, transport, or sequestration infrastructure. **The selected GHG BACT is good combustion practice, proper engine maintenance, operation consistent with manufacturer specifications, and the 800-hour annual operating limit.**

Tier 4 Final Replacement or Electrification

Replacing the certified 2013 Tier 4 Interim engine with a Tier 4 Final engine or an electric drive could reduce emissions depending on the actual engine certification level, but it would require equipment replacement or major repowering rather than a simple control retrofit. PM emissions would remain very low and may not materially decrease because Tier 4 Interim PM is already approximately 0.04 g/kW-hr in the applicable power class. Given the limited operation of 800 hours/year and low annual emissions, engine replacement or electrification would impose disproportionate capital cost and downtime relative to the incremental emission reduction. **These options are not selected as BACT.**

Step 5 – BACT Selection

Based on the top-down review, BACT for the Model Year 2013 Caterpillar 638 bhp Tier 4 Interim non-emergency, non-generator diesel engine is as follows:

Pollutant	Selected BACT	Proposed BACT limit / requirement
NOx	Good combustion practices, proper operation and maintenance, combustion of ULSD fuel, and the 800-hour annual operating limit.	2.0 g/kW-hr; 2.09 lb/hr; 0.84 tpy
CO	Good combustion practices, proper operation and maintenance, Combustion of ULSD fuel, and the 800-hour annual operating limit.	3.5 g/kW-hr; 3.67 lb/hr; 1.47 tpy
VOC / NMHC	Good combustion practices, proper operation and maintenance, Combustion of ULSD fuel, and the 800-hour annual operating limit.	0.19 g/kW-hr; 0.20 lb/hr; 0.08 tpy
PM / PM ₁₀ / PM _{2.5}	Combustion of ULSD fuel, manufacturer-required operation and maintenance, and the 800-hour annual operating limit.	0.04 g/kW-hr; 0.042 lb/hr; 0.017 tpy
SO ₂	ULSD fuel only	Fuel sulfur content <=15 ppm by weight
GHG	Good combustion practice, proper engine maintenance, operation consistent with manufacturer specifications, and the 800-hour annual operating limit.	Work practice and operating-hour limitation

These are the most effective control options not eliminated based on technical feasibility, economic reasonableness, environmental impacts, and energy impacts. SCR and replacement/repower options are not selected because their incremental emission reductions are small at the proposed operating limit and their cost-effectiveness is disproportionate. DPF or DOC are not selected because the incremental benefit to emission reductions are small at the proposed operating limit and their cost-effectiveness is disproportionate, and retrofit control can be technically inapplicable or redundant.

Unit 2 BACT Analysis

1. Introduction and Emission Unit Description

The Model Year 2019 Caterpillar diesel-fired compression-ignition engine rated at 802 brake horsepower (598 kW). The engine is a Tier 4 Final-Certified non-emergency, non-generator engine and will be limited to operate no more than 800 hours of operation per 12-month rolling period in combination with the MY 2013 diesel-powered grinder also operated at the site. The engine will combust only ultra-low sulfur diesel fuel, defined as diesel fuel with a maximum sulfur content of 15 ppm by weight (0.0015%).

This Best Available Control Technology analysis follows the five-step top-down BACT process:

1. identify available control options
2. eliminate technically infeasible options
3. rank feasible options by effectiveness
4. evaluate economic/environmental/energy impacts, and
5. select BACT as the most effective option not eliminated through that review.

Available control options were identified using the types of sources referenced in that guidance, including EPA's RACT/BACT/LAER Clearinghouse (RBLC). For this application, the engine being evaluated is a Model Year 2019 Tier 4 Final compliant engine in the greater-than-560 kW, non-generator category. Federal nonroad diesel standards after the 2014 model year apply steady-state standards to engines in this size category, and the applicable Tier 4 Final exhaust standards for engines greater than 560 kW, all except generator sets, are shown in Section 2, below

Caterpillar documentation for the high-rating C18 Tier 4 Final petroleum engine family identifies ratings of approximately 755 and 800 bhp, states that the engine is designed to meet U.S. EPA Tier 4 Final requirements, and identifies an on-engine NO_x Reduction System and diesel oxidation catalyst exhaust aftertreatment. Caterpillar also specifies ULSD fuel with sulfur content not exceeding 15 ppm for this Tier 4 Final engine configuration.

2. Potential Emissions Basis

The potential emissions shown below are based on the applicable Tier 4 Final emission standards listed in 40 CFR 1039, the engine rating of 802 bhp (598 kW), and the requested operating limit of 800 hours per year. These values represent the proposed BACT emission limits for the engine, and are also provided in Table 2.5.4..

Pollutant	Tier 4 Final standard	Equivalent standard	Hourly emissions	Annual emissions at 800 hr/yr
NO _x	3.5 g/kW-hr	2.61 g/bhp-hr	4.61 lb/hr	1.85 tpy
CO	3.5 g/kW-hr	2.61 g/bhp-hr	4.61 lb/hr	1.85 tpy
NMHC / VOC	0.19 g/kW-hr	0.142 g/bhp-hr	0.25 lb/hr	0.10 tpy
PM / PM ₁₀ / PM _{2.5}	0.04 g/kW-hr	0.0298 g/bhp-hr	0.053 lb/hr	0.021 tpy

Calculation basis: tons/year = standard (g/kW-hr) x 598 kW x 800 hr/yr x 0.00220462 lb/g / 2,000 lb/ton.

SO₂ emissions will be minimized through the exclusive use of ULSD fuel with sulfur content not exceeding 15 ppm. EPA diesel programs rely on the combination of Tier 4 engine standards and ULSD because high sulfur fuel can damage advanced emission control devices, and EPA identifies 15 ppm sulfur fuel as ULSD for diesel applications.

3. Top-Down BACT Analysis

Step 1 - Identify All Available Control Options

The following control options were identified for the Unit 2 diesel engine based on federal Tier 4 Final engine standards, manufacturer information, EPA control technology information, and the EPA RBLC process. Highlighted control options have been identified by the manufacturer as already installed on the Unit or are currently practiced by the applicant.

Control option	Pollutants addressed	Description
Tier 4 Final certified engine	NOx, CO, VOC/NMHC, PM	Use of a Model Year 2019 EPA-certified Tier 4 Final engine meeting applicable standards for engines >560 kW, non-generator.
OEM combustion controls / electronic fuel controls / turbocharging / aftercooling	NOx, CO, VOC, PM, GHG	Manufacturer-designed combustion optimization to reduce criteria pollutants while maintaining engine efficiency.
OEM NOx Reduction System	NOx	Caterpillar-identified on-engine NOx reduction system for the Tier 4 Final engine configuration.
Diesel oxidation catalyst	CO, VOC, soluble organic PM fraction	Oxidation catalyst used to reduce CO, hydrocarbons, and a portion of diesel particulate matter.
Diesel particulate filter	PM, PM ₁₀ , PM _{2.5}	Add-on wall-flow particulate filter, passive or active regeneration, used to capture diesel particulate matter.
Selective catalytic reduction	NOx	Add-on catalytic NOx control using ammonia or urea-based reagent.
Lean NOx catalyst / NOx adsorber	NOx	Add-on Catalyst-based NOx reduction technologies used in some diesel applications.
ULSD fuel, <=15 ppm sulfur	SO ₂ , sulfate PM, aftertreatment protection	Low sulfur fuel required to minimize sulfur emissions and protect advanced aftertreatment.
Good combustion practices and manufacturer-specified operation and maintenance	NOx, CO, VOC, PM, GHG	Proper operation, maintenance, load management, no unnecessary idling, and maintenance of emission-related components.
Operating-hour restriction	All pollutants	Annual operation limited to no more than 800 hours per 12-month rolling period.
Fuel switching or electrification	All combustion pollutants	Replacement of the diesel engine with natural gas or electric equipment.
Carbon capture and sequestration	CO ₂ / GHG	Capture, compression, transport, and sequestration of CO ₂ from the exhaust stream.

Step 2 - Eliminate Technically Infeasible Options

Technically Feasible or Potentially Feasible Options

Control option	Technical feasibility determination
Tier 4 Final certified engine	Technically feasible. The proposed engine is a Model Year 2019 Tier 4 Final diesel engine and is expected to be certified in applicable >560 kW non-generator category.
OEM combustion controls / electronic controls	Technically feasible. These controls are inherent to the certified engine configuration.
OEM NOx Reduction System	Technically feasible. This control is part of the Caterpillar Tier 4 Final engine design for the high-rating engine configuration.
OEM diesel oxidation catalyst	Technically feasible. Caterpillar documentation identifies DOC aftertreatment for the Tier 4 Final high-rating engine configuration. Certification documents identify this control as installed.
ULSD fuel	Technically feasible. ULSD is commercially available and required for modern diesel engines and emission control systems.
Good combustion practices and O&M	Technically feasible. These measures are standard operating practices.
800-hour annual operating limit	Technically feasible. The engine is equipped with a non-resettable hour meter or equivalent operating-hour tracking method.

Options eliminated as technically infeasible or not applicable

Control option	Technical feasibility determination
Fuel switching to natural gas or electric equipment	Eliminated. This option would redefine the proposed source and is not an add-on control technology for the proposed diesel-fired emission unit. The project purpose is to operate a diesel engine burning only ULSD.
Carbon capture and sequestration	Eliminated. CCS is not technically feasible for this small, intermittently operated diesel engine. The engine has low annual utilization, variable exhaust conditions, and no practical CO ₂ capture, compression, transport, and sequestration infrastructure associated with this project.
Combustion timing changes or non-OEM engine modifications	Eliminated. Non-OEM changes to a certified Tier 4 Final engine could adversely affect the certified configuration, reliability, warranty, and emissions performance. BACT should be based on operation of the certified engine configuration, not uncertified engine modification.

Step 3 - Rank Remaining Control Options by Effectiveness

The technically feasible controls listed above are ranked below by expected pollutant-specific effectiveness. The ranking is based on total expected control performance and the incremental benefit beyond the proposed Tier 4 Final certified engine.

NOx ranking

Rank	Control option	Expected effectiveness	Comment
1	Add-on SCR plus Tier 4 Final certified engine	Highest incremental NOx reduction	EPA identifies SCR as a NOx control for stationary reciprocating internal combustion engines and reports typical NOx reduction capability of approximately 70-90 percent, depending on design and operating conditions.
2	Tier 4 Final certified engine with OEM NOx Reduction System and combustion controls	High	Meets applicable Tier 4 Final NOx standard of 3.5 g/kW-hr for >560 kW non-generator engines.
3	Lean NOx catalyst / NOx adsorber	Moderate to limited	Less effective and less preferred than SCR for this application.
4	Good combustion practices, O&M, and operating hours limitations	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer is a very effective method to reduce NOx emissions, and is currently practiced with this Unit.

CO and VOC / NMHC ranking

Rank	Control option	Expected effectiveness	Comment
1	Tier 4 Final certified engine with OEM DOC and combustion controls	Highest practical effectiveness	The engine includes OEM DOC aftertreatment, and Tier 4 Final limits CO and NMHC emissions.
2	Additional add-on DOC	Low incremental benefit	DOCs can reduce CO and hydrocarbons, but an additional DOC would provide little incremental benefit where the engine already includes OEM DOC.
3	Good combustion practices, O&M, and operating hours limitations	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer is a very effective method to reduce CO/NMHC emissions, and is currently practiced with this Unit.

EPA information for DOCs indicates typical reductions of 20-40 percent PM, 40-75 percent hydrocarbons, and 10-60 percent CO, with little impact on NOx; DOCs are also most compatible with ULSD fuel.

PM / PM₁₀ / PM_{2.5} ranking

Rank	Control option	Expected effectiveness	Comment
1	Add-on DPF plus Tier 4 Final certified engine	Highest incremental PM reduction	DPFs can reduce PM by approximately 85-90 percent or more in verified applications.
2	Tier 4 Final certified engine with OEM aftertreatment and ULSD	High	Meets applicable Tier 4 Final PM standard of 0.04 g/kW-hr.
3	DOC	Moderate	DOCs can reduce a portion of diesel PM by reducing condensables, particularly the soluble organic fraction, but are less effective than DPFs for total PM.
4	Good combustion practices, O&M, and operating hours limitations	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer and combusting only ULSD are very effective methods to reduce PM emissions, and is currently practiced with this Unit.

EPA guidance identifies DPFs as high-efficiency diesel PM controls but notes that they must be evaluated for specific engines, exhaust temperature, duty cycle, sulfur content, lubricant use, PM level, backpressure, monitoring, and cleaning requirements.

SO₂ ranking

Rank	Control option	Expected effectiveness	Comment
1	ULSD fuel, <=15 ppm sulfur	Highest practical effectiveness	SO ₂ is controlled through fuel sulfur restriction. No add-on SO ₂ control is warranted for this diesel engine.
2	Fuel-use minimization / hour limit	Supplemental	Limiting operating hours of an engine that is maintained as recommended by the manufacturer and combusting only ULSD are very effective methods to reduce SO ₂ emissions, and is currently practiced with this Unit.

Step 4 - Economic, Environmental, and Energy Impact Evaluation

EPA's Control Cost Manual provides the standard framework for developing accurate and consistent air pollution control-device costs for pollutants including VOC, PM, NO_x, SO₂, and related pollutants. For this limited-use engine, cost-effectiveness is driven by the low annual operating limit. At 800 hours/year, the engine's annual activity is only approximately 478,400 kW-hr/year.

The Unit 2 engine is designed and manufactured to meet stringent Tier 4 Final emission standards and will operate no more than 800 hours per year. Because the baseline emissions after Tier 4 Final controls are already low, the incremental annual emission reductions available from additional add-on controls are small. This substantially increases the cost per ton of any additional add-on control.

No jurisdiction-specific cost-effectiveness threshold is assumed in this analysis. The conclusions below are based on the specific annual emission reductions available from this engine and on the relative cost, energy, environmental, and operational impacts of each control option.

NOx - SCR cost and impact review

The maximum for-SCR NOx emissions from the Unit 2 Tier 4 Final engine are approximately 1.85 tpy at the permitted 800-hour annual operating limit. Assuming SCR achieves 80 percent incremental NOx reduction, the maximum annual NOx reduction would be approximately 1.48 tons/year.

Because a project-specific SCR vendor quotation is not available, the following screening illustrates the cost-benefit relationship:

Annualized SCR Cost	Cost Effectiveness at 1.48 tpy Reduction
\$30,000/year	~\$20,000/ton NOx removed
\$50,000/year	~\$34,000/ton NOx removed
\$75,000/year	~\$51,000/ton NOx removed

SCR is therefore capable of additional NOx reduction in principle, but the emission reduction available from this low-use Tier 4 Final engine is limited to approximately 1.48 tons/year.

EPA SCR cost information notes that SCR capital costs are generally high, that operation and maintenance costs include reagent, catalyst replacement, auxiliary power, and associated equipment, and that capacity factor significantly affects cost effectiveness (\$20,000 to over \$50,000/ton NOx removed, annualized cost). EPA also identifies potential SCR issues including ammonia slip, catalyst plugging, corrosion, pressure drop, reagent handling, and potential need for auxiliary power or exhaust treatment system design changes.

For this engine, SCR is not selected as BACT because the cost and collateral impacts are not justified by the small annual NOx reduction. In addition to capital cost, SCR would require catalyst housing, urea or ammonia reagent storage and delivery, ad-on controls integration, temperature management, additional backpressure evaluation, periodic catalyst maintenance or replacement, potential ammonia slip management, and additional compliance demonstration. These impacts are disproportionate for an engine limited to a maximum of 800 operating hours per year and already certified to Tier 4 Final standards. **The selected NOx BACT for the Unit 2, Model Year 2019 Tier 4 Final certified engine with OEM NOx controls is : Good combustion practices, proper operation and maintenance, combustion of ULSD fuel, and the 800-hour annual operating limit.**

PM / PM₁₀ / PM_{2.5} - DPF cost and impact review

The Unit 2 Tier 4 Final engine has a PM potential to emit of approximately 0.021 tpy at 800 hours per year. Assuming an add-on Diesel Particulate Filter (DPF) achieves 85 percent incremental PM reduction, the maximum additional PM reduction would be approximately $0.021 * 0.85 = 0.018$ tpy.

EPA information indicates that DPFs typically reduce PM by approximately 85-90 percent or more, but also states that DPFs must be matched to the specific engine and duty cycle, require evaluation of exhaust temperature and backpressure, and require inspection, monitoring, and periodic ash cleaning. EPA also indicates that typical DPF costs of approximately \$5,000 to \$15,000 or more, with active DPF systems for large nonroad equipment costing up to approximately \$50,000.

Using the available annual PM reduction of only approximately 0.018 tpy, even the lower end of typical DPF capital cost results in very high cost effectiveness per ton before considering maintenance, cleaning, backpressure monitoring, downtime, or active-regeneration energy impacts. At \$5,000 to \$15,000 installed cost, annualized capital-only cost effectiveness is approximately \$28,000 to \$83,000 per ton of PM removed, assuming a 10-year equipment life. For an active DPF costing up to \$50,000, capital-only cost effectiveness would be approximately \$280,000 per ton of PM removed. Actual cost would be higher after adding maintenance and operating costs.

An add-on DPF is therefore not selected as BACT for this engine. **The selected PM BACT for the Unit 2 Tier 4 Final certified engine is: OEM aftertreatment, Combustion of ULSD fuel, manufacturer-required operation and maintenance, and the 800-hour annual operating limit.**

CO and VOC / NMHC - DOC and combustion control review

The Caterpillar Tier 4 Final certified engine configuration includes OEM DOC aftertreatment. DOCs are effective for reducing CO and hydrocarbons and can also reduce a portion of diesel PM; however, an additional add-on DOC would provide little incremental benefit where the engine already includes DOC aftertreatment. EPA information identifies DOCs as relatively low-cost controls compared with more complex aftertreatment, but the benefit of an additional DOC would be limited by the already-controlled Tier 4 Final emission rates.

Additional add-on DOC is therefore not selected as BACT. **The selected CO and VOC/NMHC BACT for the Unit 2 Tier 4 Final certified engine with OEM DOC is: Proper operation and maintenance, ULSD fuel, and the 800-hour annual operating limit.**

SO₂ - ULSD fuel review

SO₂ emissions are controlled most directly by limiting the sulfur content of the fuel combusted. The engine will combust only ULSD fuel containing no more than 15 ppm sulfur. EPA diesel fuel standards require ULSD for nonroad diesel fuel, and Caterpillar specifies ULSD fuel for the Tier 4 Final engine configuration.

