



TECHNICAL SUPPORT DOCUMENT

**Air Discharge Permit 23-3575
Air Discharge Permit Application CL-3225**

Issued: April 5, 2023

TFT Construction, Inc.

SWCAA ID – 2376

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Southwest Clean Air Agency

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ABBREVIATIONS

List of Acronyms

ADP	Air Discharge Permit	NSPS	New Source Performance Standard
AP-42	Compilation of Emission Factors, AP-42, 5th Edition, Volume 1, Stationary Point and Area Sources – published by EPA	PSD	Prevention of Significant Deterioration
ASIL.....	Acceptable Source Impact Level	RACT.....	Reasonably Available Control Technology
BACT.....	Best available control technology	RCW	Revised Code of Washington
BART	Best Available Retrofit Technology	SDS	Safety Data Sheet
CAM	Compliance Assurance Monitoring	SQER	Small Quantity Emission Rate listed in WAC 173-460
CFR.....	Code of Federal Regulations	Standard	Standard conditions at a temperature of 68°F (20°C) and a pressure of 29.92 in Hg (760 mm Hg)
EPA	U.S. Environmental Protection Agency	SWCAA	Southwest Clean Air Agency
GWP.....	Global Warming Potential	T-BACT	Best Available Control Technology for toxic air pollutants
LAER.....	Lowest achievable emission rate	WAC	Washington Administrative Code
MACT	Maximum Achievable Control Technologies		
NESHAP	National Emission Standards for Hazardous Air Pollutants		

List of Units and Measures

$\mu\text{g}/\text{m}^3$	Micrograms per cubic meter	lb/yr.....	Pounds per year
μm	Micrometer (10^{-6} meter)	lb/MMBtu	Pounds per million British thermal units
cfm	Cubic foot per minute	lbs	Pounds
g/kW-hr	Grams per kilowatt hour	MMBtu	Million British thermal unit
gpm	Gallon per minute	ppm	Parts per million
kg/MMBtu ...	Kilograms per million British thermal units	tpy	Tons per year
lb/hr	Pounds per hour		

List of Chemical Symbols, Formulas, and Pollutants

CO.....	Carbon monoxide	PM ₁₀	PM with an aerodynamic diameter 10 µm or less
CO ₂	Carbon dioxide	PM _{2.5}	PM with an aerodynamic diameter 2.5 µm or less
CO _{2e}	Carbon dioxide equivalent	SO ₂	Sulfur dioxide
HAP.....	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act	SO _x	Sulfur oxides
NO ₂	Nitrogen dioxide	TAP.....	Toxic air pollutant pursuant to Chapter 173-460 WAC
NO _x	Nitrogen oxides	TSP.....	Total Suspended Particulate
O ₂	Oxygen	VOC.....	Volatile organic compound
PM.....	Particulate Matter with an aerodynamic diameter 100 µm or less		

Terms not otherwise defined have the meaning assigned to them in the referenced regulations or the dictionary definition, as appropriate.

1. FACILITY IDENTIFICATION

Applicant Name: TFT Construction, Inc.
Applicant Address: 53990 West Lane Road, Scappoose, OR 97056

Facility Name: TFT Construction, Inc.
Facility Address: Portable

SWCAA Identification: 2376

Contact Person: Jason Fender

Primary Process: Aggregate Crushing (including asphalt and concrete)
SIC/NAICS Code: 1429: Quarrying of non-metallic minerals
212319: Other crushed and broken stone mining and quarrying

Facility Classification: Natural Minor

2. FACILITY DESCRIPTION

TFT Construction, Inc. (TFT Construction) operates a portable rock crushing/screening plant based in Scappoose, Oregon. The crushing plant includes a single track-mounted unit consisting of an impact crusher, vibratory screen, and conveyors. The crushing and screening unit is powered by a diesel engine.

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit / Nonroad Engine Permit application number CL-3225 (ADP/NEP application CL-3225) received February 7, 2023. TFT Construction submitted ADP application CL-3225 requesting the following:

- Approval to operate a replacement portable track-mounted KPI-JCI Astec Companies Model FT425OCC horizontal shaft impactor crusher with attached Caterpillar engine at multiple locations.
- There will be no increase in throughput.

ADP/NEP 23-3575 will supersede ADP 11-2969 in its entirety.

4. PROCESS DESCRIPTION

Rock, construction debris, recycled asphalt, or concrete will be fed to the crushing unit via front end loader or backhoe. Material will be crushed and stacked by the crushing unit and associated conveyors. High pressure water spray will be used to control fugitive dust at the infeed of the

crusher. Wet suppression will be utilized as necessary to control fugitive dust at conveyor transfer points and other sources of fugitive dust.

