Timothy M. Keller, Mayor

Environmental Health Department
Air Quality Program
Interoffice Memorandum

To:	Permit File
From:	Regan Eyerman
Subject:	**Permit Application #3292-M1**
Date:	October 22, 2020
Permit Description:	300 ton/hr Portable Crushing and Screening Plant

Facility Name:	**C&C Services**	**UTM Coordinates, East:**	348845
Facility Address:	2901 2nd St SW 87105	**North:**	3879677
Facility ID:	FA0007055	**Record ID:**	PR0009870

Proposal

An application was received by the Department on December 12, 2019 from C&C Services Commercial Construction LLC (C&C Services) for their facility located at 2901 2nd St SW, Albuquerque, NM 87105. C&C Services has purchased the plot of land to the south of their current site and is proposing to expand operations onto this new land. The facility consists of one (1) 300 ton per hour portable concrete, asphalt, and gravel crushing and screening unit powered by one (1) 350 hp diesel-fired generator set. The permit modification application proposes the following:

- Update the operating hours for the site from between 7 am and 4 pm, 9 hours per day, 6 days a week (Monday through Saturday) and 52 weeks per year to between 7 am and 7 pm, 12 hours per day, six days per week Monday through Saturday), and 52 weeks per year;
- Increase the permitted operating hours for the facility from 2,808 hours per year to 3,744 hours per year;
- Increase the permitting operating hour for the generator engine (Unit #14) from 2,808 hours per year to 3,744 hours per year;
- Update Process Equipment Units descriptions in Table 1 - Process Equipment Table to reflect the equipment that is onsite and differentiate between multiple pieces of equipment that are similar;
- Update the emissions from all emission units in Table 2a - Unit Emissions Limit Table using industry-specific and unit-specific emission factors, and according to the federal New Source Performance Standards (NSPS);
- Relocate the drop points and storage piles at the facility (Units #7 through 22).
- Move the north side concrete storage pile to the side of the property; and,
- Move the crusher/engine and screen from the north side of the property to the new land south of their current location Move the crusher/engine and screen from the north side of the property to the new land south of their current location.

Please see Appendix A for the Process Flow.

Permitting History

Permit Number	Issuance Date	Permit Type	Brief Description
3292	02/24/2017	Initial Permit	300 ton/hr Portable Crushing and Screening Plant

Regulatory Applicability

The following regulations apply to this facility.

New Mexico Administrative Code (NMAC) Regulations

Citation	Regulation
20.11.2	**Permit Fees**
20.11.2.18.C	Ton-per-year application review fees for stationary sources that require permits pursuant to 20.11.41 NMAC or other board regulation, and whose applicability is based on the source's pound per hour or ton per year emissions:
(1)	proposed sources with a proposed allowable emission rate equal to or greater than one ton per year and less than five tons per year: $859.00
	The fees above have been adjusted for the Consumer Price Index on January 1, 2019.
20.11.2.18.D	Federal program review fees due in addition to the stationary source permit application review fees:
	A person with a stationary source that is required by 20.11.41 to apply for a permit and pay a review fee pursuant to Subsection B or Subsection C of 20.11.2.18 NMAC shall also pay the federal program review fee for each applicable federal program standard or review listed in Paragraphs (1) through (5) of Subsection D of 20.11.2.18 NMAC:
(1)	for review of each 40 CFR 60 standard: $1,146.00
(3)	for review of each 40 CFR 63 promulgated standard: $1,146.00
	The fees above have been adjusted for the Consumer Price Index on January 1, 2019.
20.11.2.21	**Annual Emissions Fees and Rate for Stationary Sources**
B.	Permitted source: Sources issued a permit pursuant to 20.11.41 NMAC, 20.11.42 NMAC, 20.11.60 NMAC, 20.11.61 NMAC or other board regulation, shall pay a minimum annual emission fee of $216.00 or $51.00 per ton, whichever is greater. The annual emission fee shall be calculated as required by Subsection C of 20.11.2.13 NMAC
F.	Beginning January 1, 2011, and every January 1 thereafter, an increase based on the consumer price index shall be added to the annual emission fee and rates required by 20.11.2.21 NMAC. The annual emission fees and rates pursuant to 20.11.2.21 NMAC shall be adjusted by an amount equal to the increase in the consumer price index for the immediately preceding year.
	The Annual Emission Fees were adjusted for the Consumer Price Index on January 1, 2020.