No add-on SO₂ control is technically or economically justified for this small diesel combustion source. **The selected SO₂ BACT is the exclusive use of ULSD fuel with sulfur content not exceeding 15 ppm.**

GHG - Energy efficiency and operating limitation review

Greenhouse gas emissions from the engine will be minimized through the use of a modern Tier 4 Final certified engine, manufacturer-specified maintenance, proper combustion practices, avoidance of unnecessary idling, and the 800-hour annual operating restriction. Add-on carbon capture is not technically feasible or cost-effective for this small, intermittently operated diesel engine because the exhaust flow is variable, annual utilization is low, and the project does not include CO₂ compression, transport, or sequestration infrastructure. **The selected GHG BACT is good combustion practice, proper engine maintenance, operation consistent with manufacturer specifications, and the 800-hour annual operating limit.**

Step 5 - BACT Selection

Based on the top-down review, BACT for the Model Year 2019 Caterpillar 802 bhp Tier 4 Final non-emergency, non-generator diesel engine is as follows:

Pollutant	Selected BACT	Proposed BACT limit / requirement
NOx	Model Year 2019 Tier 4 Final certified diesel engine with OEM NOx controls, good combustion practices, manufacturer-required O&M, ULSD fuel, and 800-hour annual operating limit	3.5 g/kW-hr; 4.61 lb/hr; 1.85 tpy
CO	Tier 4 Final certified engine with OEM DOC and combustion controls	3.5 g/kW-hr; 4.61 lb/hr; 1.85 tpy
VOC / NMHC	Tier 4 Final certified engine with OEM DOC and combustion controls	0.19 g/kW-hr; 0.25 lb/hr; 0.10 tpy
PM / PM ₁₀ / PM _{2.5}	Tier 4 Final certified engine with OEM aftertreatment, ULSD fuel, good combustion practices, and proper O&M	0.04 g/kW-hr; 0.053 lb/hr; 0.021 tpy
SO ₂	ULSD fuel only	Fuel sulfur content <=15 ppm by weight
GHG	Efficient certified engine, good combustion practices, manufacturer-required O&M, no unnecessary idling, and 800-hour annual operating limit	Work practice and operating-hour limitation

These are the most effective control options not eliminated based on technical feasibility, economic reasonableness, environmental impacts, and energy impacts. Add-on SCR and add-on DPF were evaluated but are not selected as BACT because the engine is already a Tier 4 Final certified unit, the annual operating limit results in low allowable annual emissions, and the incremental emission reductions from additional add-on controls are not cost-effective when compared with the capital, operating, energy, and environmental impacts of those controls.

EXHIBIT A: APPLICATION FORMS

PERMIT APPLICATION FORM



**City of Albuquerque – Environmental Health Department
Air Quality Program**

Please mail this application to **P.O. Box 1293, Albuquerque, NM 87103**
or hand deliver between 8:00 am – 5:00 pm Monday – Friday to:
3rd Floor, Suite 3023 – One Civic Plaza NW, Albuquerque, NM 87102
(505) 768-1972 aqd@cabq.gov



**Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)**

Submittal Date: August 28, 2026

Owner/Corporate Information ☐ Check here and leave this section blank if information is exactly the same as Facility Information below.

Company Name: County of Bernalillo Solid Waste Department			
Mailing Address: 600 Second St. NW	City: Albuquerque	State: NM	Zip: 87102
Company Phone: 505.468.1294	Company Contact: Antonio Jaramillo, PE		
Company Contact Title: Director of Operations and Maintenance	Phone: 505.401.3330	E-mail: aejaramillo@bernco.gov	

Stationary Source (Facility) Information: Provide a plot plan (legal description/drawing of the facility property) with overlay sketch of facility processes, location of emission points, pollutant type, and distances to property boundaries.

Facility Name: East Mountains Transfer Station			
Facility Physical Address: 711 NM Hwy 333	City: Tijeras	State: NM	Zip: 87509
Facility Mailing Address (if different):	City:	State:	Zip:
Facility Contact: Paul Wiggins	Title: Transfer Station Foreman		
Phone: 505.314.0130	E-mail: pwiggins@bernco.gov		
Authorized Representative Name ¹ : Gabriel Villescas	Authorized Representative Title: Solid Waste Manager		

Billing Information ☒ Check here if same contact and mailing address as corporate ☐ Check here if same as facility

Billing Company Name:			
Mailing Address:	City:	State:	Zip:
Billing Contact:	Title:		
Phone:	E-mail:		

Preparer/Consultant(s) Information ☐ Check here and leave section blank if no Consultant used or Preparer is same as Facility Contact.

Name: Parkhill, Andrew N. Yuhas	Title: Professional Geologist		
Mailing Address: 333 Rio Rancho Blvd. NE, Suite 400	City: Rio Rancho	State: NM	Zip: 87124
Phone: 505.504.7765	Email: ayuhas@parkhill.com		

1. See 20.11.41.13(E)(13) NMAC.

Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

General Operation Information (if any question does not pertain to your facility, type N/A on the line or in the box)

Permitting action being requested (please refer to the definitions in 20.11.40 NMAC or 20.11.41 NMAC):				
☐ New Permit	☒ Permit Modification Current Permit #: 2080	☐ Technical Permit Revision Current Permit #: NA	☐ Administrative Permit Revision Current Permit #: NA	
☐ New Registration Certificate	☐ Modification Current Reg. #: NA	☐ Technical Revision Current Reg. #: NA	☐ Administrative Revision Current Reg. #: NA	
UTM coordinates of facility (Zone 13, NAD 83): 376,070 m E, 3,884,910 m N				
Facility type (<i>i.e.</i> , a description of your facility operations): Solid Waste Transfer Station				
Standard Industrial Classification (SIC Code #): 4953		North American Industry Classification System (NAICS Code #): 562219		
Is this facility currently operating in Bernalillo County? Yes		If YES , list date of original construction: July 2006 If NO , list date of planned startup: NA		
Is the facility permanent? Yes		If NO , list dates for requested temporary operation: From NA Through NA		
Is the facility a portable stationary source? No		If YES , is the facility address listed above the main permitted location for this source? NA		
Is the application for a physical or operational change, expansion, or reconstruction (<i>e.g.</i> , altering process, or adding, or replacing process or control equipment, etc.) to an existing facility? Yes				
Provide a description of the requested changes: This application is for the replacement of the original permitted horizontal grinder engine and addition of a secondary horizontal grinder engine at the facility.				
What is the facility's operation? ☒ Continuous ☐ Intermittent ☐ Batch				
Estimated percent of production/operation:	Jan-Mar: 25	Apr-Jun: 25	Jul-Sep: 25	Oct-Dec: 25
Requested operating times of facility:	5 hours/day	3 days/week	4 weeks/month	12 months/year
Will there be special or seasonal operating times other than shown above? This includes monthly- or seasonally-varying hours. No				
If YES , please explain: NA				
List raw materials processed: Green Waste and Woody Waste				
List saleable item(s) produced: Wood Chips and Mulch				

USE INSTRUCTIONS: For the forms on the following pages, please do not alter or delete the existing footnotes or page breaks. If additional footnotes are needed then add them to the end of the existing footnote list for a given table. Only update the rows and cells within tables as necessary for your project. Unused rows can be deleted from tables. If multiple scenarios will be represented then the Uncontrolled and Controlled Emission Tables, and other tables as needed, can be duplicated and adjusted to indicate the different scenarios.

Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Regulated Emission Sources Table

(E.g., Generator-Crusher-Screen-Conveyor-Boiler-Mixer-Spray Guns-Saws-Sander-Oven-Dryer-Furnace-Incinerator-Haul Road-Storage Pile, etc.) Match the Units listed on this Table to the same numbered line if also listed on Emissions Tables & Stack Table.

Unit Number and Description ¹		Manufacturer	Model #	Serial #	Manufacture Date	Installation Date	Modification Date ²	Process Rate or Capacity (Hp, kW, Btu, ft ³ , lbs, tons, yd ³ , etc.) ³	Fuel Type
1	Horizontal grinder engine	CAT	C18	BDN01715	2013	2013	N/A	638 Hp	No. 2 ULS Diesel
2	Horizontal grinder engine	CAT	C18	BDN04216	2019	2020	N/A	802 Hp	No. 2 ULS Diesel

NOTE: To add extra rows in Word, click anywhere in the last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

- 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.
- To determine whether a unit has been modified, evaluate if changes have been made to the unit that impact emissions or that trigger modification as defined in 20.11.41.7(U) NMAC. If not, put N/A.
- Basis for Equipment Process Rate or Capacity (e.g., Manufacturer's Data, Field Observation/Test, etc.)
Submit information for each unit as an attachment.

*certifications for each engine are provided in **Section 2.4**. Information includes emissions rate certifications, and fuel usage.*

Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Emissions Control Equipment Table

Control Equipment Units listed on this Table should either match up to the same Unit number as listed on the Regulated Emission Sources, Controlled Emissions and Stack Parameters Tables (if the control equipment is integrated with the emission unit) or should have a distinct Control Equipment Unit Number and that number should then also be listed on the Stack Parameters Table.

Control Equipment Unit Number and Description		Controlling Emissions for Unit Number(s)	Manufacturer	Model # Serial #	Date Installed	Controlled Pollutant(s)	% Control Efficiency ¹	Method Used to Estimate Efficiency	Rated Process Rate or Capacity or Flow
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: To add extra rows in Word, click anywhere in the last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

1. Basis for Control Equipment % Efficiency (e.g., Manufacturer's Data, Field Observation/Test, AP-42, etc.). **N/A**
Submit information for each unit as an attachment.

Additional emissions control equipment is not planned or proposed for use in the operation of the two source engines. All manufacturer-installed emission controls will remain in operation on each Unit and are maintained as required by the manufacturer.

**Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)**

Exempted Sources and Exempted Activities Table

See 20.11.41 NMAC for exemptions.

Unit Number and Description		Manufacturer	Model #	Serial #	Manufacture Date	Installation Date	Modification Date ¹	Process Rate or Capacity (Hp, kW, Btu, ft ³ , lbs, tons, yd ³ , etc.) ²	Fuel Type
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. NOTE: To add extra rows in Word, click anywhere in the last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

1. To determine whether a unit has been modified, evaluate if changes have been made to the unit that impact emissions or that trigger modification as defined in 20.11.41.7(U) NMAC. Also, consider if any changes that were made alter the status from exempt to non-exempt. If not, put N/A.
2. Basis for Equipment Process Rate or Capacity (e.g., Manufacturer's Data, Field Observation/Test, etc.) **N/A**
Submit information for each unit as an attachment.

Application for Air Pollutant Sources in Bernalillo County Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Uncontrolled Emissions Table

(Process potential under physical/operational limitations during a 24 hr/day and 365 day/year = 8760 hrs)

Regulated Emission Units listed on this Table should match up to the same numbered line and Unit as listed on the Regulated Emissions and Controlled Tables. List total HAP values per Emission Unit if overall HAP total for the facility is ≥ 1 ton/yr.

Unit Number*	Nitrogen Oxides (NO _x)		Carbon Monoxide (CO)		Nonmethane Hydrocarbons/Volatile Organic Compounds (NMHC/VOCs)		Sulfur Dioxide (SO ₂)		Particulate Matter ≤ 10 Microns (PM ₁₀)		Particulate Matter ≤ 2.5 Microns (PM _{2.5})		Hazardous Air Pollutants (HAPs)		Method(s) used for Determination of Emissions (AP-42, Material Balance, Field Tests, etc.)
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	
1	2.09	9.17	3.67	16.05	0.20	0.87	0.0073	0.0320	0.021	0.09	0.021	0.09	0.0169	0.0740	AP-42/EPA 40 CFR 1039.102/ Manufacturer Certification
2	4.61	20.21	4.61	20.21	0.25	1.10	0.0087	0.0380	0.053	0.23	0.053	0.23	0.0201	0.0878	AP-42/EPA 40 CFR 1039.101/ Manufacturer Certification
Totals of Uncontrolled Emissions	6.70	29.38	8.28	36.26	0.45	1.97	0.016	0.07	0.074	0.32	0.074	0.32	0.037	0.1618	

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

* A permit is required and this application along with the additional checklist information requested on the Permit Application checklist must be provided if:

- (1) any one of these process units or combination of units, has an uncontrolled emission rate greater than or equal to ($\geq$) 10 lbs/hr or 25 tons/yr for any of the above pollutants, excluding HAPs, based on 8,760 hours of operation; or
- (2) any one of these process units or combination of units, has an uncontrolled emission rate ≥ 2 tons/yr for any single HAP or ≥ 5 tons/yr for any combination of HAPs based on 8,760 hours of operation; or
- (3) any one of these process units or combination of units, has an uncontrolled emission rate ≥ 5 tons/yr for lead (Pb) or any combination of lead and its compounds based on 8,760 hours of operation; or
- (4) any one of the process units or combination of units is subject to an Air Board or federal emission limit or standard.

* If all of these process units, individually and in combination, have an uncontrolled emission rate less than ($<$) 10 lbs/hr or 25 tons/yr for all of the above pollutants (based on 8,760 hours of operation), but > 1 ton/yr for any of the above pollutants, then a source registration is required. A Registration is required, at minimum, for any amount of HAP emissions. Please complete the remainder of this form.

The calculated emissions in this section are based on Emission rates published in AP-42, 40 CFR 1039, and manufacturer certification data. Emissions characterized in this section assume operation of both units simultaneously, 24-hours per day, 365 days per year at maximum output. Calculations of controlled and uncontrolled emissions are provided in Section 2.5.

Application for Air Pollutant Sources in Bernalillo County Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Controlled Emissions Table

(Based on current operations with emission controls OR requested operations with emission controls)

Regulated Emission Units listed on this Table should match up to the same numbered line and Unit as listed on the Regulated Emissions and Uncontrolled Tables. List total HAP values per Emission Unit if overall HAP total for the facility is ≥ 1 ton/yr.

Unit Number	Nitrogen Oxides (NO _x)		Carbon Monoxide (CO)		Nonmethane Hydrocarbons/Volatile Organic Compounds (NMHC/VOCs)		Sulfur Dioxide (SO ₂)		Particulate Matter ≤ 10 Microns (PM ₁₀)		Particulate Matter ≤ 2.5 Microns (PM _{2.5})		Hazardous Air Pollutants (HAPs)		Control Method	% Efficiency ¹
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr		
1	2.09	0.84	3.67	1.47	0.20	0.08	0.0073	0.00292	0.021	0.008	0.021	0.008	0.0169	0.00675	800 hour limit, single unit	NA
2	4.61	1.85	4.61	1.85	0.25	0.10	0.0087	0.00347	0.053	0.021	0.053	0.021	0.0201	0.00802	800 hour limit, single unit	NA
Totals of Controlled Emissions	4.61	1.85	4.61	1.85	0.25	0.10	0.0087	0.00347	0.053	0.021	0.053	0.021	0.0201	0.00802		

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

1. Basis for Control Method % Efficiency (e.g., Manufacturer's Data, Field Observation/Test, AP-42, etc.). **Manufacturer's Data, individual (non-simultaneous) operation of units and limitation of hours of operation.**

Submit information for each unit as an attachment.

The calculated emissions in this section are based on manufacturer certifications, Emission rates published in AP-42, and current EPA standards published in 40 CFR 1039. Emissions characterized in this section for each unit assume operation of each unit individually for a maximum combined operational time of 800 hours per year. The "Totals of controlled emissions" values conservatively represent the higher emission of each pollutant (i.e., Unit 2), as only one unit will operate at a time (see NOTE, below regarding total operational hours). Calculations of controlled and uncontrolled emissions are provided in Section 2.5.

NOTE:

*This Application for ATC Permit Modification is requesting a permit to operate **either** Unit 1 **or** Unit 2 for a cumulative annual combined maximum operation of 800 hours. The Unit-specific emissions values above are calculated for 800 hours per individual unit, presenting a scenario where a high and low emissions option are presented. The "Totals of Controlled Emissions" cells are populated with the highest value chosen from each Unit, and therefore represent a "worst case" emissions scenario.*

Application for Air Pollutant Sources in Bernalillo County **Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)**

Hazardous Air Pollutants (HAPs) Emissions Table

Report the Potential Emission Rate for each HAP from each source on the Regulated Emission Sources Table that emits a given HAP. Report individual HAPs with ≥ 1 ton/yr total emissions for the facility on this table. Otherwise, report total HAP emissions for each source that emits HAPs in the accompanying application package in association with emission calculations. If this application is for a Registration solely due to HAP emissions, report the largest HAP emissions on this table and the rest, if any, in the accompanying application package.

Unit Number	Total HAPs		NA		NA		NA		NA		NA		NA	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1	0.0169	0.00675	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	0.0201	0.00802	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Totals of HAPs for all units:	0.0201	0.00802	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

Use Instructions: Copy and paste the HAPs table here if need to list more individual HAPs.

*The calculated HAP emissions in this section are based on AP-42 Section 3.3, and an assumed operation of each unit individually for a maximum combined operational time of 800 hours per year. The “Totals of HAPs for all units” values conservatively represent the higher emission of HAPs (i.e., Unit 2), as only one unit will operate at a time (see NOTE, below regarding total operational hours). Calculations of controlled and uncontrolled HAP emissions are provided in **Section 2.5**.*

NOTE:
*This Application for ATC Permit Modification is requesting a permit to operate **either** Unit 1 **or** Unit 2 for a cumulative annual combined maximum operation of 800 hours, leading to two scenarios where a high and low emissions option are presented. The “Totals of HAP for all units” cells are populated with the highest value chosen from each Unit, and therefore represent a “worst case” emission scenario.*

**Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)**

Purchased Hazardous Air Pollutant Table*

Product Categories (Coatings, Solvents, Thinners, etc.)	Hazardous Air Pollutant (HAP), or Volatile Hazardous Air Pollutant (VHAP) Primary To The Representative As Purchased Product	Chemical Abstract Service (CAS) Number of HAP or VHAP from Representative As Purchased Product	HAP or VHAP Concentration of Representative As Purchased Product (pounds/gallon, or %)	Concentration Determination (CPDS, SDS, etc.) ¹	Total Product Purchases For Category	(-)	Quantity of Product Recovered & Disposed For Category	(=)	Total Product Usage For Category
1. N/A	N/A	N/A	N/A	N/A	N/A	(-)	N/A	(=)	N/A
					N/A		N/A		N/A
					N/A		N/A		N/A
TOTALS					N/A	(-)	N/A	(=)	N/A
					N/A		N/A		N/A

NOTE: To add extra rows in Word, click anywhere in the second-to-last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

NOTE: Product purchases, recovery/disposal and usage should be converted to the units listed in this table. If units cannot be converted please contact the Air Quality Program prior to making changes to this table.