5. EQUIPMENT/ACTIVITY IDENTIFICATION

New Equipment

- 5.a. KPI-JCI FT4250CC Horizontal Shaft Impact Crusher (new). This unit is a track-mounted impact crusher driven by a Caterpillar C13 engine. The following information was available:

Make / Model:	KPI-JCI Astec Companies / FT4250CC
Serial Number:	417973
Year Built:	2018
Capacity:	250 tons per hour
NSPS:	40 CFR 60 Subpart OOO

- 5.b. KPI-JCI FT4250CC Horizontal Shaft Impact Crusher Engine (new). This engine drives the KPI-JCI FT4250CC Horizontal Shaft Impact Crusher unit, including the tracks on which it is mounted. Because the engine drives the tracks, the engine is classified as a nonroad engine.

Make / Model:	Caterpillar / C13
Serial Number:	JR900663
Engine Power Rating:	440 bhp
Fuel:	Diesel
Fuel Usage:	24 gallons per hour at full load
Year Built:	2018
Engine Certification:	EPA Tier 4
Stack Description:	Exhausting vertically (13') above ground level through ~8" diameter stack
NSPS/MACT:	No

Existing Equipment

- 5.c. Haul Roads. Dump trucks or other equipment may be used to transport material to, from, or within a work area.

- 5.d. Equipment/Activity Summary.

ID No.	Equipment/Activity	Control Equipment/Measure
1	KPI-JCI FT4250CC Impact Crusher	High pressure wet suppression at crusher entrance

ID No.	Equipment/Activity	Control Equipment/Measure
2	KPI-JCI FT4250CC Impact Crusher Engine (Caterpillar C13, 440 hp, nonroad engine)	Ultra-low sulfur diesel, EPA Tier 4 Certification
3	Haul Roads	Wet suppression as necessary

6. EMISSIONS DETERMINATION

Unless otherwise specified by SWCAA, actual emissions must be determined using the specified input parameter listed for each emission unit and the following hierarchy of methodologies:

- (a) Continuous emissions monitoring system (CEMS) data;
- (b) Source emissions test data (EPA reference method). When source emissions test data conflicts with CEMS data for the time period of a source test, source test data must be used;
- (c) Source emissions test data (other test method); and
- (d) Emission factors or methodology provided in this TSD.

6.a. Crushing and Screening Operations. Potential emissions from crushing, screening, and material transfer are calculated from aggregate throughput and emission factors from EPA AP-42, Table 11.19.2-2 (8/04). Emission factors for all stages except primary crushing are "controlled" factors from the 8/04 version of the table. Emission factors for primary crushing are taken from the 1/95 version of the table which only provided an "uncontrolled" PM factor for primary crushing. An 'uncontrolled' factor for PM₁₀ was calculated using the 2.1:1 ratio of PM to PM₁₀ specified in the table footnotes. An "uncontrolled" factor for PM_{2.5} was calculated using a PM to PM_{2.5} ratio of 12:1 which is based on the tested PM to PM_{2.5} ratio for tertiary crushing in the 8/04 version of the table. A control efficiency of 80% was applied to the primary crushing factors to account for the use of wet suppression.

Activity	Throughput (tpy)	Pollutant	Emission Factor - Controlled (lb/ton)	Turn Points	Emissions (tpy)
Primary crushing	200,000	PM	0.00014		0.014
		PM ₁₀	0.000067		0.007
		PM _{2.5}	0.000012		0.001
Secondary crushing	200,000	PM	0.0012		0.120
		PM ₁₀	0.00054		0.054
		PM _{2.5}	0.0001		0.010
Tertiary crushing	200,000	PM	0.0012		0.120
		PM ₁₀	0.00054		0.054
		PM _{2.5}	0.0001		0.010
Screening	200,000	PM	0.0022		0.220
		PM ₁₀	0.00074		0.074
		PM _{2.5}	0.00005		0.005
Loading/conveying	200,000	PM	0.00014	7	0.098
		PM ₁₀	0.000046		0.032
		PM _{2.5}	0.000013		0.009
Blasting	0	PM	0.0015		0.000
		PM ₁₀	0.00079		0.000
		PM _{2.5}	0.000046		0.000
Total		PM			0.572
		PM ₁₀			0.221
		PM _{2.5}			0.035

- 6.b. Haul Roads. Emissions from haul roads were calculated using default emission calculations from EPA AP-42, Section 13.2.2 (12/03), an average load weight of 20 tons, an average silt content of 4.8%, and an average round trip distance of 0.5 miles. This does not include in-pit activities by nonroad equipment. The use of wet suppression is expected to provide an overall control efficiency of 80% for haul road emissions.

$$E = k \left(\frac{s}{12} \right)^a \left(\frac{w}{3} \right)^b$$

Where: w = average truck weight in tons;

s = road surface silt content (%); and

The constants k, a, and b are given in the table below:

Constant	PM _{2.5}	PM ₁₀	PM ₃₀ (assumed to represent PM)
k (lb/vehicle mile traveled)	0.23	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45

Maximum haul road emissions are estimated in the table below.