Emission Unit #	CO* TPY	NOx* TPY	SO2* TPY	VOC* TPY	PM10* TPY	HAPs* TPY
Totals	4	0	1	0	3	--
	Total = 8 tpy					
	**Note: The total emissions on this table are for billable use only. These are NOT the allowable annual emissions for the facility.*					

Citation	Regulation
20.11.5	**Visible Air Contaminants**
20.11.5.12	**General Stationary Sources**
	No person owning or operating any stationary source, not otherwise addressed in this Part, shall cause or allow visible air contaminant emissions that exceed an opacity of 20 percent, 6 minute time-averaged.
20.11.5.13.C	**Diesel-Powered Engine:** No person shall cause or allow visible emissions from any stationary diesel-powered engine to exceed 20 percent opacity, 6 minute time-averaged. During the first 20 minutes of cold startup the visible emissions shall not exceed 40 percent opacity, 6 minute time-averaged. Additionally, no increase of load shall be applied so as to cause an emission having an opacity greater than 40 percent during any time interval.
20.11.8	**Ambient Air Quality Standards**
20.11.8.6	To adopt local ambient air quality standards that are identical to the federal National Primary and Secondary Ambient Air Quality Standards codified at 40 CFR Part 50, and to adopt applicable state Ambient Air Quality Standards codified at 20.2.3 NMAC
20.11.20	**Fugitive Dust Control**
20.11.20.12	**General Provisions**
A	Each person shall use reasonably available control measures or any other effective control measure during active operations or on inactive disturbed surface areas, as necessary to prevent the release of fugitive dust, whether or not the person is required by 20.11.20 NMAC to obtain a fugitive dust control permit. It shall be a violation of 20.11.20 NMAC to allow fugitive dust, track out, or transported material from any active operation, open storage pile, stockpile, paved or unpaved roadway disturbed surface area, or inactive disturbed surface area to cross or be carried beyond the property line, right-of-way, easement or any other area under control of the person generating or allowing the fugitive dust if the fugitive dust may:
(1)	with reasonable probability injure human health or animal or plant life;
(2)	unreasonably interfere with the public welfare, visibility or the reasonable use of property; or
(3)	be visible for a total of 15 minutes or more during any consecutive one hour observation period using the visible fugitive dust detection method in 20.11.20.26 NMAC or an equivalent method approved in writing by the department.
E	Stockpiles shall be no higher than 15 feet above the existing natural or man-made grade that abuts the stockpile, unless otherwise approved in advance and in writing by the department

Citation	Regulation
20.11.40	**Source Registration**
20.11.40.2	This Part is applicable to any stationary source located in Bernalillo County.
20.11.40.6	By January 1, 1974, any person owning or operating any commercial or industrial stationary source, which emits more than two thousand pounds of any air contaminant per year or any amount of a hazardous air pollutant, must obtain a Registration Certificate for the source from the Director. Any person owning or operating any commercial or industrial stationary source constructed after September 1, 1973, and meeting the emission requirements of this section, must obtain a Registration Certificate for the source from the Director within one hundred and eighty days after the initial startup date of the source.
20.11.41	**Construction Permits**
20.11.41.2.B	Emission thresholds that require a construction permit before commencing construction, modification or operation of a stationary source subject to 20.11.41 NMAC:
(2)	If a person proposes a modification of a stationary source and the modification will emit one or more regulated air contaminants for which a federal, state or board ambient air quality standard exists, and if, as a result of the modification, all activities at the source will emit, when calculated at the contaminant's potential emission rate, 10 pounds per hour or more or 25 tons per year or more of a regulated air contaminant, then the person shall apply for and obtain a construction permit or permit modification as required by 20.11.41 NMAC before the person commences construction or operation.
20.11.41.2.C	Source classifications; source types:
(1)	Any equipment or process that is subject or becomes subject to 20.11.63 NMAC, New Source Performance Standards for Stationary Sources, or 20.11.64 NMAC, Emission Standards for Hazardous Air Pollutants for Stationary Sources
20.11.41.29	**Permit Modification**
	A person who proposes to modify a stationary source shall comply with all requirements of 20.11.41 NMAC. Applications for permit modifications shall be processed in accordance with all requirements established by 20.11.41 NMAC for permit applications, including public notice, review, fees and hearing procedures.
20.11.49	**Excess Emissions**
20.11.49.13.A	Applicable to any source:
(1)	whose operation results in an emission of a regulated air pollutant, including a fugitive emission, in excess of the quantity, rate, opacity or concentration specified by an air quality regulation or permit condition; or
(2)	subject to the requirements of 20.11.47 NMAC, Emissions Inventory Requirements, 20.11.41 NMAC, Construction Permits, 20.11.42 NMAC, Operating Permits, 20.11.61 NMAC, Prevention of Significant Deterioration, or 20.11.60 NMAC, Permitting In Nonattainment Areas.
20.11.49.15.A	The owner or operator of a source having an excess emission shall report the following information to the department on forms provided by the department. The department may authorize the submittal of such reports in electronic format. The department may require that the owner or operator of a source provide further information in addition