1. Submit, as an attachment, information on one (1) product from each Category listed above which best represents the average of all the products purchased in that Category. CPDS = Certified Product Data Sheet; SDS = Safety Data Sheet

*** A Registration is required, at minimum, for any amount of HAP or VHAP emission.**

Emissions from purchased HAP usage should be accounted for on previous tables as appropriate.

A permit may be required for these emissions if the source meets the requirements of 20.11.41 NMAC.

HAPS are not purchased or used at the Facility.

**Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)**

Material and Fuel Storage Table

(E.g., Tanks, barrels, silos, stockpiles, etc.)

Storage Equipment		Product Stored	Capacity (bbls, tons, gals, acres, etc.)	Above or Below Ground	Construction (Welded, riveted) & Color	Installation Date	Loading Rate ¹	Offloading Rate ¹	True Vapor Pressure	Control Method	Seal Type	% Eff. ²
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: To add extra rows in Word, click anywhere in the last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

1. Basis for Loading/Offloading Rate (*e.g.*, Manufacturer's Data, Field Observation/Test, etc.). N/A
Submit information for each unit as an attachment.
2. Basis for Control Method % Efficiency (*e.g.*, Manufacturer's Data, Field Observation/Test, AP-42, etc.). N/A
Submit information for each unit as an attachment.

No stationary fuel storage tanks are located at the facility.

Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Stack Parameters Table

If any equipment from the Regulated Emission Sources Table is also listed in this Stack Table, use the same numbered line for the emission unit on both tables to show the association between the Process Equipment and its stack.

Unit Number and Description		Pollutant (CO, NO _x , PM ₁₀ , etc.)	UTM Easting (m)	UTM Northing (m)	Stack Height (ft)	Stack Exit Temp. (°F)	Stack Velocity (fps)	Stack Flow Rate (acfm)	Stack Inside Diameter (ft)	Stack Type
1	Horizontal Grinder Engine	CO, NO _x , PM ₁₀ , PM _{2.5} , VOC	376,057.40	3,884,891.95	11	959	275	3236 cfm	0.5	Vertical
2	Horizontal Grinder Engine	CO, NO _x , PM ₁₀ , PM _{2.5} , VOC	376,082.57	3,884,901.19	12.5	971	551	4582 cfm	0.42	Vertical

NOTE: To add extra rows in Word, click anywhere in the last row. A plus (+) sign should appear on the bottom right corner of the row. Click the plus (+) sign to add a row. Repeat as needed.

Application for Air Pollutant Sources in Bernalillo County
Source Registration (20.11.40 NMAC) and Construction Permits (20.11.41 NMAC)

Certification

NOTICE REGARDING SCOPE OF A PERMIT: The Environmental Health Department's issuance of an air quality permit only authorizes the use of the specified equipment pursuant to the air quality control laws, regulations and conditions. Permits relate to air quality control only and are issued for the sole purpose of regulating the emission of air contaminants from said equipment. Air quality permits are not a general authorization for the location, construction and/or operation of a facility, nor does a permit authorize any particular land use or other form of land entitlement. It is the applicant's/permittee's responsibility to obtain all other necessary permits from the appropriate agencies, such as the City of Albuquerque Planning Department or Bernalillo County Department of Planning and Development Services, including but not limited to site plan approvals, building permits, fire department approvals and the like, as may be required by law for the location, construction and/or operation of a facility. For more information, please visit the City of Albuquerque Planning Department website at <https://www.cabq.gov/planning> and the Bernalillo County Department of Planning and Development Services website at <https://www.bernco.gov/planning>.

NOTICE REGARDING ACCURACY OF INFORMATION AND DATA SUBMITTED: Any misrepresentation of a material fact in this application and its attachments is cause for denial of a permit or revocation of part or all the resulting registration or permit, and revocation of a permit for cause may limit the permittee's ability to obtain any subsequent air quality permit for ten (10) years. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the Air Quality Control Act, NMSA 1978 §§ 74-2-1 to 74-2-17, is guilty of a misdemeanor and shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per day per violation or by imprisonment for not more than twelve months, or by both.

I, the undersigned, hereby certify that I have knowledge of the information and data represented and submitted in this application and that the same is true and accurate, including the information and data in any and all attachments, including without limitation associated forms, materials, drawings, specifications, and other data. I also certify that the information represented gives a true and complete portrayal of the existing, modified existing, or planned new stationary source with respect to air pollution sources and control equipment. I understand that there may be significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. I also understand that the person who has applied for or has been issued an air quality permit by the Department is an obligatory party to a permit appeal filed pursuant to 20.11.81 NMAC. Further, I certify that I am qualified and authorized to file this application, to certify the truth and accuracy of the information herein and bind the source. Moreover, I covenant and agree to comply with any requests by the Department for additional information necessary for the Department to evaluate or make a final decision regarding the application.

Signed this 25 day of August, 202026

GABRIEL VILLACAS
Print Name

Solid Waste Manager
Print Title

[Signature]
Signature

Role: ☐ Owner ☐ Operator
☐ Other Authorized Representative

PERMIT APPLICATION REVIEW FEE CHECKLIST



City of Albuquerque Environmental Health Department Air Quality Program



Permit Application Review Fee Checklist Instructions

All source registration and construction permit applications for stationary or portable sources shall be charged an application review fee according to the fee schedule in 20.11.2 NMAC. These filing fees are required for both new construction, reconstruction, and permit modification/revision applications. Most air quality notification (AQN) applications shall be charged an application review fee according to 20.11.39 NMAC. Qualified small businesses as defined in 20.11.2 NMAC may be eligible to pay one-half of the application review fees and 100% of all applicable federal program review fees.

Please fill out the permit application review fee checklist completely and submit with a check or money order payable to the "City of Albuquerque Fund 242" and:

1. Deliver it in person to the Albuquerque Environmental Health Department, 3rd Floor, Room 3023, Albuquerque-Bernalillo County Government Center, South Building, One Civic Plaza NW, Albuquerque, NM 87102; or
2. Mail it to Albuquerque Environmental Health Department, Air Quality Program, Permitting Division, P.O. Box 1293, Albuquerque, NM 87103; or
3. Online fee payments are now accepted as well. Application must be submitted first, then Department will provide invoice for online payment. Fill out form completely and mark check box below fee amount due on last page to request an invoice to pay the fee online.

The Department will provide a receipt of payment to the applicant. The person delivering or filing a submittal shall attach a copy of the receipt of payment to the submittal as proof of payment. Application review fees shall not be refunded without the written approval of the manager. If a refund is requested, a reasonable professional service fee to cover the costs of staff time involved in processing such requests shall be assessed. Please refer to 20.11.2 NMAC (effective January 10, 2011) for more detail concerning the "Fees" regulation as this checklist does not relieve the applicant from any applicable requirement of the regulation.

Special Instructions for Sections II and III

If your facility is applying for a new construction permit or modification subject to 20.11.41 NMAC, check either the review fee for stationary sources subject to 20.11.41 NMAC and not subject to proposed allowable emission rates **OR** check one of the review fees based on proposed allowable emission rates.

Then also check any additional Federal Program or Major Modification Review Fees that apply.

The Federal Program Review Fees apply to each subpart review that is triggered by this permitting action. Enter the number of subparts on the applicable line. For example, if you are installing a new boiler subject to 40 CFR 60, Subpart Dc, and a new emergency engine subject to 40 CFR 60, Subpart IIII, you would need to pay the 40 CFR 60 NSPS Federal Program Review Fee twice. The same would apply if units are being modified or replaced. However, if you are installing two emergency engines subject to 40 CFR 60, Subpart IIII, you would only pay the fee once because the fee is 'per subpart' not 'per unit'.

For modifications, the Federal Program fees only apply if a unit being modified is subject to federal regulations.



**City of Albuquerque
Environmental Health Department
Air Quality Program**



Permit Application Review Fee Checklist Effective January 1, 2026 – December 31, 2026

Please completely fill out the information in each section. Incompleteness of this checklist may result in the Albuquerque Environmental Health Department not accepting the application review fees. If you have any questions concerning this checklist, please call (505) 768-1972.

I. COMPANY INFORMATION:

Company Name	County of Bernalillo Solid Waste Department		
Company Address	415 Silver Ave SW, Albuquerque, NM 87102		
Facility Name	East Mountain Transfer Station		
Facility Address	711 NM Hwy 333, Tijeras, NM 87509 (also occupies 715)		
Contact Person	Gabriel Villescás		
Contact Person Phone Number	505-220-4475	Email	gvillescás@bermco.gov
Are these application review fees for an existing permitted source located within the City of Albuquerque or Bernalillo County?	Yes ☒		No ☐
If yes, what is the current permit/registration/AQN number for this facility?	Permit # 2080		
Is this application review fee for a Qualified Small Business as defined in 20.11.2 NMAC? (See Definition of Qualified Small Business on Page 4)	Yes ☐		No ☒

II. STATIONARY SOURCE APPLICATION REVIEW FEES:

If the application is for a new stationary source facility, please check all that apply. If this application is for a modification to an existing permit please see Section III. For revisions or relocations please see Sections IV or V.

Check All That Apply	Stationary Sources	Review Fee	Program Element
Air Quality Notifications			
☐	AQN New Application	\$720	2801
☐	AQN Technical Amendment	\$393	2802
☐	AQN Transfer of a Prior Authorization	\$393	2803
☒	<i>Not Applicable</i>	<i>See Sections Below</i>	
Stationary Source Review Fees			
☐	Source Registration required by 20.11.40 NMAC	\$734	2401
☐	A stationary source that requires a permit pursuant to 20.11.41 NMAC or other board regulation and is not subject to the below proposed allowable emission rates	\$1,467	2301
	A stationary source that requires a permit pursuant to 20.11.41 NMAC and is subject to review fees based on the proposed allowable emission rate for the single highest fee pollutant	Check the appropriate tpy range below	
☐	Proposed Allowable Emission Rate equal to or greater than 1 tpy and less than 5 tpy	\$1,101	2302
☐	Proposed Allowable Emission Rate equal to or greater than 5 tpy and less than 25 tpy	\$2,201	2303
☐	Proposed Allowable Emission Rate equal to or greater than 25 tpy and less than 50 tpy	\$4,402	2304
☐	Proposed Allowable Emission Rate equal to or greater than 50 tpy and less than 75 tpy	\$6,603	2305
☐	Proposed Allowable Emission Rate equal to or greater than 75 tpy and less than 100 tpy	\$8,804	2306
☐	Proposed Allowable Emission Rate equal to or greater than 100 tpy	\$11,005	2307
☒	<i>Not Applicable</i>	<i>See Sections Below</i>	

Federal Program Review Fees for each subpart (In addition to the Stationary Source Application Review Fees above)				
☐	40 CFR 60 – “New Source Performance Standards” (NSPS)	x	\$1,467	2308
☐	40 CFR 61 – “National Emission Standards for Hazardous Air Pollutants” (NESHAPs)	x	\$1,467	2309
☐	40 CFR 63 – (NESHAPs) Promulgated Standards	x	\$1,467	2310
☐	20.11.64 – (NESHAPs) Case-by-Case MACT Review (Major HAP sources)	x	\$14,674	2311
☐	20.11.61 NMAC – Prevention of Significant Deterioration (PSD) Permit	x	\$7,337	2312
☐	20.11.60 NMAC – Non-Attainment Area Permit	x	\$7,337	2313
	Total Federal Program Review Fees		\$	
☒	Not Applicable		Not Applicable	

III. MODIFICATION TO EXISTING PERMIT APPLICATION REVIEW FEES:

If the application is for a modification to an existing permit, please check all that apply. If this application is for a new stationary source facility, please see Section II. For revisions or relocations please see Sections IV or V.

Check All That Apply	Modifications	Review Fee	Program Element
Modification Application Review Fees			
☐	Proposed modification to an existing stationary source that requires a permit pursuant to 20.11.41 NMAC or other board regulation and is not subject to the below proposed allowable emission rates	\$1,467	2321
	Proposed modification to an existing stationary source that requires a permit pursuant to 20.11.41 NMAC and is subject to review fees based on the proposed allowable emission rate for the single highest fee pollutant	Check the appropriate tpy range below	
☒	Proposed Allowable Emission Rate equal to or greater than 1 tpy and less than 5 tpy	\$1,101	2322
☐	Proposed Allowable Emission Rate equal to or greater than 5 tpy and less than 25 tpy	\$2,201	2323
☐	Proposed Allowable Emission Rate equal to or greater than 25 tpy and less than 50 tpy	\$4,402	2324
☐	Proposed Allowable Emission Rate equal to or greater than 50 tpy and less than 75 tpy	\$6,603	2325
☐	Proposed Allowable Emission Rate equal to or greater than 75 tpy and less than 100 tpy	\$8,804	2326
☐	Proposed Allowable Emission Rate equal to or greater than 100 tpy	\$11,005	2327
☐	Not Applicable	See Sections Below	
Major Modifications Review Fees (In addition to the Modification Application Review Fees above)			
☐	20.11.60 NMAC – Permitting in Non-Attainment Areas	\$7,337	2333
☐	20.11.61 NMAC – Prevention of Significant Deterioration	\$7,337	2334
☒	Not Applicable	Not Applicable	
Federal Program Review Fees for each subpart (This section applies only if a Federal Program Review is triggered by the proposed modification) (These fees are in addition to the Modification and Major Modification Application Review Fees above)			
☒	40 CFR 60 – “New Source Performance Standards” (NSPS)	x	\$1,467 2328
☐	40 CFR 61 – “National Emission Standards for Hazardous Air Pollutants” (NESHAPs)	x	\$1,467 2329
☐	40 CFR 63 – (NESHAPs) Promulgated Standards	x	\$1,467 2330
☐	20.11.64 – (NESHAPs) Case-by-Case MACT Review (Major HAP sources)	x	\$14,674 2331
☐	20.11.61 NMAC – Prevention of Significant Deterioration (PSD) Permit	x	\$7,337 2332
☐	20.11.60 NMAC – Non-Attainment Area Permit	x	\$7,337 2333
	Total Federal Program Review Fees	\$	
☐	Not Applicable	Not Applicable	

IV. ADMINISTRATIVE AND TECHNICAL REVISION APPLICATION REVIEW FEES:

If the application is for an administrative or technical revision of an existing registration or permit issued pursuant to 20.11.40 or 20.11.41 NMAC, please check one that applies. For revisions to registrations, check Administrative Revisions.

Check One	Revision Type	Review Fee	Program Element
☐	Administrative Revisions	\$250	2340
☐	Technical Revisions	\$500	2341
☒	Not Applicable	See Sections II, III or V	

V. PORTABLE STATIONARY SOURCE RELOCATION FEES:

If the application is for a portable stationary source relocation of an existing permit, please check one that applies.

Check One	Portable Stationary Source Relocation Type	Review Fee	Program Element
☐	No New Air Dispersion Modeling Required	\$500	2501
☐	New Air Dispersion Modeling Required	\$750	2502
☒	Not Applicable	See Sections II, III or IV	

VI. Please submit payment in the amount shown for the total application review fee.

Section Totals	Review Fee Amount
Section II Total	\$0
Section III Total	\$2,568
Section IV Total	\$0
Section V Total	\$0
Total Application Review Fee	\$2,568

☒ Check here if an invoice is requested so Application Review Fee can be paid online.

I, the undersigned, a responsible officer of the applicant company, certify that to the best of my knowledge, the information stated on this checklist gives a true and complete representation of the permit application review fees which are being submitted. I also understand that an incorrect submittal of permit application reviews may cause an incompleteness determination of the submitted permit application and that the balance of the appropriate permit application review fees shall be paid in full prior to further processing of the application.

Signed this 25 day of August, 20 2026

Gabriel Villegas

Print Name

Solid Waste Manager

Print Title

Signature

Definition of Qualified Small Business as defined in 20.11.2 NMAC:

"Qualified small business" means a business that meets all of the following requirements:

- (1) a business that has 100 or fewer employees;
- (2) a small business concern as defined by the federal Small Business Act;
- (3) a source that emits less than 50 tons per year of any individual regulated air pollutant, or less than 75 tons per year of all regulated air pollutants combined; and
- (4) a source that is not a major source or major stationary source.

Note: Beginning January 1, 2011, and every January 1 thereafter, an increase based on the consumer price index shall be added to the application review fees. The application review fees established in Subsection A through D of 20.11.2.18 NMAC shall be adjusted by an amount equal to the increase in the consumer price index for the immediately-preceding year. Application review fee adjustments equal to or greater than fifty cents (\$0.50) shall be rounded up to the next highest whole dollar. Application review fee adjustments totaling less than fifty cents (\$0.50) shall be rounded down to the next lowest whole dollar. The department shall post the application review fees on the city of Albuquerque environmental health department air quality program website.

CONSTRUCTION PERMIT APPLICATION CHECKLIST



City of Albuquerque Environmental Health Department Air Quality Program



Construction Permit (20.11.41 NMAC) Application Checklist

This checklist must be returned with the application

Any person seeking a new air quality permit, a permit modification, or an emergency permit under 20.11.41 NMAC (Construction Permits) shall do so by filing a written application with the Albuquerque-Bernalillo County Joint Air Quality Program, which administers and enforces local air quality laws for the City of Albuquerque (“City”) and Bernalillo County (“County”), on behalf of the City Environmental Health Department (“Department”).

The Department will rule an application administratively incomplete if it is missing or has incorrect information. The Department may require additional information that is necessary to make a thorough review of an application, including but not limited to technical clarifications, emission calculations, emission factor usage, additional application review fees if any are required by 20.11.2 NMAC, and new or additional air dispersion modeling.

If the Department has ruled an application administratively incomplete three (3) times, the Department will deny the permit application. Any fees submitted for processing an application that has been denied will not be refunded. If the Department denies an application, a person may submit a new application and the fee required for a new application. The applicant has the burden of demonstrating that a permit should be issued.

The following are the minimum elements that shall be included in the permit application before the Department can determine whether an application is administratively complete and ready for technical review. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.

At all times before the Department has made a final decision regarding the application, an applicant has a duty to promptly supplement and correct information the applicant has submitted in an application to the Department. The applicant’s duty to supplement and correct the application includes but is not limited to relevant information acquired after the applicant has submitted the application and additional information the applicant otherwise determines is relevant to the application and the Department’s review and decision. While the Department is processing an application, regardless of whether the Department has determined the application is administratively complete, if the Department determines that additional information is necessary to evaluate or make a final decision regarding the application, the Department may request additional information and the applicant shall provide the requested additional information.

NOTICE REGARDING PERMIT APPEALS: A person who has applied for or has been issued an air quality permit by the Department shall be an obligatory party to a permit appeal filed pursuant to 20.11.81 NMAC.

NOTICE REGARDING SCOPE OF A PERMIT: The Department’s issuance of an air quality permit only authorizes the use of the specified equipment pursuant to the air quality control laws, regulations and conditions. Permits relate to air quality control only and are issued for the sole purpose of regulating the emission of air contaminants from said equipment. Air quality permits are not a general authorization for the location, construction and/or operation of a facility, nor does a permit authorize any particular land use or other form of land entitlement. It is the applicant’s/permittee’s responsibility to obtain all other necessary permits from the appropriate agencies, such as the City Planning Department or County Department of Planning and Development Services, including but not limited to site plan approvals, building permits, fire department approvals and the like, as may be required by law for the location, construction and/or operation of a facility. For more information, please visit the City Planning Department website at <https://www.cabq.gov/planning> and the County Department of Planning and Development Services website at <https://www.bernco.gov/planning>.

The Applicant shall:

20.11.41.13(A) NMAC – Pre-Application Requirements:

Item	Completed	N/A ¹	Waived ²
(1) Request a pre-application meeting with the Department using the pre-application meeting request form. Include a copy of the request form submitted to the Department.	☒	☐	☐
(2) Attend the pre-application meeting. Date of pre-application meeting: 03/08/2023	☒	☐	☐
Pre-application meeting agenda and public notice sign checklists included with application?	☒	☐	☐

1. Not Applicable
2. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.

20.11.41.13(B) NMAC – Applicant’s Public Notice Requirements:

Item	Included in Application	N/A ¹	Waived ²
(1) Provide public notice in accordance with the regulation, including by certified mail or electronic mail to the designated representative(s) of the recognized neighborhood associations and recognized coalitions that are within one-half mile of the exterior boundaries of the property on which the source is or is proposed to be located. The public notice shall include all information required by Subsection C of 20.11.41.13 NMAC. One mile radius required by 20.11.72.9 NMAC.	☒	☐	☐
• Contact list of representative(s) of recognized neighborhood associations and recognized coalitions cannot be more than three months old from the application submittal date. • Include memo with contact list provided by Department in application submittal.	☒	☐	☐
• Provide notice using the Notice of Intent to Construct form and Applicant Notice Cover Letter.	☒	☐	☐
(2) In accordance with the regulation, post and maintain a weather-proof sign provided by the Department in a visible location. The applicant shall keep the sign posted until the Department takes final action on the permit application. Include pictures in application showing location of sign and close-up showing information on sign.	☒	☐	☐
Documentary proof of all public notice requirements listed above and required by 20.11.41.13(E)(15) included with application?	☒	☐	☐

1. Not Applicable; For emergency permits, the public notice requirements in 20.11.41.24 NMAC shall apply instead.
2. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.

20.11.41.13(D) NMAC

Item	Included in Application
A person who is seeking a construction permit pursuant to 20.11.41 NMAC shall complete a permit application and file one complete original and one duplicate copy with the Department. If the original is printed double sided, then it must be printed head-to-toe (flip on the short edge).	☒
• A high-quality electronic duplicate copy is required by the Department to speed up review and allow for the Department public notice to be posted online. The electronic copy must be an exact duplicate of the hardcopy original, including pages with signatures such as the application certification page. Note: Do not include financial information, such as a copy of a check, in the electronic PDF.	☒
The electronic submittal on thumb drive, unless alternate method is allowed by the Department, must also include modeling files, if applicable, and emission calculations file(s) in Microsoft Excel-compatible format.	☒

The Permit Application shall include:

20.11.41.13(E) NMAC – Application Contents

Item	Included in Application	N/A ¹	Waived ²
(1) A complete permit application on the most recent form provided by the Department.	☒	☐	☐
(2) The application form includes:			
a. The applicant's name, street and post office address, and contact information;	☒	☐	☐
b. The facility owner/ operator's name, street address and mailing address, if different from the applicant;	☒	☐	☐
c. The consultant's name and contact information, if applicable;	☒	☐	☐
d. All information requested on the application form is included (<i>i.e.</i> , the form is complete).	☒	☐	☐
(3) The date the application was submitted to the Department.	☒	☐	☐
(4) Sufficient attachments for the following:			
a. Ambient impact analysis using an atmospheric dispersion model approved by the U.S. Environmental Protection Agency, and the Department to demonstrate compliance with the applicable National Ambient Air Quality Standards (NAAQS). <i>See 20.11.1 NMAC.</i> If you are modifying an existing source, the modeling must include the emissions of the entire source to demonstrate the impact the new or modified source(s) will have on existing plant emissions.	☒	☐	☐
b. The air dispersion model has been executed pursuant to a protocol that was approved in advance by the Department.	☒	☐	☐
c. Air dispersion modeling approved (or 2 nd denied) protocol date: 08/10/2023	☒	☐	☐
d. Basis or source for each emission rate (including manufacturer's specification sheets, EPA Tier Certification for engines, AP-42 section sheets, test data, or corresponding supporting documentation for any other source used).	☒	☐	☐
e. All calculations used to estimate potential emission rates and controlled/proposed emissions.	☒	☐	☐
f. Basis for the estimated control efficiencies and sufficient engineering data for verification of the control equipment operation, including if necessary, design, drawing, test report and factors which affect the normal operation.	☐	☒	☐
g. Fuel data for each existing and/or proposed piece of fuel burning equipment.	☒	☐	☐
h. Anticipated maximum production capacity of the entire facility and the requested production capacity after construction and/or modification.	☒	☐	☐
i. Stack and exhaust gas parameters for all existing and proposed emission stacks.	☒	☐	☐
(5) An operational and maintenance strategy detailing:	☒	☐	☐
a. the steps the applicant will take if a malfunction occurs that may cause emission of a regulated air contaminant to exceed a limit that is included in the permit;	☒	☐	☐
b. the nature of emissions during routine startup or shutdown of the source and the source's air pollution control equipment; and	☐	☒	☐
c. the steps the applicant will take to minimize emissions during routine startup or shutdown.	☒	☐	☐
(6) A map, such as a 7.5' topographic quadrangle map published by the U.S. Geological Survey or a map of equivalent or greater scale, detail and precision, including a City or County zone atlas map that shows the proposed location of the source. Show proposed/ existing process equipment locations on aerial photograph requested in item 7.	☒	☐	☐

Item	Included in Application	N/A ¹	Waived ²
(7) An aerial photograph showing the proposed location of each process equipment unit involved in the proposed construction, modification, relocation or technical revision of the source except for federal agencies or departments involved in national defense or national security as confirmed and agreed to by the Department in writing.	☒	☐	☐
(8) A complete description of all sources of regulated air contaminants and	☒	☐	☐
a. a process flow diagram depicting the process equipment unit or units at the facility, both existing and proposed, that are proposed to be involved in routine operations and from which regulated air contaminant emissions are expected to be emitted. Include fugitive emission points as well.	☒	☐	☐
(9) A full description of air pollution control equipment, including all calculations and the basis for all control efficiencies presented, manufacturer's specifications sheets, and site layout and assembly drawings; UTM (universal transverse mercator) coordinates shall be used to identify the location of each emission unit.	☒	☐	☐
(10) A description of the equipment or methods proposed by the applicant to be used for emission measurement.	☒	☐	☐
(11) The maximum and normal operating time schedules of the source after completion of construction or modification, as applicable.	☒	☐	☐
(12) Any other relevant information as the Department may reasonably require, including without limitation:	☒	☐	☐
a. Provide an applicability determination for all potentially applicable federal regulations.	☒	☐	☐
b. Applicants shall provide the Zoning Requirement Cover Letter Form, along with documentary proof that the proposed air quality permitted use of the facility's subject property is allowed by the zoning designation of the City or County zoning laws, as applicable. Sufficient documentation includes: (i) a zoning certification from the City Planning Department or County Department of Planning and Development Services, as applicable, if the property is subject to City or County zoning jurisdiction; or (ii) a zoning verification from both planning departments if the property is not subject to City or County zoning jurisdiction. ³ A zone atlas map shall not be sufficient.	☒	☐	☐
c. Compliance History Disclosure Form ⁴	☒	☐	☐
d. BACT Analysis, if applicable, for new permit or permit modification applications.	☒	☐	☐
(13) The signature of the applicant, operator, owner or an authorized representative, certifying to the accuracy of all information as represented in the application and attachments, if any.	☒	☐	☐
(14) A check or money order for the appropriate application fee or fees required by 20.11.2 NMAC, Fees. (Online fee payments are now accepted as well. Application must be submitted first, then Department will provide invoice for online payment. Check box on Application Review Fee Checklist form to request invoice.)	☒	☐	☐

1. Not Applicable
2. It is not necessary to include an element if the Department has issued a written waiver regarding the element and the waiver accompanies the application. However, the Department shall not waive any federal requirements.
3. Applicants are not required to submit documentation for the subject property's zoning designation when applying for a relocation of a portable stationary source, or a technical or administrative revision to an existing permit.
4. Required for applications filed pursuant to the following regulations: Construction Permits (20.11.41 NMAC); Operating Permits (20.11.42 NMAC); Nonattainment Areas (20.11.60 NMAC); Prevention of Significant Deterioration (20.11.61 NMAC); and Acid Rain (20.11.62 NMAC); except this Form shall not be required for asbestos notifications under 20.11.20.22 NMAC, and this Form shall only be required for administrative permit revision (20.11.41.28(A) NMAC) and administrative permit amendments (20.11.42.12(E)(1) NMAC) when the action requested is a transfer of ownership. Air Quality Program staff can answer basic questions about the Compliance History Disclosure Form but will not provide specific advice about which boxes to check or whether information must be disclosed. The decision about how to answer a question and whether there is information to disclose is the responsibility of applicants/permittees.

EXHIBIT B: PRE-APPLICATION MEETING



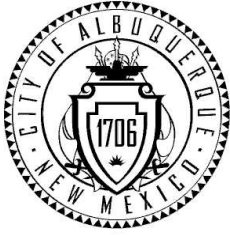
Pre-Permit Application Meeting Request Form

Air Quality Program- Environmental Health Department

Please complete appropriate boxes and email to aqd@cabq.gov or mail to:

Environmental Health Department
Air Quality Program
P.O. Box 1293
Room 3047
Albuquerque, NM 87103

Name:	Gabriel Villescascas, Solid Waste Manager
Company/Organization:	County of Bernalillo Public Works East Mountain Transfer Station
Point of Contact: (phone number and email): Preferred form of contact (circle one): Phone <u>E-mail</u>	Phone: 505-220-4475 (cell) Email: gvillescascas@bernco.gov Alternate Contact: Andy Yuhas, Parkhill (consultant) Phone: 505-504-7765 (ofc) Email: ayuhas@parkhill.com
Preferred meeting date/times:	Open to dates and times
Description of Project:	To update the County of Bernalillo's air quality permit (#2080) for the East Mountain Transfer Station to replace the primary permitted woodchipper/horizontal grinder and add a secondary woodchipper to maintain compliance with NMAC.



City of Albuquerque

Environmental Health Department

Air Quality Program



Pre-Permit Application Meeting Checklist

Any person seeking a permit under 20.11.41 NMAC, Authority-to-Construct Permits, shall do so by filing a written application with the Department. Prior to submitting an application, the applicant shall contact the department in writing and request a pre-application meeting for information regarding the contents of the application and the application process. This checklist is provided to aid the applicant and **a copy must be submitted with the application.**

Applications that are ruled incomplete because of missing information will delay any determination or the issuance of the permit. The Department reserves the right to request additional relevant information prior to ruling the application complete in accordance with 20.11.41 NMAC.

Name: Bernalillo County Solid Waste
Contact: Gabriel Villegas
Company/Business: East Mountain Transfer Station

☒ Fill out and submit a Pre-Permit Application Meeting Request form
⇒ Available online at <http://www.cabq.gov/airquality>

☒ Emission Factors and Control Efficiencies
Notes: *Since only one engine will run at a time, and all engines will not exceed annual operation of 800 hours, create a worst-case scenario engine for the purposes of emissions estimates. One engine is Interim Tier 4, and the other is full Tier 4. No control efficiencies are proposed for these engines other than operational hour limitations. Manufacturer maintenance recommendations will be followed.*

☒ Air Dispersion modeling guidelines and protocol
Notes: *Dispersion modeling will be required to support this application. Protocol to be submitted first by Cirrus Consulting, AQP will review and return within 6 weeks. AQP will provide Protocol guidelines and met data/neighboring source data.*

☒ Department Policies
Notes: *None Discussed*

☒ Air quality permit fees

Notes: *Not Discussed, but determined through Program guidance documents to be an estimated \$2,424.00 as calculated using the AQP 2024 Review Fees Sheet.*

☒ Public notice requirements

- Replacement Part 41 Implementation

- 20.11.41.13 B. Applicant's public notice requirements

- Providing public notice to neighborhood association/coalitions

- Neighborhood association: Embudo Canyon NA

- Coalition: East Gateway Coalition, East Mountain Coalition

Notes: N/A

AQP will also post Public Notice during Permit Application Review period

- ☒ Posting and maintaining a weather-proof sign

Notes: To be picked up by applicant and posted at the applicant's facility until Permit is issued

☒ Regulatory timelines

- 30 days to rule application complete

- 90 days to issue completed permit

- Additional time allotted if there is significant public interest and/or a significant air quality issue

- Public Information Hearing

- Complex permitting action

Notes: *Additional 6-week review time for ADM Protocol (completed prior to submittal)*

EXHIBIT C: PUBLIC NOTICE REQUIREMENTS



PROPOSED AIR QUALITY CONSTRUCTION PERMIT

Applicant's Name: East Mountain Transfer Station Address: 311 NM Hwy 333, Tijeras, NM 87509
Owner or Operator's Name: County of Bernalillo Solid Waste Department
Owner or Operator's Address: 500 Second Street NE Albuquerque, NM 87102
Actual or Estimated Date the Application will be Submitted to the Department: _____
Exact Location of the Source or Proposed Source: 311 NM Hwy 333, Tijeras, NM 87509
Description of the Source: Diesel Horizontal Generator Engines (2)
Nature of the Business: Solid Waste Transfer Station
Process or Change for which the permit is being requested: Replacement of Original Diesel Engine and Addition of A Second Engine

Preliminary Estimate of the Maximum Quantities of each regulated air contaminant the source will emit:

	Initial Construction Permit		Net Changes in Emissions (for permit Modifications or Technical Revisions)		
	Pounds Per Hour (lbs/hr)	Tons Per Year (tpy)	Pounds Per Hour (lbs/hr)	Tons Per Year (tpy)	Estimated Total Tons Per Year
CO	3.45	1.46	+/- 0.96	+/- 0.39	1.85
NOx	6.17	2.49	+/- 1.56	+/- 0.62	3.11
SO2	5.1	2.04	+/- 5.09	+/- 2.04	0.005
VOC	0.44	0.16	+/- 0.19	+/- 0.06	0.10
TSP	0.31	0.09	+/- 0.15	+/- 0.05	0.04
PM10	0.21	0.08	+/- 0.15	+/- 0.05	0.06
PM2.5	0.21	0.08	+/- 0.15	+/- 0.05	0.06
VHAP	N/A	N/A	+/- 0.020	+/- 0.0080	0.0080

Maximum Operating Schedule: 800 Hours/Year
Normal Operating Schedule: 800 Hours/Year

Current Contact Information for Comments and Inquiries:
Name: GABRIEL VILLEGAS
Address: 500 Second St NW Albuquerque, NM 87102
Phone Number: (505) 461-1339
E-Mail Address: gvillegas@bernalillo.gov

City of Albuquerque - Environmental Health Department - Air Quality Program - Stationary Source Permitting
Phone Number (505) 768-1972 E-Mail Address: eqd@cabq.gov

HIS SIGN SHALL REMAIN POSTED UNTIL THE DEPARTMENT TAKES FINAL ACTION ON THE PERMIT APPLICATION

NOTICE FROM THE APPLICANT

Notice of Intent to Apply for Air Quality Construction Permit

You are receiving this notice because the New Mexico Air Quality Control Act (20.11.41.13(B) and 20.11.72.9 NMAC) requires any owner/operator proposing to construct or modify a facility subject to air quality regulations to provide public notice by certified mail or electronic mail to designated representatives of recognized neighborhood associations and coalitions within 1 mile of the property on which the source is or is proposed to be located.

This notice indicates that the owner/operator intends to apply for an Air Quality Construction Permit from the Albuquerque – Bernalillo County Air Quality Program. Currently, no application for this proposed project has been submitted to the Air Quality Program. Applicants are required to include a copy of this form and documentation of mailed notices with their Air Quality Construction Permit Application.

Proposed Project Information

Applicant's name and**address:**

*Nombre y domicilio del
solicitante:*

East Mountain Transfer Station
711 NM Hwy 333
Tijeras, NM 87509

Owner / operator's**name and address:**

*Nombre y domicilio del
propietario u operador:*

County of Bernalillo Solid Waste Department
415 Silver Ave SW
Albuquerque, NM 87102

Contact for comments and inquires:

Datos actuales para comentarios y preguntas:

Name (*Nombre*): Gabriel Villescás

415 Silver Ave SW

Address (*Domicilio*): Albuquerque, NM 87102

Phone Number (*Número Telefónico*): 505.220.4475

E-mail Address (*Correo Electrónico*): gvillescas@bernco.gov

Actual or estimated date the application will be submitted to the department:

Fecha actual o estimada en que se entregará la solicitud al departamento:

July 6, 2026

Description of the source:

Descripción de la fuente:

Diesel horizontal grinder engines (2)

**Exact location of the source or
proposed source:**

*Ubicación exacta de la fuente o
fuente propuesta:*

UTM Zone 13N, 376,070 meters east, 3,884,910 meters north; 711 NM Hwy 333, Tijeras,
NM 87509

Nature of business:

Tipo de negocio:

Solid Waste Transfer Station

**Process or change for which the permit is
requested:**

*Proceso o cambio para el cuál de solicita el
permiso:*

Replacement of original diesel engine and addition of a second engine

Maximum operating schedule:

Horario máximo de operaciones:

800 hours/year

Normal operating schedule:

Horario normal de operaciones:

800 hours/year

Preliminary estimate of the maximum quantities of each regulated air contaminant the source will emit:

Estimación preliminar de las cantidades máximas de cada contaminante de aire regulado que la fuente va a emitir:

Air Contaminant <i>Contaminante de aire</i>	Proposed Construction Permit <i>Permiso de Construcción Propuesto</i>		Net Changes (for permit modification or technical revision) <i>Cambio Neto de Emisiones (para modificación de permiso o revisión técnica)</i>	
	pounds per hour <i>libras por hora</i>	tons per year <i>toneladas por año</i>	pounds per hour <i>libras por hora</i>	tons per year <i>toneladas por año</i>
NO_x	4.61	1.85	-1.56	-0.62
CO	4.61	1.85	0.96	0.39
VOC	0.25	0.10	-0.19	-0.08
SO₂	0.0087	0.0035	-5.09	-2.04
PM₁₀	0.053	0.021	-0.157	-0.059
PM_{2.5}	0.053	0.021	-0.157	-0.059
HAP	0.020	0.0080	0.0201	0.00802

NOTE: To add extra rows for H₂S or Pb in Word, click in a box in the last row. Click the plus (+) sign that appears on the right of the row to add a row.