Citation	Regulation
	to that already required by 20.11.49.15 NMAC by a deadline specified by the department.
(1)	**Initial excess emission repor**t: The owner or operator shall file an initial report, no later than the end of the next regular business day after the time of discovery of an excess emission. The initial report shall include all available information regarding each item required by Subsection B of 20.11.49.15 NMAC.
(2)	**Final excess emission report:** No later than 10 days after the end of the excess emission, the owner or operator shall file a final report that contains specific and detailed information for each item required by Subsection B of 20.11.49.15 NMAC.
20.11.49.15.D	**Alternative reporting.** If an owner or operator of a source is subject to both the excess emission reporting requirements of 20.11.49.15 NMAC and the reporting requirements of 40 CFR Parts 60, 61, and 63, and the federal reporting requirements duplicate the requirements of 20.11.49.15 NMAC, then the federal reporting requirements shall suffice.
	New Source Performance Standards
20.11.63	**Incorporation of federal standards Codified at 40 CFR Part 60**
20.11.63.11	Federal Standards at 40 CFR Part 60, Subparts OOO and IIII
	Emission Standards For Hazardous Air Pollutants For Stationary Sources
20.11.64	**Incorporation of Federal Standards Codified at 40 CFR Part 63:**
20.11.64.12	Federal Standard at 40 CFR Part 63, Subpart ZZZZ
20.11.66	**Process Equipment**
	NOTE: While 20.11.66 NMAC is applicable to the C & C Services facility the pound per hour (lb/hr) particulate emissions requested in the application are lower than the lb/hr particulate emissions required in 20.11.66 NMAC. Therefore the permit was drafted with permit conditions for the requested lb/hr particulate emissions since the requested lb/hr particulate emissions are more stringent (lower) and more protective than the lb/hr particulate emissions required in 20.11.66 NMAC.
20.11.90	**Source Surveillance; Administration, Enforcement, Inspection**
20.11.90.2	20.11.90 is applicable to any source within the Bernalillo County.
20.11.90.13.A	The owner or operator of any stationary source of an air contaminant shall, upon notification by the director, maintain records of the nature and amounts of emissions, to which an air quality control emission regulation applies, from the source and any other information as may be deemed necessary by the director to determine whether the source is in compliance with applicable regulations.
20.11.90.13.E	The director shall establish a periodic visual surveillance system to detect and investigate apparent violations of visible emission limitations and such complaints relating to apparent violations of the regulations as may occur.
20.11.90.14.A	Upon request of the director, the person responsible for the emission of air contaminants for which limits are established by the rules codified under Title 20, Environmental Protection, Chapter 11, Albuquerque - Bernalillo County Air Quality Control Board, of the New Mexico Administrative Code, shall provide such facilities, utilities, and openings exclusive of instrument and sensing devices, as may be necessary for the proper determination of the nature, extent, quantity and degree of such air contaminants. Such facilities may be either temporary or permanent at the

Citation	Regulation
	discretion of the person responsible for their provisions; and shall be suitable for determination consistent with emission limits established in these rules.

Federal Applicability

Citation	Regulation	Does it apply to the Facility and/ or Equipment? Y/N (List units)
40 CFR 60 Subpart OOO	*Standards of Performance for Nonmetallic Mineral Processing Plants*	Process Equipment Unit #4, 5 and 6
40 CFR 60 Subpart IIII	*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*	Process Equipment Unit #14
40 CFR 63 ZZZZ	*National Emission Standards for Hazardous Air Pollutants for Source Category: Stationary Reciprocating Internal Combustion Engines*	Process Equipment Unit #14

Actions Taken

4/30/2019	Application received by the Program
5/28/2019	Application deemed incomplete by the Program
12/12/2019	Updated application received by the Program
2/03/2020	Application deemed complete by the Program
2/11/2020	Public notice on the permit application published on the Program website marking the beginning of public comment period on the application
3/03/2020	Modeling Review completed by the Program
3/09/2020	Request for PIH received from Mr. Stephen Abeyta
3/12/2020	Typo in original public notice so notice on the permit application re-published on the Program website marking the beginning of the second public comment period on the application
4/22/2020	Updated emissions calculations received by the Program
5/11/2020	Updated Modeling Review completed by the Program
10/16/2020	Public notice on the PIH published on the Program website and in the Albuquerque Journal