Questions or comments regarding this Notice of Intent should be directed to the Applicant. Contact information is provided with the Proposed Project Information on the first page of this notice. To check the status of an Air Quality Construction Permit application, call 311 and provide the Applicant's information, or visit <https://www.cabq.gov/airquality/air-quality-permits>.

The Air Quality Program will issue a Public Notice announcing a 30-day public comment period on the permit application for the proposed project when the application is deemed complete. The Air Quality Program does not process or issue notices on applications that are deemed incomplete. More information about the air quality permitting process is attached to this notice.

Air Quality Construction Permitting Overview

This is the typical process to obtain an Air Quality Construction Permit for Synthetic Minor and Minor sources of air pollution from the Albuquerque – Bernalillo County Air Quality Program.

Step 1: Pre-Application Meeting: The Applicant and their consultant must request a meeting with the Air Quality Program to discuss the proposed action. If air dispersion modeling is required, Air Quality Program staff discuss the modeling protocol with the Applicant to ensure that all proposed emissions are considered.

Notice of Intent from the Applicant: Before submitting their application, the Applicant is required to notify all nearby neighborhood associations that they intend to apply for an air quality permit or modify an existing permit. The Applicant is also required to post a notice sign at the facility location.

Step 2: Administrative Completeness Review and Preliminary Technical Review: The Air Quality Program has 30 days from the day the permit application is received to review the permit application to be sure that it is administratively complete. This means that all application forms must be signed and filled out properly, and that all relevant technical information needed to evaluate any proposed impacts is included. If the application is not complete, the permit reviewer will deem the application incomplete and request more information from the Applicant. Applicants have three opportunities to submit an administratively complete application with all relevant technical information.

Public Notice from the Department: When the application is deemed complete, the Department will issue a Public Notice announcing a 30-day public comment period on the permit application. This notice is distributed to the same nearby neighborhood associations to which the Applicant sent notices, as well as interested parties who have requested notification of application submittals, and is published on the Air Quality Program's website.

During this 30-day comment period, individuals have the opportunity to submit written comments expressing their concerns or support for the proposed project, request to review the draft technical analysis, and/or to request a Public Information Hearing. If approved by the Environmental Health Department Director, Public Information Hearings are held after the technical analysis is complete and the permit has been drafted.

Step 3: Technical Analysis and Draft Permit: Air Quality Program staff review all elements of the proposed operation related to air quality, and review outputs from advanced air dispersion modeling software that considers existing emission levels in the area surrounding the proposed project, emission levels from the proposed project, and meteorological data. The total calculated level of emissions and modeled impact is compared to state and federal air quality standards and informs the decision on whether to approve or deny the Applicant's permit application.

Draft Permit: The permit will establish emission limits, standards, monitoring, recordkeeping, and reporting requirements. The draft permit undergoes an internal peer review process to determine if the emissions were properly evaluated, permit limits are appropriate and enforceable, and the permit is clear, concise, and consistent.

Possible Public Notice from the Department: If individuals request to review the draft technical analysis for a permitting action during the first 30-day public comment period in Step 2, there will be an additional public notice step. When the technical analysis is complete and the permit has been drafted, the Department will issue a second Public Notice announcing a 30-day public comment period on the technical analysis and draft permit. This possible second Public Notice, along with the technical analysis documentation and draft permit, will be published on the Air Quality Program's website, and the public notice for availability of the technical analysis and draft permit will only be directly sent to those who requested further information during the first comment period.

During this possible second 30-day comment period, residents have another opportunity to submit written comments expressing their concerns or support for the proposed project, and/or to request a Public Information Hearing.

Possible Public Information Hearing: The Environmental Health Department Director may decide to hold a Public Information Hearing for a permit application if there is significant public interest and a significant air quality issue. If a Public Information Hearing is held, it will occur after the technical analysis is complete and the permit has been drafted.

Air Quality Construction Permitting Overview

Step 4: Public Comment Evaluation and Response: The Air Quality Program evaluates all public comments received during the 30-day public comment period(s) and Public Information Hearing, if held, and updates the technical analysis and draft permit as appropriate. The Air Quality Program prepares a response document to address the public comments received, and when a final decision is made on the permit application, the comment response document is published on the Air Quality Program's website and distributed to the individuals who participated in the permitting process. If no comments are received, a response document is not prepared.

Step 5: Final Decision on the Application: After public comments are addressed and the final technical review is completed, the Environmental Health Department makes a final decision on the application. If the permit application meets all applicable requirements set forth by the New Mexico Air Quality Control Act and the federal Clean Air Act, the permit is approved. If the permit application does not meet all applicable requirements, it is denied.

If there is public participation for a permit application and a response document is prepared, notification of the final decision on the permit application and the availability of the comment response document is published on the Air Quality Program's website and distributed to the individuals who participated in the permitting process. If there is no public participation, no notification of the final decision is provided.

The Department is legally required to approve a permit application if the proposed action will meet all applicable requirements and if it demonstrates that it will not result in an exceedance of ambient air quality standards. Permit writers are very careful to ensure that estimated emissions have been appropriately identified or quantified and that the emission data used are acceptable.

The Department must deny a permit application if it is deemed incomplete three times, if the proposed action will not meet applicable requirements, if estimated emissions have not been appropriately identified or quantified, or if the emission data are not acceptable for technical reasons.

For more information about air quality permitting, visit www.cabq.gov/airquality/air-quality-permits



Timothy M. Keller,
Mayor

Public Participation

List of Neighborhood Associations and Neighborhood Coalitions MEMORANDUM

To: Andrew N. Yuhas, PG
From: Michael McKinstry, Environmental Health-Air Quality Permitting Manager
Subject: Determination of Neighborhood Associations and Coalitions
within 1 mile of 711 NM Highway 333 (old route 66) Bernalillo County, NM.
Date: May 7, 2026

DETERMINATION:

On May 7, 2026, I used the City of Albuquerque Zoning Advanced Map Viewer (<http://coagisweb.cabq.gov/>) to verify which City of Albuquerque Neighborhood Associations (NA), Homeowner Associations (HOA) and Neighborhood Coalitions (NC) are located within 1 mile of 711 NM Highway 333 (old route 66) in Bernalillo County, NM.

I then used the City of Albuquerque Office (COA) of Neighborhood Coordination's Monthly Master NA List dated April 2026 and the Bernalillo County (BC) Monthly Neighborhood Association April 2026 Excel file to determine the contact information for each NA and NC located within 1 mile of 711 NM Highway 333 (old route 66) in Bernalillo County, NM.

The table below contains the contact information, which will be used in the City of Albuquerque Environmental Health Department's public notice. Duplicates have been deleted.

COA/BC Association or Coalition	Name	Email or Mailing Address*
East Mountain District 5 Coalition	Bob Watson Diane Donaghy	janebob99@lobo.net jemcsa@nmia.com
Tablazon Neighborhood Association	Donna Delery Jenny Galasso	vrulta@gmail.com galasso@j@yahoo.com

****If email address is not listed, provide public notice via certified mail and include a copy of each mail receipt with the application submittal.***

Andrew N. Yuhas

From: Anaya, Michael A. <Maanya@cabq.gov>
Sent: Thursday, August 20, 2026 11:29 AM
To: Andrew N. Yuhas
Cc: McKinstry, Michael W.
Subject: RE: East Mountain Transfer Station Permit Application (2080) - Public notice update request

Categories: Filed by Newforma

Mr. Yuhas

I have reviewed City of Albuquerque Neighborhood Associations (NA), Homeowner Associations (HOA), and Neighborhood Coalitions (NC) located within 1 mile of 711 NM Highway 333 (old Route 66) in Bernalillo County, NM. The list that you received on May 7, 2026, has not changed.

**COA/BC Association or
Coalition Name Email or Mailing Address***

East Mountain District 5

Coalition

Bob Watson

Diane Donaghy

janebob99@lobo.net

jemcsa@nmia.com

Tablazon Neighborhood

Association

Donna Delery

Jenny Galasso

vrulta@gmail.com

galassoj@yahoo.com

Michael Anaya

From: Andrew N. Yuhas <ayuhas@Parkhill.com>
Sent: Thursday, August 20, 2026 10:01 AM
To: McKinstry, Michael W. <mmckinstry@cabq.gov>
Cc: Anaya, Michael A. <Maanya@cabq.gov>
Subject: FW: East Mountain Transfer Station Permit Application (2080) - Public notice update request

Good morning, as my email to Ms. Scott was kicked back , I am making this request to you, Apologies for any inconvenience. Please see my original message, below.

From: Andrew N. Yuhas <ayuhas@Parkhill.com>
Sent: Thursday, August 20, 2026 9:47 AM

Andrew N. Yuhas

From: Andrew N. Yuhas
Sent: Friday, July 3, 2026 11:06 AM
To: jemcsa@nmia.com
Subject: Public Notice of Proposed Air Quality Construction Permit Application County of Bernalillo Solid Waste Department, East Mountain Transfer Station
Attachments: 2080-EMTS_Notice of Intent_FINAL.pdf
Categories: Filed by Newforma

Dear Neighborhood Association/Coalition Representative(s),

Why did I receive this public notice?

You are receiving this notice in accordance with New Mexico Administrative Code (NMAC) 20.11.41.13(B)(1), which requires any applicant seeking an Air Quality Construction Permit or permit modification pursuant to 20.11.41 NMAC to provide public notice by certified mail or electronic mail to the designated representative(s) of the recognized neighborhood associations and recognized coalitions that are within one-half mile of the exterior boundaries of the property on which the source is or is proposed to be located. Public notice is required within a one mile radius by 20.11.72.9 NMAC.

What is the Air Quality Permit application review process?

The City of Albuquerque, Environmental Health Department, Air Quality Program (Program) is responsible for the review and issuance of Air Quality Permits for any stationary source of air contaminants within Bernalillo County. Once the application is received, the Program reviews each application and rules it either complete or incomplete. Complete applications will then go through a 30-day public comment period. Within 90 days after the Program has ruled the application complete, the Program shall issue the permit, issue the permit subject to conditions, or deny the requested permit or permit modification. The Program shall hold a Public Information Hearing pursuant to 20.11.41.15 NMAC if the Director determines there is significant public interest and a significant air quality issue is involved.

What do I need to know about this proposed application?

Applicant Name	County of Bernalillo Solid Waste Department
Site or Facility Name	East Mountain Transfer Station
Site or Facility Address	711 NM Hwy 333
New or Existing Source	EXISTING
Anticipated Date of Application Submittal	July 6, 2026
Summary of Proposed Source to Be Permitted	The Bernalillo County Solid Waste Department East Mountain Transfer Station (EMTS) is seeking a modification of their existing ATC permit (#2080) associated with the grinder engine at the facility. Updates include replacement of the original diesel-powered horizontal green waste grinder operated at the facility with a newer unit, and the addition of a second diesel-powered horizontal grinder to the site's operations. Updated emissions for both units are provided within this application to accurately characterize total emissions from engines at EMTS. As required for an application for permit modification, updated air dispersion modeling has been completed and is included in the submittal. The modeling report details model inputs and modeled concentrations associated with the

	proposed modifications. The report also demonstrates compliance with all applicable National and New Mexico Ambient Air Quality Standards (NAAQS and NMAAQs).
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What emission limits and operating schedule are being requested?

See attached Notice of Intent to Construct form for this information.

How do I get additional information regarding this proposed application?

For inquiries regarding the proposed source, contact:

- **Mr. Gabriel Villescas**
- **gvillescas@bernco.gov**
- **505.401.1779**

For inquiries regarding the air quality permitting process, contact:

- City of Albuquerque Environmental Health Department Air Quality Program
- aqd@cabq.gov
- (505) 768-1972

Andrew N. Yuhas, PG
Professional Geologist

Parkhill

T 505.504.7765 | M 406.544.2133 | Parkhill.com

Andrew N. Yuhas

From: Andrew N. Yuhas
Sent: Friday, July 3, 2026 11:06 AM
To: janebob99@lobo.net
Subject: Public Notice of Proposed Air Quality Construction Permit Application County of Bernalillo Solid Waste Department, East Mountain Transfer Station
Attachments: 2080-EMTS_Notice of Intent_FINAL.pdf
Categories: Filed by Newforma

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- aqd@cabq.gov
- (505) 768-1972

Andrew N. Yuhas, PG
Professional Geologist

Parkhill

T 505.504.7765 | M 406.544.2133 | Parkhill.com

Andrew N. Yuhas

From: Andrew N. Yuhas
Sent: Friday, July 3, 2026 11:05 AM
To: galassoj@yahoo.com
Subject: Public Notice of Proposed Air Quality Construction Permit Application County of Bernalillo Solid Waste Department, East Mountain Transfer Station
Attachments: 2080-EMTS_Notice of Intent_FINAL.pdf
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- aqd@cabq.gov
- (505) 768-1972

Andrew N. Yuhas, PG
Professional Geologist

Parkhill

T 505.504.7765 | M 406.544.2133 | Parkhill.com

Andrew N. Yuhas

From: Andrew N. Yuhas
Sent: Friday, July 3, 2026 11:05 AM
To: vrulta@gmail.com
Subject: Public Notice of Proposed Air Quality Construction Permit Application County of Bernalillo Solid Waste Department, East Mountain Transfer Station
Attachments: 2080-EMTS_Notice of Intent_FINAL.pdf
Categories: Filed by Newforma

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- gillescas@bernco.gov
- **505.401.1779**

For inquiries regarding the air quality permitting process, contact:

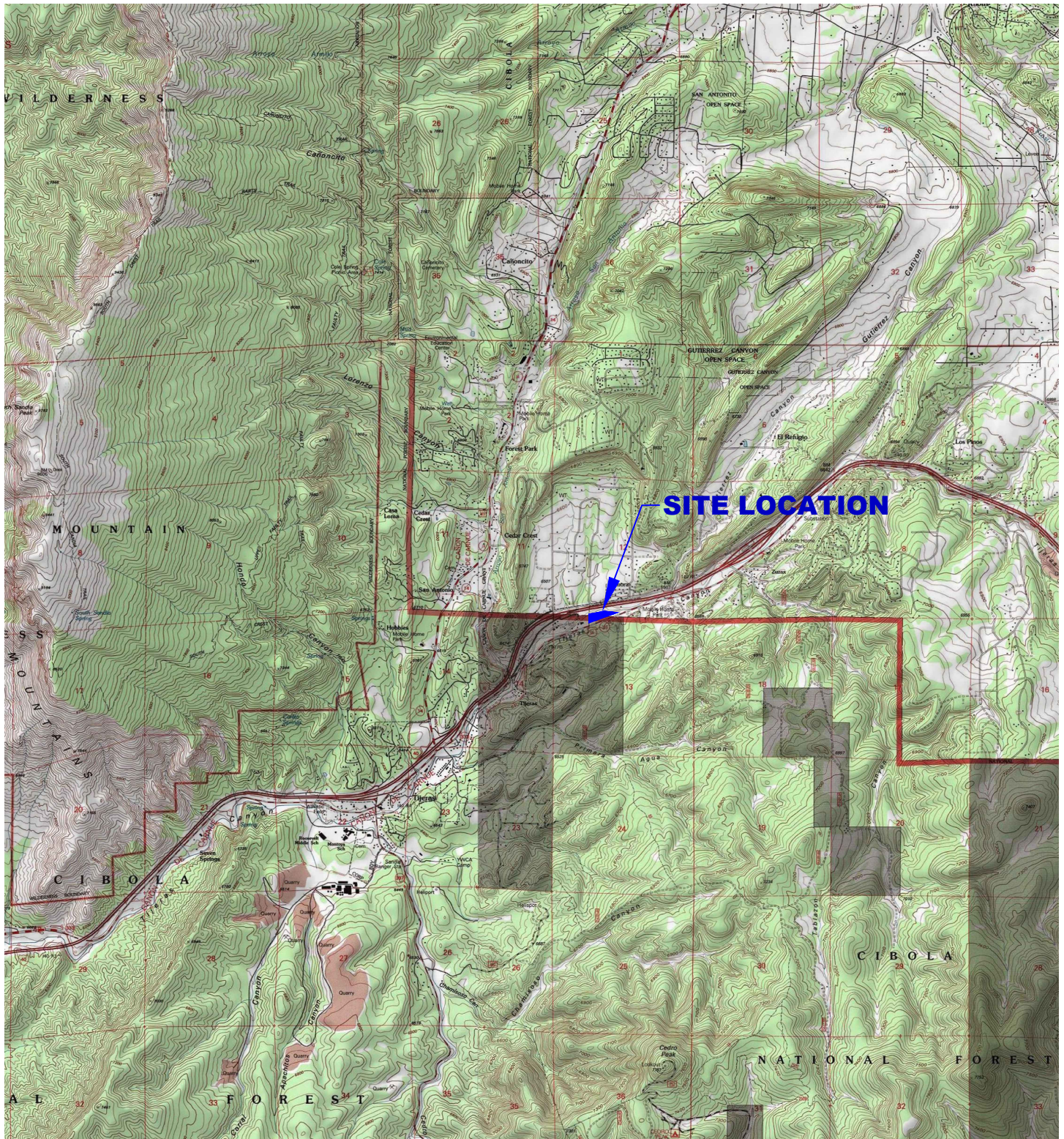
- City of Albuquerque Environmental Health Department Air Quality Program
- agd@cabq.gov
- (505) 768-1972

Andrew N. Yuhas, PG
Professional Geologist

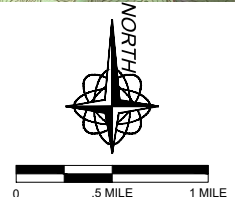
Parkhill

T 505.504.7765 | M 406.544.2133 | Parkhill.com

EXHIBIT D: FACILITY LOCATION AND AERIAL PHOTO



1. MAP REFERENCE: USGS 1:100,000 BASE MAP
2. GEOGRAPHIC CENTER 35° 5' 56.92" N -106° 21' 38.09" W



Parkhill

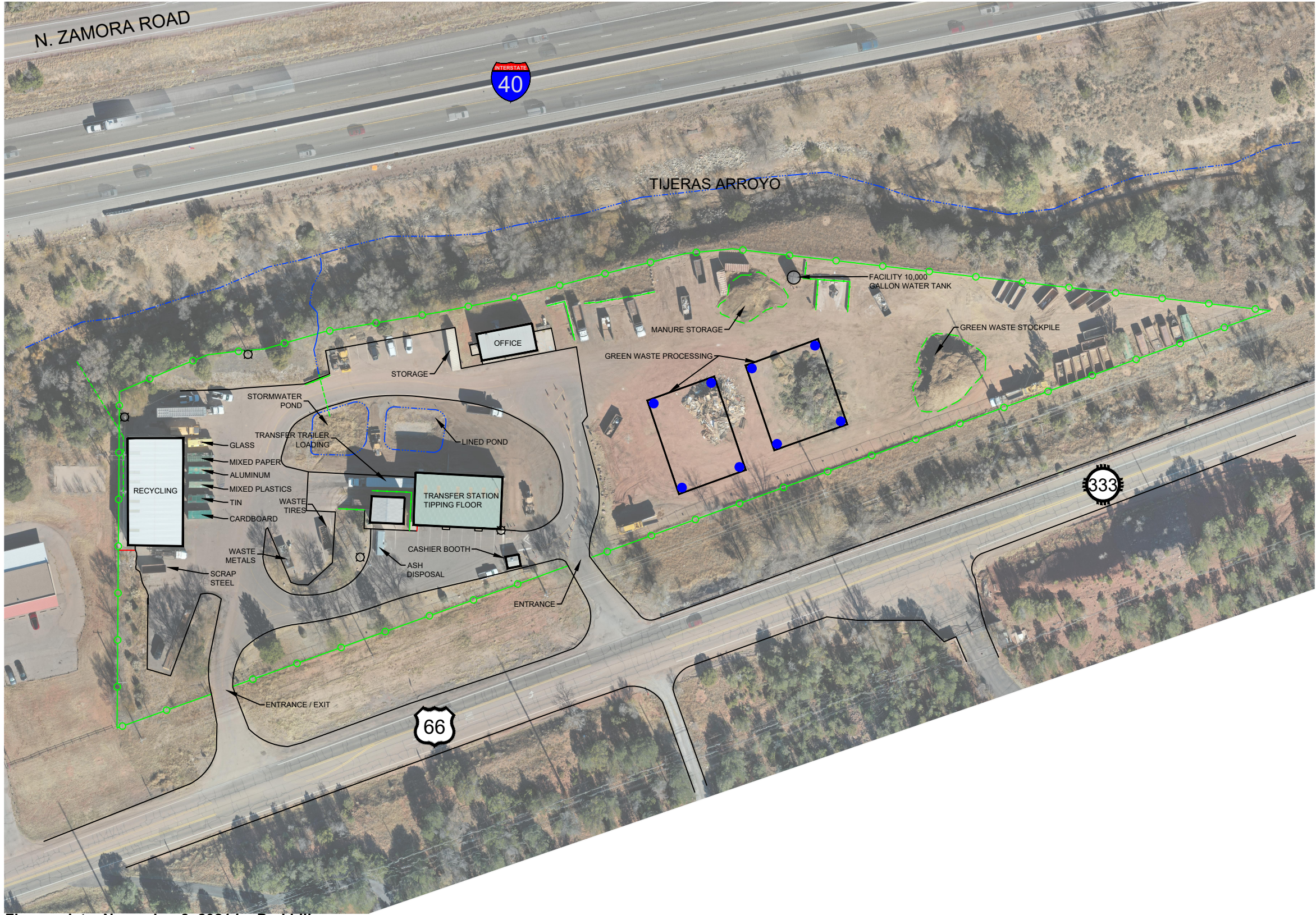
Parkhill.com

**EAST MOUNTAIN
TRANSFER STATION
BERNALILLO COUNTY
711 NM-333
TIJERAS, NEW MEXICO**

SITE LOCATION

Issue:	FINAL
Date:	05/02/2023
Project No:	040683.23
Exhibit:	D.1

FILE NAME: A:\2023\40683.23\03_DSGN01_DWG\050_CIVIL02_CONTENT\EMTS PLOT PLAN 2026 11x17.dwg PRINTED: Wednesday, August 26, 2026 - 4:27pm



- LEGEND**
- EXISTING PERIMETER FENCE
 - PAVED ROAD
 - POND
 - STREAM
 - CULVERT
 - LIGHT POLE
 - BUILDING
 - HORIZONTAL GRINDER ENGINE POTENTIAL LOCATIONS

Flyover date: November 8, 2021 by Parkhill

EXHIBIT E: ZONING CERTIFICATION



**City of Albuquerque
Environmental Health Department
Air Quality Program**



**Construction Permit (20.11.41 NMAC)
Zoning Requirement Cover Letter**

This Cover Letter Must Be Returned With The Application Along With All Required Attachments

The Albuquerque-Bernalillo County Joint Air Quality Program, which administers and enforces local air quality laws for the City of Albuquerque (“City”) and Bernalillo County (“County”), on behalf of the City Environmental Health Department (“Department”).

Any person seeking a new air quality permit or a permit modification under 20.11.41 NMAC (Construction Permits) shall provide documentary proof that the proposed air quality permitted use of the facility’s subject property is allowed by the zoning designation of the City or County zoning laws, as applicable. Sufficient documentation may include (i) a zoning certification from the City Planning Department or County Department of Planning and Development Services, as applicable, if the applicant is subject to City or County zoning jurisdiction; or (ii) a zoning verification from both planning departments if the applicant is not subject to City or County zoning jurisdiction. A zone atlas map shall not be sufficient. At this time, applicants are not required to submit documentation for the subject property’s zoning designation when applying for a relocation of a portable stationary source, or a technical or administrative revision to an existing permit.

The Department will rule an application administratively incomplete if it is missing or has incorrect information. If the Department has ruled an application administratively incomplete three (3) times, the Department will deny the permit application. Any fees submitted for processing an application that has been denied will not be refunded. If the Department denies an application, a person may submit a new application and the fee required for a new application. The applicant has the burden of demonstrating that a permit should be issued.

The Department may require additional information that is necessary to make a thorough review of an application. At all times before the Department has made a final decision regarding the application, an applicant has a duty to promptly supplement and correct information the applicant has submitted in an application to the Department. The applicant’s duty to supplement and correct the application includes, but is not limited to, relevant information acquired after the applicant has submitted the application and additional information the applicant otherwise determines is relevant to the application and the Department’s review and decision. While the Department is processing an application, regardless of whether the Department has determined the application is administratively complete, if the Department determines that additional information is necessary to evaluate or make a final decision regarding the application, the Department may request additional information and the applicant shall provide the requested additional information.

NOTICE REGARDING SCOPE OF A PERMIT: The Department’s issuance of an air quality permit only authorizes the use of the specified equipment pursuant to the air quality control laws, regulations and conditions. Permits relate to air quality control only and are issued for the sole purpose of regulating the emission of air contaminants from said equipment. Air quality permits are not a general authorization for the location, construction and/or operation of a facility, nor does a permit authorize any particular land use or other form of land entitlement. It is the applicant’s/permittee’s responsibility to obtain all other necessary permits from the appropriate agencies, such as the City Planning Department or County Department of Planning and Development Services, including but not limited to site plan approvals, building permits, fire department approvals and the like, as may be required by law for the location, construction and/or operation of a facility. For more information, please visit the City Planning Department website at <https://www.cabq.gov/planning> and the County Department of Planning and Development Services website at <https://www.bernco.gov/planning>.

Corporate and Facility Information: This information shall match the information in the permit application.

Air Quality Permit Applicant Company Name: County of Bernalillo Solid Waste Department			
Facility Name: East Mountain Transfer Station			
Facility Physical Address: 711 NM Hwy 333 (Property includes 711 and 715)	City: Tijeras	State: NM	Zip: 87509
Facility Legal Description: #1: TR OF LAND WITHIN NWLY POR OF NW NE NW SEC 13 T10N R5E CONT1.87 AC AKA POR OF LOT 17 #2: SEC 12 10N R5E SW1/4 SE1/4 SE1/4 SW1/4			

General Operation Information: This information shall match the information in the permit application.

Permitting action being requested (please refer to the definitions in 20.11.41 NMAC):

☐ New Permit ☒ Permit Modification, Current Permit #: **2080**

Attachment Information: The location information provided to the City Planning Department or County Department of Planning and Development Services, as applicable, and reflected in the zoning certification or verifications, as applicable, shall be the same as the Facility location information provided to the Department in the air quality construction permit application.

☒ Zoning Certification Provided by: County Planning <i>This is a use-specific certification.</i> <u>City Planning Form:</u> https://www.cabq.gov/planning/code-enforcement-zoning <u>County Planning Form:</u> https://www.bernco.gov/planning/planning-and-land-use/applications-forms/	☐ City Zoning Verification ☐ County Zoning Verification <u>City Planning Form:</u> https://www.cabq.gov/planning/code-enforcement-zoning <u>County Planning Form:</u> https://www.bernco.gov/planning/planning-and-land-use/applications-forms/
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BERNALILLO COUNTY

Planning & Development Services
415 Silver Ave. SW, 2nd Floor
Albuquerque, NM 87102
(505) 314-0350 Fax: (505) 314-0480
www.bernco.gov



ZONING SECTION

REQUEST FOR STATEMENT OF ZONAL CERTIFICATION/ VERIFICATION (ZNP)

PROPERTY OWNER'S NAME	County of Bernalillo, New Mexico			PHONE	505.401.3330
OWNER'S ADDRESS	1 Civic Plaza NW	CITY	Albuquerque	STATE	NM
				ZIP	87102

APPLICANT'S NAME	County of Bernalillo Solid Waste Department			PHONE	505.468.1294
APPLICANT'S ADDRESS	415 Silver Ave SW.	CITY	Albuquerque	STATE	NM
				ZIP	87102

SITE ADDRESS	711 NM Hwy 333, Tijeras, NM 87509 (Site occupies 711 and 715)				
DIRECTIONS	Facility is located approximately 1.5 miles east of NM Hwy 14/NM Hwy 333 intersection				
LEGAL DESCRIPTION	#1: TR OF LAND WITHIN NWLY POR OF NW NE NW SEC 13 T10N R5E CONT1.87 AC AKA POR OF LOT 17 #2: SEC 12 10N R5E SW1/4 SE1/4 SE1/4 SW1/4				
ZONE MAP	J-30-Z H-30-Z	CURRENT ZONE(S)	A-2 A-2	PROPERTY SIZE IN ACREAGE	1.87 Acres 3.17 Acres
UPC #	103005814752320212 103005923902830107				
EXISTING BUILDING & USE	Properties/Parcels are occupied by the East Mountain Transfer Station				

STATEMENT INFORMATION:
(check one)

GENERAL VERIFICATION
No charge



USE-SPECIFIC CERTIFICATION
(please explain) \$45.00



STATEMENT SHOULD BE ADDRESSED TO:

NAME	Mr. Gabriel Villegas, Solid Waste Manager				
MAILING ADDRESS	415 Silver Ave SW.	CITY	Albuquerque	STATE	NM
				ZIP	87102

ALL CERTIFICATION/ VERIFICATION STATEMENTS WILL BE SENT BY MAIL UNLESS OTHERWISE NOTED:

___ Fax a copy to _____

___ Contact when completed; applicant will pick up certification statement

☒ E-Mail to gvillegas@bernco.gov and ayuhas@parkhill.com

Gabriel Villegas
Applicant's signature

5/22/2026
Date

Planning & Development Services Department

415 Silver Ave. SW, 2nd Floor
Albuquerque, New Mexico 87102
Office: (505) 314-0350

www.bernco.gov



May 27, 2026

MR. GABRIEL VILLESCHAS
415 SILVER AVE. SW
ALBUQUERQUE, NM 87102

Re: 711 and 715 NM 333 – the “property” – ZNP2026-0033

To Whom It May Concern:

This letter shall certify that according to the official map on file with this office as of this date, the referenced property, legally described as AN UNPLATTED TRACT OF LAND WITHIN NWLY POR OF NW NE NW SEC 13 T10N R5E, aka portion of lot 17 and SEC 12 T10N R5E SW1/4 SE1/4 SE1/4 SW1/4, Tijeras, Bernalillo County, New Mexico, is zoned A-2 with a Special Use Permit for Health Department Field Office and Solid Waste Transfer Center. For your convenience, I have included a copy of the corresponding Zone Atlas page showing the referenced property and the approved site plan.

The uses listed in the Special Use Permit are allowed on the site in conformance with the approved site plan. A Solid Waste Transfer Center is an allowed use under the Special Use Permit (CSU-89-07 and ZA2016-0081).

This certification statement only references the applicability of the Zoning Ordinance as it applies to the aforementioned property in the specified zone. This letter is not a business license and cannot be construed as approval for construction.

Do not hesitate to contact me if you have questions concerning this matter at 314-0499 or at mgould@bernco.gov.

Sincerely,

Maggie Gould

Zoning Administrator

Enclosures: Zone Atlas Page J-30-Z, H-30-Z, site plan

Cc: gvillescascasbernco.gov

County Commissioners

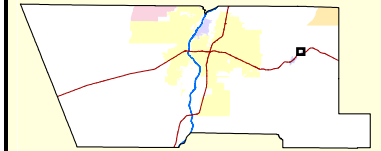
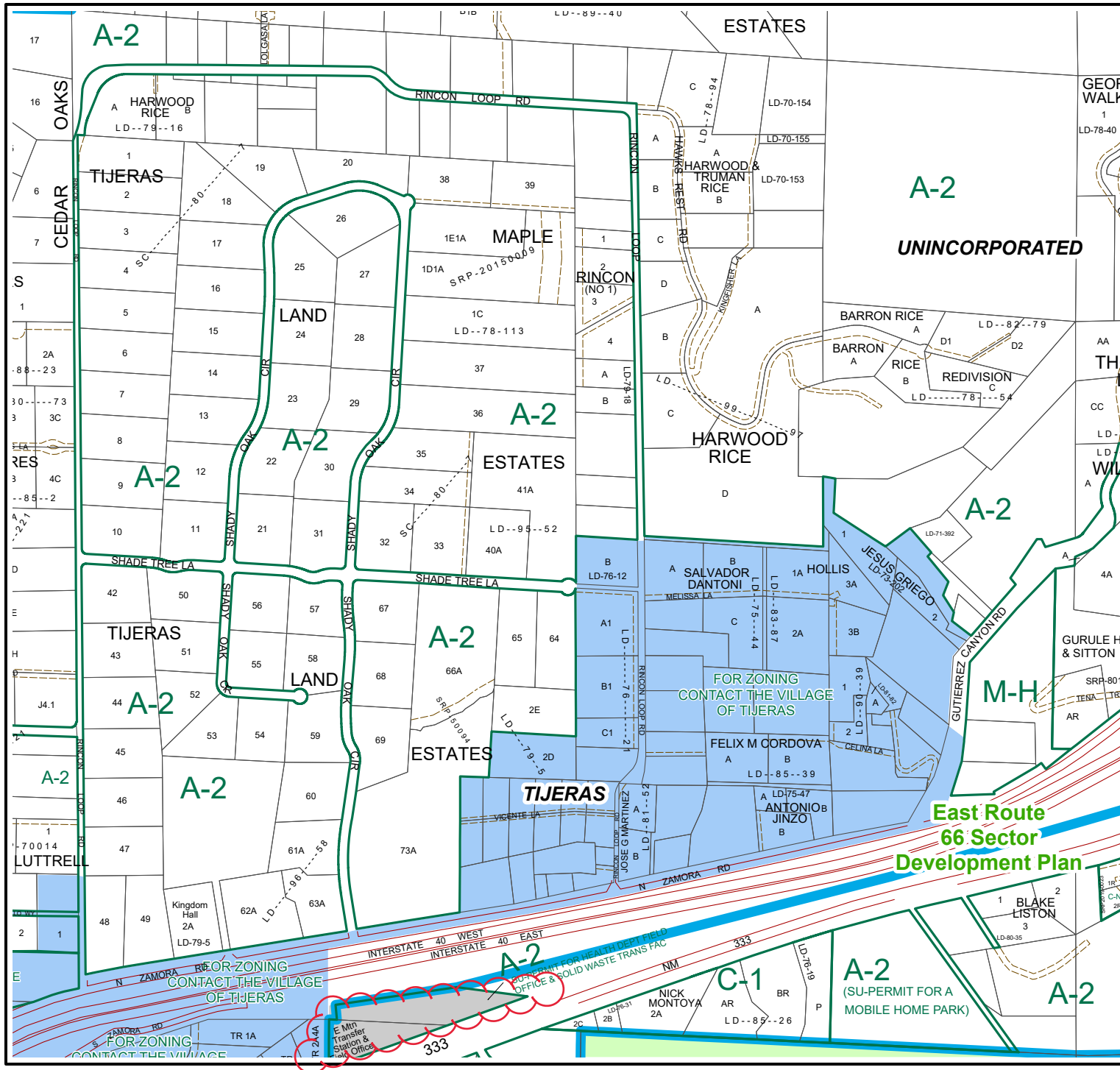
Adriann Barboa, Chair, District 3 • Frank A. Baca, Vice-Chair, District 2
Barbara Baca, District 1 • Walt Benson, District 4 • Eric C. Olivas, District 5

Elected Officials

Damian R. Lara, Assessor • Michelle S. Kavanaugh, Clerk • Cristy J. Carbón-Gaul, Probate Judge
John D. Allen, Sheriff • Tim Eichenberg, Treasurer

County Manager

Cindy Chavez

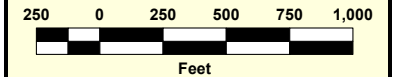


LEGAL DESCRIPTION

T10N
R5E
SEC 12

UNIFORM PROPERTY CODE

1-030-059



Map amended through Spring 2026



PLANNING & DEVELOPMENT SERVICES
GIS TECHNOLOGY SECTION

This information is for reference only. Bernalillo County assumes no liability for errors associated with the use of these data. Users are solely responsible for confirming data accuracy when necessary. Source data from Bernalillo County and the City of Albuquerque. For current information visit <https://www.bermco.gov/planning/download-zone-atlas.aspx>.

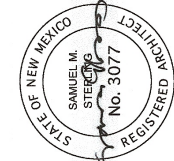
H-30-Z

NOTES:
1. Facility has a total of 7 employees with a maximum of 4 working on any given shift.
Hours of operation are 7:00 AM to 5:30 PM Monday through Sunday

2.