Specific Conditions for this Facility

FACILITY WIDE SPECIFIC CONDITIONS

This facility is prohibited from processing any asbestos containing material
The equipment is considered a portable stationary source as defined by 20.11.41.7.GG NMAC and may be relocated to another site provided the requirements in Permit No. 3292-M1 are met prior to the relocation.
Units #1 through 3, #7 through 12 and #15 through 22 shall not cause or allow fugitive emissions that exceed 20 percent opacity six (6) minute time-average. This condition is pursuant to 20.11.5.12 NMAC.
A fence or some other barrier restricts access to the property
Working piles must remain at least 20 feet from the eastern and western fences
The crusher, screen and engine must remain at least 60 feet away from the eastern and western fences and 175 feet away from the southern fence
Haul truck traffic is limited to 53 trucks per day
Hours of Operation
• The facility shall not exceed 3,744 hours of operation per year based on a 12-month rolling period • The facility shall operate only between 7:00 AM and 7:00 PM, 12 hours per day, Monday to Saturday, and 52 weeks per year. The facility shall not be operated on Sunday
Operating Scenarios
None
Throughput
• 300 tons per hour • 1,123,200 tons per year based on a 12-month rolling total
Recordkeeping Conditions
Maintain records of the daily, monthly, and annual throughput (in tons) for the facility. Monthly throughput records shall be maintained to calculate yearly throughputs based on a 12-month rolling period.
Maintain a daily record of the number of hours of operation for the facility. These records shall include the start and stop times for each day of plant operation. Hours of operation records shall be maintained in order to calculate daily, monthly, and annual hours of operation.
Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility pursuant to 40 CFR 60 Subpart A §60.7(a)(7)(b).
Maintain records the material being processed does not contain asbestos.
Monitoring Conditions
Monitor the daily, monthly, and annual throughput (in tons) for the facility.
Monitor the number of hours of operation for the facility.
Reporting Conditions
An annual (January 1 through December 31 of the previous year) emissions inventory for the source togeth descriptions of any reconfiguration of process technology and air pollution equipment by March 15 every ye emissions inventory shall include annual hours of operation and the annual material throughput in tons
Any relocation of the aggregate plant at least 45 days prior to the date the permittee proposes to commence ope at a new location within Bernalillo County
Any permit update or correction as required by 20.11.41 NMAC no more than 60 days after the permittee or should have known about the condition that requires updating or correction of the permit (20.11.41.2 NMAC)

EQUIPMENT SPECIFIC CONDITIONS

Raw Material Storage Piles	Water shall be added to the raw material storage piles prior to loading into main feed hopper. Watering of raw material storage piles shall be done as necessary, but not less frequently than once daily unless precipitation has occurred in the last 24 hours.
Raw Material Storage Piles	Shall not cause or allow fugitive emissions that exceed 20 percent opacity six (6) minute time-average. This condition is pursuant to 20.11.5.12 NMAC.
Screen and Conveyor	Shall not cause or allow fugitive emissions that exceed 7 percent opacity as specified in 40 CFR 60 Subpart OOO §60.672(b)
Crusher	Shall not cause or allow fugitive emissions that exceed 12 percent opacity as specified in 40 CFR 60 Subpart OOO §60.672(b).
Screen, Conveyor and Crusher	Shall be operated with an atomized water spray bar at all times while the facility is in operation.
Haul Road	The owner or operator of the facility shall maintain gravel and millings and shall apply water as necessary to all haul road sections.
Generator (Powering Crusher)	The owner or operator of the facility must purchase and install an NSPS 40 CFR 60 Subpart IIII engine to meet model year 2011 or newer emission standards.
Generator (Powering Crusher)	Subject to NSPS 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and Subpart A - General Provisions. The unit commenced construction after July 11, 2005 and was be manufactured after April 1, 2006. Accordingly, the unit shall comply with all applicable requirements of 40 CFR 60 Subparts A and IIII.
Generator (Powering Crusher)	National Emissions Standard for Hazardous Air Pollutants (NESHAP) found in 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Source Category: Stationary Reciprocating Internal Combustion Engines apply. This facility shall comply with the specific requirements found in this subpart as well as the general requirements of 40 CFR 63 Subpart A - General Provisions. The permittee shall comply with the specific requirements of Subpart ZZZZ applicable to new engines.
Generator (Powering Crusher)	Shall be restricted to a maximum of 3,744 hours of operation (based on a 12-month rolling total).
Generator (Powering Crusher)	The Permittee shall operate and maintain to achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine [40 CFR 60.4203].
Generator (Powering Crusher)	The Permittee shall meet the diesel fuel requirements as required by 40 CFR 60 Subpart IIII §60.4207(b) for engines subject to 40 CFR Part 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel: [§60.4207(b) and §80.510(b)] (a) Has a maximum sulfur content of 15 ppm [40 CFR 80.510(b)] and (b) Has a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent;

	[40 CFR 80.510(b)].
Generator (Powering Crusher)	The Permittee shall do all the following, except as permitted under 40 CFR 60.4211(g) [60.4211(a)]: (a) Operate and maintain the unit and the unit's control device according to the manufacturer's written emission-related instructions or procedures developed by the Permittee that are approved by the engine manufacturer; [60.4211(a)(1)]; (b) Change only those emission-related settings that are permitted by the manufacturer [60.4211(a)(2)]; and (c) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable; [60.4211(a)(3)].
Generator (Powering Crusher)	For 2007 model year and later, the Permittee must comply with the emission standards specified in 40 CFR 60.4204(b), the Permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), for the same model year and engine power. It shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g) [§60.4211(c)].
Generator (Powering Crusher)	If modified or reconstructed the Permittee shall comply with the emission standards of 40 CFR 60.4204(e) and the Permittee shall demonstrate compliance according to one of the following methods [60.4211(e)]: (a) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in 40 CFR 60.4204(e) [60.4211(e)]; or (b) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in 40 CFR 60.4212. The test shall be conducted within 60 days after the engine commences operation after the modification or reconstruction [§60.4211(e)].
Generator (Powering Crusher)	If the Permittee does not install, configure, operate, and maintain the control device according to the manufacturer's emission-related written instructions, or if the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance per the requirements of 40 CFR 60.4211(g) [§60.4211(g)].
Generator (Powering Crusher)	Shall comply with the emission standards for new compression-ignition engine in 40 CFR 60 Subpart III §60.4201, for 2007 model year and later stationary compression-ignition (CI) internal combustion engine (ICE). In accordance with 40 CFR 60 Subpart IIII §60.4204(b), owners and operators of 2007 model year and later non-emergency stationary compression ignition internal combustion engines (CI ICE) with a displacement of less than 30 liters per cylinder must shall comply with the emission standards for new compression ignition (CI) engines in §60.4201, for their 2007 model year and later stationary CI ICE, as applicable [§60.4204(b)].
Generator (Powering Crusher)	Shall comply with the emission standards for new compression-ignition engine in 40 CFR Part 60 Subpart III §60.4201(a), In accordance to the §60.4201 introduction: What emission standards must I meet for non-emergency engines if I am a stationary compression ignition (CI) internal combustion engine manufacturer? and in accordance to §60.4201(a): Stationary compression ignition internal combustion engines (CI ICE) manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power [§60.4201(a)].
Generator (Powering Crusher)	Shall comply with the emission standards for new compression-ignition engine in 40 CFR Part 1039 – Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines, Subpart B - Emission Standards and Related Requirements, §1039.101(b) Table 1, In accordance to §60.4201(a), since engine output power is greater than or equal to

	130 kW (~174 hp) and less than 560 kW (~751 hp), and has model year 2015 which is after the 2014 model year the engine must be certified to meet the emission standards for new and in-use non-road compression-ignition engines after the 2014 model year [§1039.101(b) Table 1].