SSA
SOUTHERN STATES ARCHITECTS, P.C.
804 S.W. 11th Ave., Suite C, Homestead, FL 33150
954.232.2520 ssarchitects.com

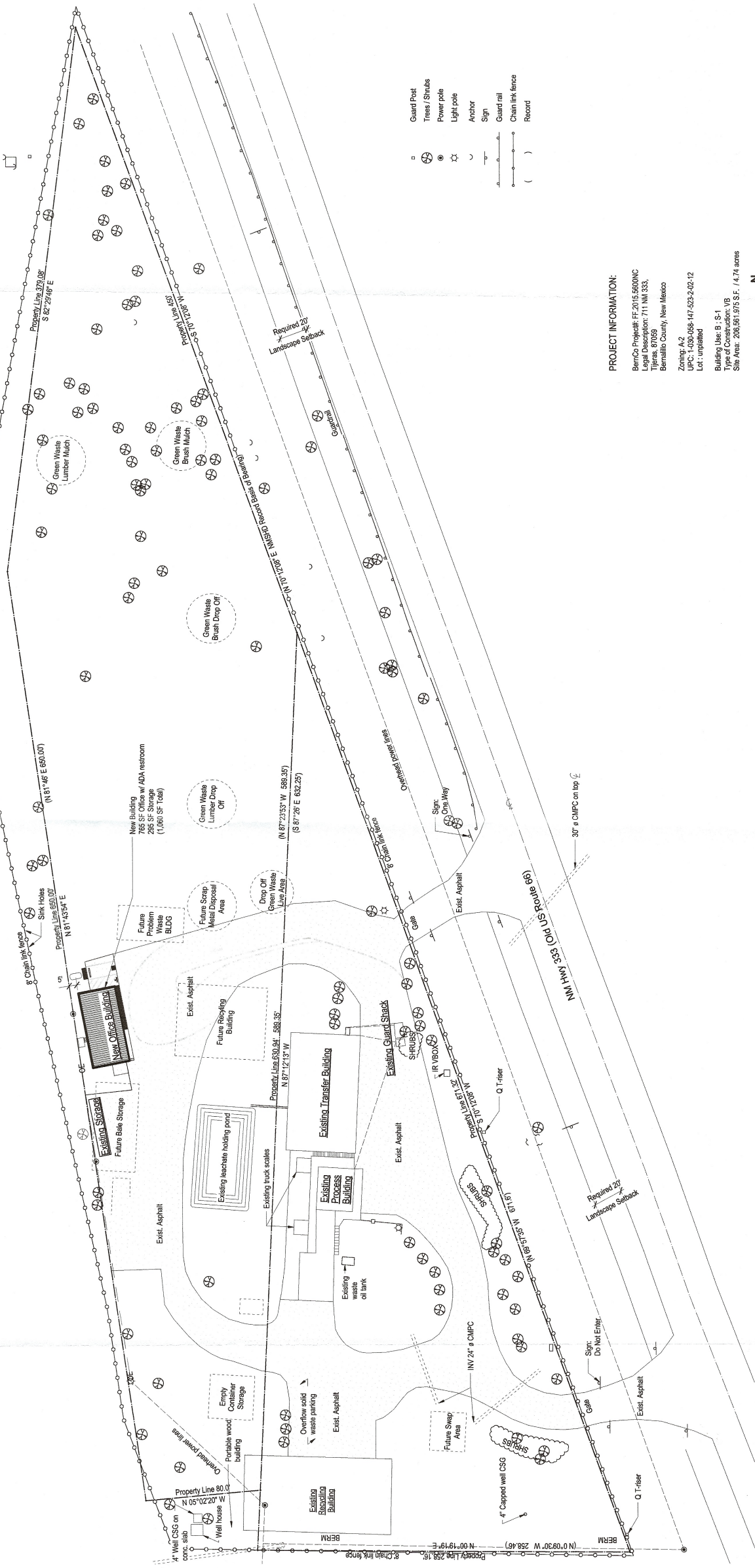
CONSULTANT



STAMP

KEPLAN

Bernalillo County Zoning
Approved: *Guadalupe Garcia*
Date: *01/12/2016*
Comments: *CSL: 89-07*
10 Rejected ZA 2016
0081: All applications
to be met.
Sheet 1 of 1



PROJECT INFORMATION:
Berrico Project#: FF-2016-5600NC
Legal Description: 711 NM 333,
Tijeras, 87059
Bernalillo County, New Mexico
Zoning: A2
UPC: 1-030-058-147-523-2-02-12
Lot: unplatted
Building Use: B - S-1
Type of Construction: Single-Family
Site Area: 206,561.575 SF / 4.74 acres

Site Plan
Scale: 1" = 40 ft

Office
East Mountain Transfer Station
Bernalillo County
711 NM 333, Tijeras, New Mexico 87059

PHASE: Construction
DATE: July 25, 2016
Revised per ZA Administrative Amendment
220716-081 October 19, 2016

ASK-01
Site Plan

EXHIBIT F: COMPLIANCE HISTORY DISCLOSURE



City of Albuquerque Environmental Health Department Air Quality Program



Air Quality Compliance History Disclosure Form

The Albuquerque-Bernalillo County Joint Air Quality Program ("Program") administers and enforces local air quality laws for the City of Albuquerque ("City") and Bernalillo County ("County") on behalf of the City Environmental Health Department, including the New Mexico Air Quality Control Act ("AQCA"), NMSA 1978, Sections 74-2-1 to -17. In accordance with Sections 74-2-7(P) and (S) of the AQCA, the Program may deny any permit application or revoke any permit issued pursuant to the AQCA if, within ten years immediately preceding the date of submission of the permit application, the applicant or permittee meets any one of the criteria outlined in the AQCA. The Program requires applicants to file this Compliance History Disclosure Form in order for the Program to deem an air permit application administratively complete, or issue an air permit for those permits without an initial administrative completeness determination process. Additionally, an existing permit holder (permits issued prior to the Effective Date of this Form) shall provide this Compliance History Disclosure Form to the Program upon the Program's request. Note: Program Staff can answer basic questions about this Compliance History Disclosure Form but cannot provide specific guidance or legal advice.

Instructions

1. Applications filed pursuant to the following regulations shall include this Compliance History Disclosure Form, in accordance with Section 74-2-7(S) of the AQCA: *Construction Permits* (20.11.41 NMAC); *Operating Permits* (20.11.42 NMAC); *Nonattainment Areas* (20.11.60 NMAC); *Prevention of Significant Deterioration* (20.11.61 NMAC); *Acid Rain* (20.11.62 NMAC); and *Fugitive Dust* (20.11.20 NMAC) except this Form shall not be required for asbestos notifications under 20.11.20.22 NMAC.
2. This Compliance History Disclosure Form is not site specific: responses shall be based on the applicant/permittee as an entity and not be limited to the application, site, facility or source.
3. The permittee identified on this Compliance History Disclosure Form shall match the permittee in the existing permit or new application. If the information in an existing permit needs to be changed, please contact the Program about revisions and ownership transfers.
4. Answer every question completely and truthfully, and do not leave any blank spaces. If there is nothing to disclose in answer to a particular question, check the box labeled "No" except for Question 5b. Failure to provide any of the information requested in this Compliance History Disclosure Form may constitute grounds for an incompleteness determination, application denial, or permit revocation.
5. Be especially careful not to leave out information in a way that might create an impression that you are trying to hide it. Omitting information, even unintentionally, may result in application denial or permit revocation.
6. For any required explanations, be sure to identify the question to which the explanation is responsive. If you submit any document in connection with your answer to any question, refer to it as, "Exhibit No. __", and attach it after the explanation(s) at the end of the Compliance History Disclosure Form, consecutively numbering each additional page at the top right corner.
7. The Program may require additional information to make a thorough review of an application. At all times before the Program has made a final decision regarding the application, an applicant has a duty to promptly supplement and correct information the applicant has submitted in an application to the Program. The applicant's duty to supplement and correct the application includes, but is not limited to, relevant information acquired after the applicant has submitted the application and additional information the applicant otherwise determines is relevant to the application and the Program's review and decision. While the Program is processing an application, regardless of whether the Program has determined the application is administratively complete, if the Program determines that additional information is necessary to evaluate or make a final decision regarding the application, the Program may request additional information and the applicant shall provide the requested additional information.
8. Supplementary information required by the Program may include responses to public comment received by the Program during the application review process.
9. Any fees submitted for processing an application that has been denied will not be refunded. If the Program denies an application, a person may submit a new application and the fee required for a new application. The applicant has the burden of demonstrating that a permit should be issued.

COMPLIANCE HISTORY		
A. Applicant/Permittee Name: County of Bernalillo Solid Waste Department, East Mountain Transfer Station		Check Applicable Box: ☒ Applicant ☒ Permittee
B. Time Period of Compliance Reporting (10 Years):		July 7, 2016 to July 6, 2026
Instructions: For applicants, answer the following questions with information from within the 10 years preceding the current application. For existing permit holders requested to submit this form by the Program outside of an application, answer the following questions with information from within the 10 years preceding the Program's issuance of each permit.		
C. Questions		
1	Knowingly misrepresented a material fact in an application for a permit?	☐ Yes ☒ No
2	Refused to disclose information required by the provisions of the New Mexico Air Quality Control Act?	☐ Yes ☒ No
3	Been convicted in any court of any state or the United States of a felony related to environmental crime?	☐ Yes ☒ No
4	Been convicted in any court of any state or the United States of a crime defined by state or federal statute as involving or being in restraint of trade, price fixing, bribery, or fraud?	☐ Yes ☒ No
5a	Constructed or operated any facility for which a permit was sought, including the current application, without the required air quality permit(s) under 20.11.41 NMAC, 20.11.42 NMAC, 20.11.60 NMAC, 20.11.61 NMAC, or 20.11.62 NMAC?	☐ Yes ☒ No
5b	If "No" to question 5a, mark N/A and go to question 6. If "Yes" to question 5a, state whether each facility that was constructed or operated without the required air quality permit met at least one of the following exceptions: i. The unpermitted facility was discovered after acquisition during a timely environmental audit that was authorized by the Program or the New Mexico Environment Department; or ii. The operator of the facility, using good engineering practices and established approved calculation methodologies, estimated that the facility's emissions would not require an air permit, and the operator applied for an air permit within 30 calendar days of discovering that an air permit was required for the facility.	☐ Yes ☐ No ☒ N/A
6	Had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States?	☐ Yes ☒ No
7	For each "yes" answer, or "no" to 5b, please attach an explanation and supporting documentation.	

I, the undersigned, hereby certify under penalty of law that this Compliance History Disclosure Form (Form) and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. I have knowledge of the information in this Form and it is, to the best of my knowledge and belief, true, accurate, and complete. I understand that there are significant penalties for submitting false information, including denial of the application or revocation of a permit, as well as fines and imprisonment for knowing violations. If I filed an application, I covenant and agree to promptly supplement and correct information in this Form until the Program makes a final decision regarding the application. Further, I certify that I am qualified and authorized to file this Form, to certify to the truth and accuracy of the information herein, and bind the permittee and source.

Signed this 25 day of August, 20 2026

Gabriel Villescas

Print Name

Signature

Solid Waste Manager

Print Title

Bernalillo County

Company Name

**EXHIBIT G: AQP COMMUNICATIONS REQUESTING ADDITIONAL
INFORMATION**

CITY OF ALBUQUERQUE

Environmental Health Department

Dr. Whitney S. Craig, Director



Antonio Jaramillo
Director of Operations and Maintenance
County of Bernalillo Solid Waste Department
600 Second St. NW
Albuquerque, NM 87102

August 7, 2026
Sent via email:
aejaramillo@berncgo.gov
Cc: Andrew N. Yuhas
ayuhas@parkhill.com

**Subject: Air Quality Construction Permit Application #2080-M1
2nd Administrative Incompleteness Determination**

Dear Mr. Jaramillo:

The City of Albuquerque, Environmental Health Department, Air Quality Program (Program) received an air quality construction permit application from County of Bernalillo Solid Waste Department on July 6, 2026 for the East Mountain Transfer Station facility located at 711 NM Hwy 333 in Tijeras, NM. An initial review has been completed and based on the information that was submitted, the Program is not able to complete a thorough evaluation of the application at this time. Therefore, the application has been deemed administratively incomplete on August 5, 2026. The application did not meet the following:

1. Original wet-ink signatures were not provided on the Application, Review Checklist, and Compliance History Disclosure Forms in the hardcopy submittal as required. Please provide wet-ink signatures on the Application, Review Fee Checklist, and Compliance History Disclosure Forms.
2. Unit 1 Executive Order U-R-001-0461 seems to have inaccurate details. The engine for Unit 1 is a 475-kW unit, but the Executive Order appears to be for engines greater than 560 kW. Please provide an Executive Order that accurately reflects Unit 1.
 - a. This same issue appears to be present on the EPA Certificate of Conformity for Unit 1. The certificate lists an engine size of 560<kW<=900.
3. The applicant is using emission factors from both Tables 6 and 8, Interim Tier 4 Exhaust Emission Standards. The Program cannot accept emission factors from different tables for different pollutants. The applicant should use emission factors only from Table 6. When emission standards are revised, the emission limits must be updated throughout the submittal. Modeling does not need to be redone after switching to lower emissions using only Table 6.

A preliminary review of the modeling submitted for the East Mountain Transfer Station found the following deficiencies that need to be addressed before the review of the modeling can proceed:

4. This 2nd submittal is missing the CO and PM_{2.5} ROI modeling files. These other pollutant models are described in the modeling report, but only NO₂ is included in the ROI and NAAQS modeling files. This 2nd submittal is supposed to be a complete resubmittal with all required components, not relying on anything from the 1st submittal. This was clearly stated in the first bullet point in the Apr. 24, 2026, email from Mike McKinstry to Bernalillo County and Parkhill. "The 2nd submittal must be a complete application package with all required components." All modeling files listed in Section 5.0 should have been included with this 2nd submittal. They need to be included with the 3rd submittal.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

5. Section 4.3 of the modeling report states that Cirrus used 1/3 arc-second NED files downloaded from USGS to generate elevations instead of the 1 arc-second NED files from the CABQ website, and Section 5.0 says the USGS files were not submitted. If different NED files from those provided on the CABQ website are used, please provide those NED files as part of the submittal.
6. Section 4.5 of the modeling report states that Cirrus determined there were no building downwash effects from the structures at the EMTS in the ROI models, so they did not use building downwash in the CIA models. Please provide an explanation that clarifies how it was determined that there were no building downwash effects.
7. Why is Section 2.1-Alternative Operating Scenario missing from this 2nd submittal modeling report? Is the alternative operating scenario no longer requested or desired?

Pursuant to 20.11.41.16(A)(2) NMAC, the department may deem the application administratively incomplete if the department requires additional information to make a thorough review of the application, including technical clarifications, emission calculations, emission factor usage, additional application review fees if any are required by 20.11.2 NMAC and new or additional air dispersion modeling.

Please be aware that this is the second out of three opportunities for the Program to determine if the application is administratively complete and continue the process. If the Program has ruled an application administratively incomplete three times, the Program can deny the permit application. Any fees submitted for processing an application that has been denied will not be refunded pursuant to 20.11.41.16(A)(2) NMAC. If the Program denies the application, the applicant may submit a new application and the fee required for a new application. **The deadline to receive a complete application, and a copy that includes all the information as required in 20.11.41.13 NMAC is August 28, 2026.** Additionally, if the time lapse between the date of the Memorandum with the contact list of all Neighborhood Associations and Coalitions (NAs/NCs) provided by the Program and the resubmittal of the application is more than three months, you will need to resend the notice of intent (NOI) to construct to the representatives of the NAs/NCs located within 1 mile of the boundaries of the site. Please contact the Program to obtain an updated contact list of the NAs/NCs.

The Program will continue the evaluation of the application and air dispersion modeling once a complete application has been received.

If you have any questions or require any additional information, please do not hesitate to contact me by phone at 505-228-3955 or via email at maanya@cabq.gov.

Sincerely,



Michael Anaya
Senior Environmental Health Scientist
Air Quality Program
Environmental Health Department
City of Albuquerque

CITY OF ALBUQUERQUE

Environmental Health Department

Paul J. Rogers, Director



Antonio Jaramillo, PE
Director of Operations and Maintenance
County of Bernalillo Solid Waste Department
600 Second St. NW
Albuquerque, NM 87102

February 26, 2025

Sent via email:

aejaramillo@bernco.gov

Cc: Andrew Yuhas

ayuhas@parkhill.com

**Subject: Air Quality Construction Permit Application #2080-M1
1st Administrative Incompleteness Determination**

Dear Mr. Jaramillo:

The City of Albuquerque, Environmental Health Department, Air Quality Program (Program) received an air quality construction permit application from County of Bernalillo Solid Waste Department on January 27, 2025 for the East Mountains Transfer Station facility located at 711 NM Hwy 333 in Tijeras, NM. An initial review has been completed and based on the information that was submitted, the Program is not able to complete a thorough evaluation of the application at this time. Therefore, the application has been deemed administratively incomplete on February 26, 2025. **The application did not meet the following:**

1. In the 20.11.41.13(D) NMAC section of the "Construction Permit Application Checklist" the Program requests an electronic submittal on a thumb drive of "...emission calculations file(s) in Microsoft Excel-compatible format" that the program did not receive.
2. On the "Permit Application Review Fee Checklist", the box should not be marked under Section III "Modification Application Review Fees (Not Based on Proposed Allowable Emission Rate)" but should be marked in the "Federal Program Review Fees for each Subpart" for "40 CFR 60 - New Source Performance Standards (NSPS)". Correct the page and replace it with the old page.
3. An applicability determination with all New Mexico Administration Code (NMAC) and federal regulations, is requested in the 20.11.41.13(E) NMAC section, item 12a of the "Construction Permit Application Checklist", this was not provided with the application.
4. There is confusing information about which Part 1039 emission factors were used for the 2013 engine. One page says the lower emission factors were used and then the calculations (and likely modeling) use the higher emission factors to calculate emissions. This is more conservative and acceptable to use the higher emission factors and emission rates but it is confusing.
5. The permit number on the front page of the application package will need to be corrected and anywhere else it is incorrect.
6. Typographical errors are present in places like the Table of Contents (Conotrolled), Table 1.2.1 (Unconrolled Emissions) and possibly other places. These are not major issues but please correct them.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

A preliminary review of the modeling submitted for the East Mountains Transfer Station found the following deficiencies that need to be addressed before the review of the modeling can proceed:

7. The two thumb drives labeled 'ADM' appear to have corrupt files. The 'ROI' folders will not open on either drive. It appears the Program received all the modeling files on the thumb drive labeled 'App Pkg' so more drives are not needed unless the modeling files are updated. If modeling and other files are updated, the electronic copies can all be submitted on one drive.
8. The modeling report needs to include a table of the SIL/ROI modeling results, not just a reference to an Excel file that was provided. The Excel file is good, but the table needs to be in the modeling report also.
9. The PM_{2.5} annual SIL listed in Table 1 of the modeling report and in the Modeling Data & Results (2024-01) Excel file is the old SIL of 0.2 µg/m³. This was replaced by the lower SIL of 0.13 µg/m³ in May 2024 and that should be what the modeled impacts are compared to. Also, the NAAQS for annual PM_{2.5} in Table 1 and in the Modeling Data & Results (2024-01) shows 12 µg/m³ but it should be 9 µg/m³, also effective May 2024. The June 3, 2024 email from the Program to Parkhill stated that the modeling would have to comply with the change in the level of the annual PM_{2.5} NAAQS and associated SIL. It looks like this may just be an issue that needs to be corrected in the modeling report and Excel file because the new SIL was not exceeded according to the data in the Excel file.
10. Section 4.1 of the modeling report states that a minimum NO₂/NO_x in-stack ratio (ISR) of 0.2 was used with the Tier 2 ARM2 method for NO₂ modeling. This is not acceptable. The ISR values the Program sent in a March 9, 2023 email specifically stated that those ISRs were for Tier 3 NO₂ methods. The May 2024 AQP Modeling Guidelines specifically state in the NO₂ Tier Modeling Options section on page 8 that when using ARM2 "the default minimum (0.5) and maximum (0.9) NO₂/NO_x ratios should be used".