Emission Standards Table

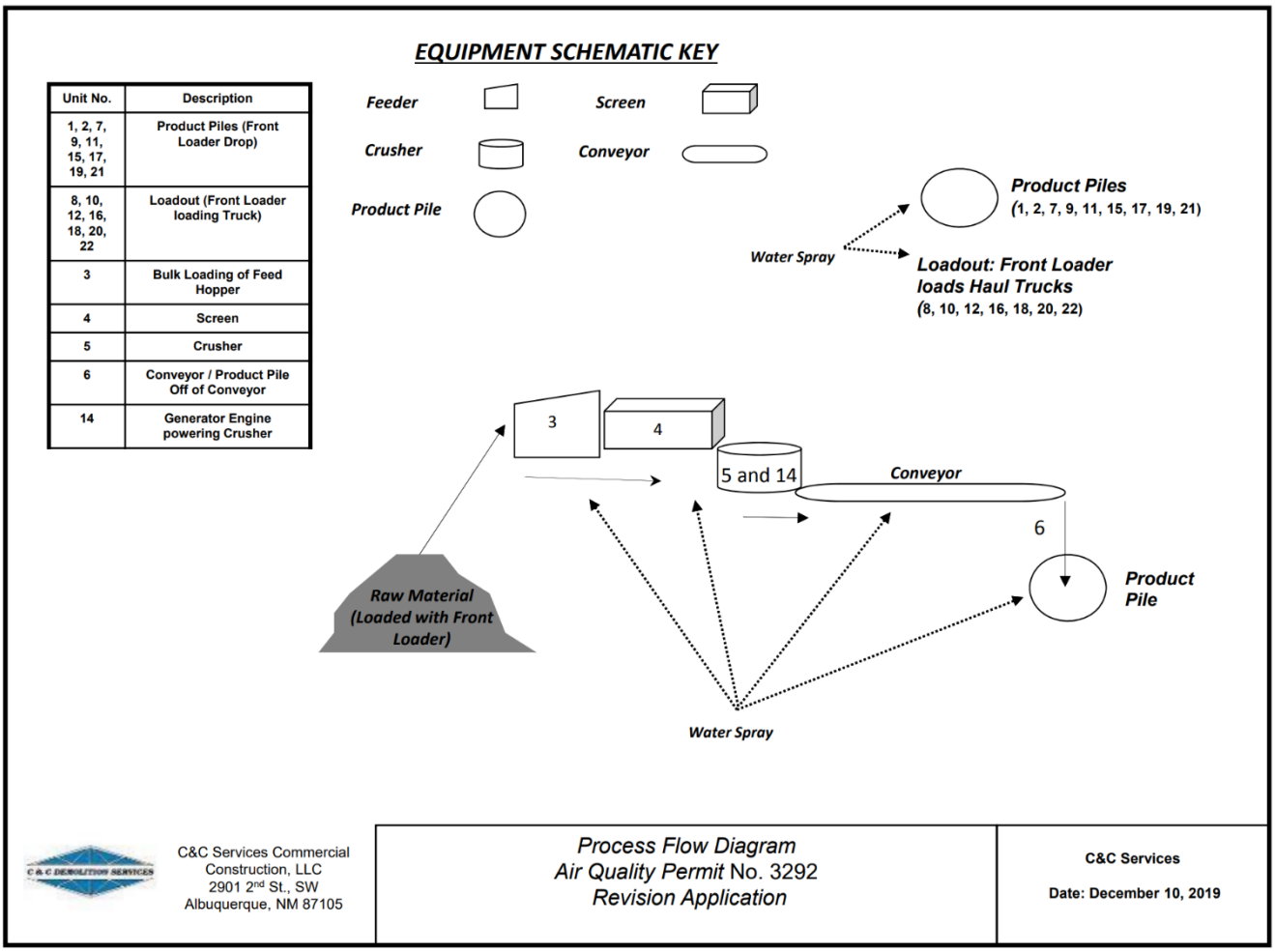
Emission Standards	
	Emission Limits applicable to §1039.101(b) Table 1 Tier 4 Exhaust Emission Standards After the 2014 Model Year (All application row) for Maximum engine power of more than or equal to 130 kW and less than or equal to 560 kW (130≤kW≤560) in g/kW-hr
Pollutant	g/kW-hr
PM	0.02
NO_X	0.40
NMHC	0.19
CO	3.5

	Recordkeeping Conditions
Raw Material Storage Piles	Maintain records of the daily application of water to raw material storage piles. If application of water is not required, the daily record shall indicate why application was not necessary (i.e. recent rain, snowfall, etc.).
Haul Road	Maintain records of the application of gravel, millings, and water
Water Spray System	Maintain a monthly record of water spray system inspections, including the date of each inspection and any corrective actions taken. Each inspection shall be recorded in a logbook in written or electronic format pursuant to §60.676(b)(1).
Generator (Powering Crusher)	Maintain a monthly log of the number of hours of operation based on a 12-month rolling period.
	Monitoring Conditions:
Raw Material Storage Piles	Monitor the daily application of water to raw material storage piles.
Haul Road	Monitor the application of gravel, millings, and water
Water Spray System	Monitor the water spray system once per day Units #4, 5, or 6 are operated to ensure the water spray system is functioning properly and in operation while the facility is operating. Pursuant to 40 CFR 60 Subpart OOO §60.674(b), the owner or operator of any affected facility that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles [§60.674(b)]
Generator (Powering Crusher)	Install a non-resettable hour meter prior to startup and monitor hours of operation based on a 12-month rolling period.

Generator (Powering Crusher)	If equipped with a diesel particulate filter to comply with the emissions standards listed above, the diesel particulate filter must be installed with a backpressure monitor that notifies the Permittee when the high backpressure limit of the engine is approached [§60.4209(b)].
	Reporting Conditions:
Screen, Conveyor and Crusher	Notification of the anticipated date for conducting the opacity obser required by 40 CFR 60 Subpart OOO §60.675(a)(2).
Generator (Powering Crusher)	In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee shall notify the Program, in WRITING, of the following: (a) The date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) is commenced, postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form[40 CFR 60.7(a)(1)]; and (b) A notification of the actual date of initial startup postmarked within 15 days after such date [40 CFR 60.7(a)(3)]
	Compliance Tests
Screen, Conveyor and Crusher	Written reports of the results of all performance tests conducted to demonstrate compliance with the opacity observations made using EPA Method 9 to demonstrate compliance with 40 CFR 60 Subpart OOO §60.672(b) and performance tests conducted to demonstrate compliance with the opacity results shall be received by the Program within 30 days of completion of the compliance test.

APPENDIX A

PROCESS FLOW DIAGRAM



CALCULATIONS

TABLE A

AP-42 (11/06) Section 13.2.4 Aggregate Handling and Storage Piles

Aggregate Handling and Storage Pile Emissions - Controlled													
Unit #	k = particle size multiplier[1]		U = mean wind speed (mph)[2]	M = material moisture content (%)[3]	Emission Factor (lb/ton)[4]		Hours*	Process Rate (tph)	Control Efficiency	PM10 Emissions		PM2.5 Emissions	
	PM10	PM2.5			PM10	PM2.5				lb/hr	tpy	lb/hr	tpy
1	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
2	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
3	0.35	0.053	8.5	2	0.002	0.0003	3744	300	90	0.07	0.13	0.010	0.019
7	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
8	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
9	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
10	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
11	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
12	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
15	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
16	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
17	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
18	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
19	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
20	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
21	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009
22	0.35	0.053	8.5	2	0.002	0.0003	3744	150	90	0.03	0.06	0.005	0.009

[1] k = particle size multiplier from AP-42 Section 13.2.4

[2] U = mean wind speed = 8.5 mph from NOAA data fro Albuquerque through 2011 provided by AQD/SBAP

[3] M = material moisture content = 2% for stone quarrying and processing from AP-42 Table 13.2.4-1

[4] E = k (0.0032) [U/5]^1.3 / [M/2]^1.4 from AP-42 Section 13.2.4

[5] 95% control efficiency based on daily watering of stockpiles to maintain a high moisture content of materials

*3744 reflects 12 hrs/day, 6 days/wk, 52 wk/yr

Example Calculation for Unit #1 Controlled PM10 Emissions:
Emission factor (lb/ton) = k (0.0032) [U/5]^1.3 / [M/2]^1.4
E = (0.35*0.0032)*(((8.5/5)^1.3)/((2/2)^1.4)) = 0.002 lb/ton
(0.002 lb/ton) * (150 ton/hr) (1-0.9) = 0.03 lb/hr
(0.03 lb/hr) * (3744 hr/yr) / (2000 lb/ton) = 0.06 ton/yr

TABLE B

AP-42 (11/06) Table 11.19.2.2 Emission Factors for Crushed Stone Processing Operations

Screening, Crushing, and Conveyor Emissions - Controlled								
Unit	Emission Factor, lb/ton		Hours*	Process Rate (tph)	PM10 Emissions		PM2.5 Emissions	
	PM10	PM2.5			lb/hr	tpy	lb/hr	tpy
4 [1]	0.00074	0.00005	3744	300	0.22	0.42	0.015	0.028
5 [2]	0.00054	0.0001	3744	300	0.162	0.303	0.030	0.056
6 [3]	0.000046	0.000013	3744	300	0.014	0.026	0.0039	0.0073

[1] Emission factors for PM10 and PM2.5 obtained from AP-42 Table 11.19.2-2 for Screening

[2] Emission factors for PM10 and PM2.5 obtained from AP-42 Table 11.19.2-2 for Tertiary Crushing

[3] Emission factors for PM10 and PM2.5 obtained from AP-42 Table 11.19.2-2 for Conveyor Transfer Point

*3744 reflects 12 hrs/day, 6 days/wk, 52 wk/yr

Example Calculation for Unit #4 Controlled PM10 Emissions:
Emission factor (lb/ton) = 0.0087 lb/ton
(0.0087 lb/ton) * (300 ton/hr) = 2.61 lb/hr (1-0.95) = 0.13 lb/hr
(0.13 lb/hr) * (3744 hr/yr) / (2000 lb/ton) = 0.24 ton/yr