Pursuant to 20.11.41.16(A)(2) NMAC, the department may deem the application administratively incomplete if the department requires additional information to make a thorough review of the application, including technical clarifications, emission calculations, emission factor usage, additional application review fees if any are required by 20.11.2 NMAC and new or additional air dispersion modeling.

Please be aware that this is the first out of three opportunities for the Program to determine if the application is administratively complete and continue the process. If the Program has ruled an application administratively incomplete three times, the Program can deny the permit application. Any fees submitted for processing an application that has been denied will not be refunded pursuant to 20.11.41.16(A)(2) NMAC. If the Program denies the application, the applicant may submit a new application and the fee required for a new application. **The deadline to receive a complete application, and a copy, that includes all the information as required in 20.11.41.13 NMAC is March 12, 2025.** Additionally, if the time lapse between the date of the Memorandum with the contact list of all Neighborhood Associations and Coalitions (NAs/NCs)

provided by the Program and the resubmittal of the application is more than three months, you will need to resend the notice of intent (NOI) to construct to the representatives of the NAs/NCs located within ½ mile of the boundaries of the site. Please contact the Program to obtain an updated contact list of the NAs/NCs.

The Program will continue the evaluation of the application and air dispersion modeling once a complete application has been received.

If you have any questions or require any additional information, please do not hesitate to contact me by phone at 505-768-1923 or via email at mmckinstry@cabq.gov.

Sincerely,

Michael McKinstry

Michael McKinstry
Environmental Health Manager
Air Quality Program
Environmental Health Department
City of Albuquerque

Andrew N. Yuhas

From: McKinstry, Michael W. <mmckinstry@cabq.gov>
Sent: Friday, April 24, 2026 11:05 AM
To: gvillescascas@bernco.gov
Cc: Tumpane, Kyle; Andrew N. Yuhas; Stonesifer, Jeff W.
Subject: RE: modeling and application for East Mountain Transfer Station
Attachments: The 5 Steps of BACT Analysis.docx

Categories: Filed by Newforma

Mr. Villescascas,

The Air Quality Program had some requests regarding the permitting action for the East Mountain Transfer Station. The last requests were sent on or around June 4, 2025 but we haven't received anything as of today (see the email chain below). Attached is the guidance for the BACT assessment and below is a list of the items that need to be submitted to keep this moving forward. Also, below is the email chain of our last correspondence. Feel free to reach out to us with any questions you may have.

- All items from the February 26, 2025 Incompleteness Letter must be fixed or addressed in the 2nd submittal. The 2nd submittal must be a complete application package with all required components.
 - As noted in the February 26, 2025 Incompleteness Letter, an updated contact list of NAs/NCs will need to be requested and the public notice will need to be re-sent.
 - A new Compliance History Disclosure Form will need to be downloaded from the AQP website, updated with new compliance reporting dates and re-signed due to the time lapse since the dates on the form in the 1st submittal.
 - A new Application Review Fee Checklist will need to be downloaded from the AQP website and corrected based on the information in item 2 of the February 26, 2025 Incompleteness Letter. The two correct fields need to be marked and the correct fee total calculated.
- A BACT Assessment must be provided, as requested in March 3, 2025 and June 4, 2025 emails from Michael McKinstry. Additional details on the BACT Assessment are attached to this email.
- The AQP's responses to Parkhill's questions about items 8 & 9 from the February 26, 2025 Incompleteness Letter, and additional modeling questions, were provided in an April 11, 2025 email response from Kyle Tumpane (RE: East Mountains Transfer Station ATC Modification – Modeling). Please make the requested changes and address the additional questions.
- The AQP's additional preliminary modeling review deficiencies were provided in a May 28, 2025 email from Jeff Stonesifer (modeling and application for East Mountain Transfer Station). This email covers the AQP's determination related to item 10 from the February 26, 2025 Incompleteness Letter, which was also addressed in the April 11, 2025 email response from Kyle Tumpane, as well as additional modeling questions and concerns. Please make the necessary changes and address the additional questions.
- The AQP has identified an additional potential modeling concern related to the use of source groups and ARM2 for NO₂ modeling. The AQP and New Mexico Environment Department Air Quality Bureau have observed that ARM2 may potentially underpredict modeled impacts when modeling different sources in individual source groups. If you have two engines in separate source groups, ARM2 may reduce the concentration of each engine based on the emissions of the engine from the other group. This is described in Section 3.2.5 of the 2024 AERMOD User's Guide: "ARM2 sums all NO_x impacts from all sources modeled in a single model run to determine the NO₂/NO_x ratio that's applied for each

source group (SRCGROUP) specified. While the SRCGROUP keyword is required with at least one source group defined, if source group 'ALL' is omitted, AERMOD will automatically assume a source group 'ALL' internally and apply ARM2 to that assumed source group. In this case, AERMOD will generate a warning message to indicate that source group 'ALL' is missing but not required. Thus, ARM2 will not be calculated based on separate source groups NOX impacts. For example, if NOX emissions from five stacks are modeled with the ARM2 option, and only one source group is specified for one stack, ARM2 will first determine the total NOX impact from all five stacks, calculate the empirically derived NO2/NOX ratio from the total NOX impact (using a 5th order polynomial equation discussed in API, 2013), and the final NO2 impact concentration for the single stack source group would be calculated as the product of the NO2/NOX ratio and the discrete NOX impact for the single stack source group."

- EMTS should check and be sure this is not happening in their models after the other changes are made. If this issue is occurring, then the NO₂ modeling approach may need to be adjusted.

The deadline to receive a complete application, and a copy, that includes all the information as required in 20.11.41.13 NMAC is May 22, 2026.

Respectfully,



MICHAEL W. MCKINSTRY

environmental health manager

o 505.768.1923

m 505.228-3441

e mmckinstry@cabq.gov

cabq.gov/ehd

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From: McKinstry, Michael W.

Sent: Wednesday, June 4, 2025 8:18 AM

To: Andrew N. Yuhas <ayuhas@Parkhill.com>; Stonesifer, Jeff W. <JStonesifer@cabq.gov>; gillescas@bernco.gov

Cc: Tumpane, Kyle <ktumpane@cabq.gov>

Subject: RE: modeling and application for East Mountain Transfer Station

Mr. Yuhas,

Would it be possible for you to also submit the BACT assessment along with the modeling for the application?

Respectfully,



MICHAEL W. MCKINSTRY
environmental health manager

o 505.768.1923

m 505.228-3441

e mmckinstry@cabq.gov

cabq.gov/ehd

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From: Andrew N. Yuhas <ayuhas@Parkhill.com>

Sent: Wednesday, May 28, 2025 2:33 PM

To: Stonesifer, Jeff W. <JStonesifer@cabq.gov>; gvillescascas@bernco.gov

Cc: McKinstry, Michael W. <mmckinstry@cabq.gov>; Tumpene, Kyle <ktumpene@cabq.gov>

Subject: RE: modeling and application for East Mountain Transfer Station

Jeff,

Thank you for that review and response. I will reconnect with our modeler and address your comments. If additional questions arise, I will be sure to reach out as soon as possible.

Andrew N. Yuhas, PG
Professional Geologist

Parkhill

T 505.504.7765 | M 406.544.2133 | Parkhill.com

From: Stonesifer, Jeff W. <JStonesifer@cabq.gov>

Sent: Wednesday, May 28, 2025 2:29 PM

To: gvillescascas@bernco.gov

Cc: McKinstry, Michael W. <mmckinstry@cabq.gov>; Tumpene, Kyle <ktumpene@cabq.gov>; Andrew N. Yuhas

<ayuhas@Parkhill.com>

Subject: modeling and application for East Mountain Transfer Station

Mr. Villegas,

The preliminary review of the modeling and application submitted for permit modification at Bernalillo County's East Mountain Transfer Station has found the following deficiencies that need to be fixed before the modeling review can continue. This is no guarantee that all deficiencies with the modeling or the application have been found.

Although the Federal Modeling Guideline, a.k.a. Appendix W, allows a reviewing agency to establish an alternative minimum ambient ratio in section 4.2.3.4.d, page 19 of EPA's December 2015 technical support document (EPA-454/B-15-004) states that the ambient ratio should be considered as well as the source's in-stack ratio (ISR). Low ratios of NO₂/NO_x are most likely in locations that sometimes have high ambient NO_x levels. Although the East Mountain Transfer Station is situated close to an interstate, it is hard to tell if the NO_x levels are high without a NO_x monitor in that area.

Furthermore, section 3.2.5 of the November 2024 AERMOD User's Guide states "the default minimum ratio utilized in the ARM2 method may not be appropriate in cases where the sources being modeled are known to have relatively high in-stack NO₂/NO_x ratios." Thus, the AERMOD User's states the situation where the minimum ratio may need to be changed instead of using the default. The EPA's ISR database shows that diesel engines typically have ISRs of 0.1 or less. In other words, default minimum ratio is appropriate for modeling the NO_x emissions from a diesel engine with ARM2.

Section 3.3.6.3 of the AERMOD User's Guide states the default minimum ratio for ARM2 is 0.5. Bernalillo County cannot use a minimum ratio of 0.2 with ARM2 to model NO₂ from diesel engines. Bernalillo County needs to submit proper NO₂ modeling for the East Mountain Transfer Station.

Bernalillo County's online property parcel data shows that the East Mountain Transfer Station occupies two property parcels: 711 Hwy 333 and 715 Hwy 333. The diesel engines will operate on 715 Hwy 333. The application needs to be updated to include the 715 Hwy 333 parcel.

Building #4 needs to be expanded to match aerial imagery.

The modeled location of the left/west green waste processing area does not quite match the plot plan location of that area. Was the model created with the engine closer to the fence to establish setbacks? Which location is correct? The location of this processing area and thus the engines may need to be fixed in the modeling. The applicant should be aware that modeling may be used to establish setbacks from the fence as conditions in the permit.

Regards,



JEFF STONESIFER

senior environmental health scientist

o **505.767.5624**

m **505.250.2689**

e jstonesifer@cabq.gov

cabq.gov/environmentalhealth

Andrew N. Yuhas

From: Tumpane, Kyle <ktumpane@cabq.gov>
Sent: Friday, April 11, 2025 3:54 PM
To: Andrew N. Yuhas; aejaramillo@bernco.gov
Cc: McKinstry, Michael W.; Stonesifer, Jeff W.
Subject: RE: East Mountains Transfer Station ATC Modification - Modeling

Follow Up Flag: Follow up
Flag Status: Flagged

Mr. Yuhas,

The Air Quality Program (AQP) has reviewed your request to not have to update modeling related to items 8, 9 and 10 of the 1st Administrative Incompleteness Determination letter sent February 26, 2025. An initial set of responses are provided below. However, the AQP would like to complete a more thorough preliminary review of the submitted modeling. The goal of this additional preliminary review will be to provide final answers to items 8, 9 and 10 from the 1st Administrative Incompleteness Determination, as well as to identify any additional modeling questions or concerns. The AQP will review and consider the information related to ARM2 provided in your April 11, 2025 email as part of this review.

This additional preliminary review will hopefully prevent any additional delays in the review process that could come from any modeling issues identified after the 2nd submittal of application #2080-M1 is received. The AQP will provide a resubmittal deadline as part of the notification sent once the additional preliminary review is completed.

Items 8 and 9 are really only asking for minor updates to the modeling report and Modeling Data Excel file. For item 8, modeling protocols, including the one for this facility, do not typically discuss what results tables would be included in the modeling report and this should be a quick table to add to the modeling report.

For item 9, Parkhill was informed in a June 3, 2024 email that any submitted modeling would have to comply with the new level of the annual PM_{2.5} NAAQS and the associated change in the SIL. Therefore, these updated values should have been used in the modeling report and modeling Excel file. Again, these should be quick updates to the listed tables in the modeling report and Excel file.

For item 10, we understand that the AQP reviewed the air dispersion modeling protocol. However, as stated on our website, and in both the October 2019 and May 2024 AQP Modeling Guidelines, "The intent of the protocol is to minimize the odds of a model being rejected during the review. However, the Program's approval of a protocol does not guarantee that every potential problem has been identified or that the modeling will be accepted." Although it was not specifically mentioned in the AQP Modeling Guidelines until the May 2024 version, the AQP has required default in-stack ratios to be used with ARM2 for many years. The AQP believed any possible lower in-stack ratio would be used with Tier 3 methods if needed. Additionally, the justification for the lower in-stack ratio is simply a reference to a filtered EPA NO₂ ISR Database.xlsx file included with the modeling report. More information, like the range of values, average, type of equipment, etc. should be provided in the modeling report as justification. The filtered EPA NO₂ ISR Database includes RICE, boilers and turbines. Only RICE are useful for comparison for these engines, and one of the RICE had >0.2 ISR. Also, the tests are all from Alaska, which is close to or at sea level and engines operate differently at the elevation in Albuquerque, so we add a safety factor on top of any ISR ranges pulled from the EPA NO₂ ISR Database.

A final determination will be provided after the additional preliminary review regarding whether the NO₂ modeling will have to be completed using the default minimum ISR of 0.5 if ARM2 is used.

A quick look at the submitted modeling files raised some additional concerns.

The cumulative (NAAQS) models being run separately for EMTS sources and neighboring sources is not typical. According to the modeling report, this was necessary because of the different ISRs used for EMTS and neighboring sources. This is why different ISRs are typically used with Tier 3 NO₂ methods, for which AERMOD allows different ISRs for different sources in a single model.

Combining the highest modeled impacts from EMTS sources and neighboring sources even though they do not occur at the same receptor and may not occur at the same time, for 1-hour NO₂, is extremely conservative and not typical.

The cumulative (NAAQS) 1-hour NO₂ models have different numbers of receptors in the model with EMTS sources (427 receptors) versus the model with neighboring sources (401 receptors). Why is there a difference? The number of significant receptors should be the same for both models because they should be based on the SIL/ROI model results.

Thank you,



KYLE TUMPANE

senior environmental health scientist

o 505-768-2872

m 505-366-9985

e ktumpane@cabq.gov

cabq.gov/ehd

From: Andrew N. Yuhas <ayuhas@Parkhill.com>

Sent: Thursday, March 27, 2025 3:10 PM

To: Tumpane, Kyle <ktumpane@cabq.gov>

Subject: East Mountains Transfer Station ATC Modification - Modeling

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Mr. Tumpane,

Parkhill is in receipt of the AQP's notice of incompleteness and list of subject items pertinent to the application for Permit Modification for the East Mountains Transfer Station, and I wanted to address items 8, 9, and 10, which were all in reference to the modeling report submitted with the application.

The modeling for this application was done in compliance with a program-reviewed and approved dispersion modeling protocol. That protocol was developed, reviewed and approved prior to the publication of the Program's most recent May 2024 Modeling guidelines, but was fully in compliance at the time of review and approval (guidelines in place since October, 2019).

Parkhill is requesting AQP's consideration of the current Modeling Report. Although not all components are up to date with current guidelines, we feel the results can still be considered in compliance and that further modeling is not necessary. Please feel free to reach out for further discussion on these items with Parkhill and our modeler. We look forward to our continued work with AQP on this project.

Respectfully,

Andrew N. Yuhas, PG
Professional Geologist

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Andrew N. Yuhas

From: McKinstry, Michael W. <mmckinstry@cabq.gov>
Sent: Monday, March 3, 2025 7:24 AM
To: Andrew N. Yuhas; aejaramillo@bernco.gov
Subject: RE: Regulation Part 72

Categories: Filed by Newforma

Mr. Yuhas,

That is one of the criteria. The other criteria is in 20.11.72.8 D.,

“The department shall require BACT for new or modified stationary sources throughout Bernalillo County that emit any one, or combination of, the following fifteen hazardous air pollutants (HAPs): acetaldehyde, acrolein, benzene, 1,3-butadiene, carbon tetrachloride, ethyl benzene, ethylene oxide, formaldehyde, hydrochloric acid, methyl bromide, methylene chloride, naphthalene, toluene, vinyl chloride, and xylenes”. These HAPs are usually associated with the combustion of diesel powered engines.

Please feel free to contact me anytime with any questions.

Respectfully,



MICHAEL W. MCKINSTRY
environmental health manager
o 505.768.1923
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cabq.gov/ehd

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From: Andrew N. Yuhas <ayuhas@Parkhill.com>
Sent: Friday, February 28, 2025 2:45 PM

To: McKinstry, Michael W. <mmckinstry@cabq.gov>; aejaramillo@bernco.gov

Subject: RE: Regulation Part 72

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Thank you for the update on this Rule, Mr. McKinstry.

If a facility does not fall within the 1-mile radius of an Overburdened area as defined by 20.11.72 NMAC, is it acceptable for this requirement to be addressed in the Regulatory Applicability section of the Application for Permit Modification?

Andrew N. Yuhas, PG
Professional Geologist

Parkhill

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From: McKinstry, Michael W. <mmckinstry@cabq.gov>

Sent: Friday, February 28, 2025 8:34 AM

To: aejaramillo@bernco.gov

Cc: Andrew N. Yuhas <ayuhas@Parkhill.com>

Subject: Regulation Part 72

Mr. Jaramillo,

As explained in our phone conversation the application for the East Mountains Transfer Station's Modification for the grinder of green and woody waste that was submitted on January 27, 2025 is now applicable to the Health Environment Equity Impacts 20.11.72 NMAC (see attached). 20.11.72 NMAC went into effect on January 1, 2025. This will need to be included when the application is resubmitted. If you have any questions/concerns feel free to contact me at my information below.

Respectfully,



MICHAEL W. MCKINSTRY
environmental health manager

o 505.768.1923

m 505.228-3441

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cabq.gov/ehd

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