TABLE C

AP-42 (11/06) Section 13.2.2 Unpaved Roads

Unit #13

Daily roadtrips	53	Annual Roadtrips[1]	19345	Control efficiency	80%
Roundtrip, miles	0.5	Hours/day	12	Hours	3744

k	PM10	PM2.5
	1.5	0.15
a	0.9	0.9
b	0.45	0.45
W	27	27
s	4.8	4.8
p	70	70

[1] Annual roadtrips calculated from 365 days/yr so is conservative

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VMT per hour: 2.58 — **VMT per year: 9672.50**

Controlled Emissions

E (PM10), lb/VMT hourly: **1.77** — E (PM10), lb/VMT annual: **1.43**

E (PM10), lb/hr: **0.91** — E (PM10), ton/yr: **1.38**

E (PM25), lb/VMT hourly: **0.18** — E (PM25), lb/VMT annual: **0.14**

E (PM25), lb/hr: **0.09** — E (PM25), ton/yr: **0.14**

Sample calculation

VMT

VMT per hour = (53 roundtrips/day)(2600 ft/trip)(mile/5280 ft)(day/12 hours)

VMT per hour = **2.58**

VMT per year = (2.17 miles/hr)(3744 hours/yr)

VMT per year = **9672.50**

Hourly

Emission Factor (lb/VMT) = $k(s/12)^a(W/3)^b$

PM10

PM10 (lb/VMT) = $(1.5)(4.8/12)^{0.9}/(27/3)^{0.45}$

PM10 (lb/VMT) = 1.77

PM10 (lb/hr) = (2.17 VMT/hr) [1.77 lb/VMT)(1-0.80)

PM10 (lb/hr) = 0.91

Annual

Emission Factor (lb/VMT) = $k(s/12)^a(W/3)^b$ [(365-p)/365]

PM10

PM10 (lb/VMT) = $(1.5)(4.8/12)^{0.9}/(27/3)^{0.45}$[(365-70)/365]

PM10 (lb/VMT) = 1.43

PM10 (ton/yr) = (8142.73 VMT/yr) [1.43 lb/VMT)(1 ton/2000 lbs)(1-0.80)

PM10 (ton/yr) = 1.38

TABLE D

Emission Limits applicable to §1039.101(b), Table 1: (After the 2014 model year for rated engine power of more than or equal to 130 kW and less than 560 kW in g/kW-hr

Non-Emergency Engine Emissions - Controlled																				
Unit	Size/Process (hp)	Emission Factor Source	Emission Factor (g/hp*hr)						Hours*	NOx Emissions		CO Emissions		NMHC Emissions		SOx Emissions		PM10 Emissions		PM2.5 Emissions	
			NOx	CO	NMHC	SOx	PM10	PM2.5		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
14	350	Tier 4	0.3	2.6	0.14	0.93	0.01	0.01	3744	0.23	0.43	2.01	3.76	0.11	0.20	0.72	1.343	0.008	0.014	0.008	0.014

*3744 reflects 12 hrs/day, 6 days/wk, 52 wk/yr

Example Calculation for Unit #14 Controlled PM10 Emissions:
Emission factor (g/hp*hr) = 0.01 g/hp*hr
(0.01 g/hp*hr) * (350 hp) / (453.592 g/lb) = 0.008 lb/hr
(0.008 lb/hr) * (3744 hr/yr) / (2000 lb/ton) = 0.014 ton/yr

TABLE E

Controlled Emission Totals												
Process Equipment Unit	NOx Emissions		CO Emissions		VOC Emissions		SOx Emissions		PM10 Emissions		PM2.5 Emissions	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
1	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
2	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
3	--	--	--	--	--	--	--	--	0.07	0.13	0.010	0.019
4	--	--	--	--	--	--	--	--	0.22	0.42	0.02	0.03
5	--	--	--	--	--	--	--	--	0.16	0.30	0.03	0.06
6	--	--	--	--	--	--	--	--	0.01	0.03	0.004	0.01
7	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
8	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
9	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
10	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
11	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
12	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
13	--	--	--	--	--	--	--	--	0.91	1.38	0.09	0.14
14	0.231	0.433	2.006	3.756	0.108	0.202	0.718	1.343	0.01	0.01	0.01	0.01
15	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
16	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
17	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
18	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
19	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
22	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
21	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
22	--	--	--	--	--	--	--	--	0.03	0.06	0.005	0.009
Totals	**0.23**	**0.43**	**2.01**	**3.76**	**0.11**	**0.20**	**0.72**	**1.34**	**1.92**	**3.27**	**0.24**	**0.42**

Details and calculation examples from each type of source included in proceeding pages