Haul Road Emissions				
Average Truck Weight =	27 tons (assumes empty weight of 17 tons)			
Average Round Trip Distance =	0.50 miles			
Amount of Aggregate per Load =	20.0 tons			
Total Miles Traveled =	5,000 miles			
Assumed Silt Content =	4.8%			
Assumed Control (wet suppression) =	80%			
	Uncontrolled	Controlled		
	Emission	Emission		
	Factor	Factor	Emissions	Emission Factor
Pollutant	lb/mile	lb/mile	tpy	Source
PM	6.94	1.39	3.47	AP-42 13.2.2 (11/06)
PM ₁₀	1.77	0.35	0.88	AP-42 13.2.2 (11/06)
PM _{2.5}	0.27	0.054	0.14	AP-42 13.2.2 (11/06)

- 6.c. KPI-JCI FT4250CC Horizontal Shaft Impact Crusher Engine (new). Potential annual emissions from the combustion of ultra-low sulfur diesel (<0.0015% sulfur by weight) were calculated with the assumption that the equipment will operate at full load for up to 3,600 hours per year.

KPI-JCI FT4250CC Horizontal Shaft Impact Crusher Engine						
Hours of Operation =	3,600 hours					
Power Output =	440 horsepower					
Diesel Density =	7.206 pounds per gallon					
Fuel Sulfur Content =	0.0015 % by weight					
Fuel Consumption Rate =	22.40 gallons per hour					
Fuel Heat Content =	0.138 MMBtu/gal (for use with GHG factors from 40 CFR 98)					
Annual Fuel Consumption =	80,640 gallons					
	Emission Factor	Emission Factor	Emissions	Emission Factor		
Pollutant	lb/hp-hr	lb/hr	tpy	Source		
NO _x	6.60E-04	0.29	0.52	Tier 4		
CO	0.00573	2.52	4.54	Tier 4		
VOC	0.00031	0.14	0.25	Tier 4		
SO _x as SO ₂	0.000011	0.0048	0.0087	Mass Balance		
PM/PM ₁₀ /PM _{2.5}	0.000022	0.010	0.02	Tier 4		
			CO ₂ e	CO ₂ e		Emission Factor
Greenhouse Gases	kg/MMBtu	GWP	lb/MMBtu	lb/gallon	tpy, CO ₂ e	Source
CO ₂	73.96	1	163.05	23	907	40 CFR 98
CH ₄	0.003	25	0.165	0.023	0.92	40 CFR 98
N ₂ O	0.0006	298	0.394	0.054	2.19	40 CFR 98
Total GHG - CO ₂ e			163.613	23	910	

Emissions must be calculated using the emission factors identified above unless new emission factors are provided by the manufacturer or developed through source testing.

- 6.d. Emissions Summary

Air Pollutant	Stationary Source Potential to Emit (tpy)	Nonroad Engine Potential to Emit (tpy)	Project Impact (tpy)
NO _x	0.0	0.52	-4.76
CO	0.0	4.54	1.52
VOC	0.0	0.25	-1.86
SO ₂	0.01	0.0087	0.0
PM	4.04	0.02	-0.11

Air Pollutant	Stationary Source Potential to Emit (tpy)	Nonroad Engine Potential to Emit (tpy)	Project Impact (tpy)
PM ₁₀	1.10	0.02	-0.11
PM _{2.5}	0.17	0.02	-0.11
TAP	0.0	0.0	0.0
HAP	0.0	0.0	0.0
CO ₂ /CO _{2e}	0.0	910	-85.71

7. REGULATIONS AND EMISSION STANDARDS

Regulations have been established for the control of emissions of air pollutants to the ambient air. Regulations applicable to the proposed facility that have been used to evaluate the acceptability of the proposed facility and establish emission limits and control requirements include, but are not limited to, the following regulations, codes, or requirements. These items establish maximum emissions limits that could be allowed and are not to be exceeded for new or existing facilities. More stringent limits are established in this Permit consistent with implementation of Best Available Control Technology (BACT):

- 7.a. Title 40 Code of Federal Regulations Chapter 60 (40 CFR 60) Subpart OOO (60.670 et seq.) "Standards of Performance for Nonmetallic Mineral Processing Plants" establishes opacity and particulate matter emission limits for stationary (fixed) plants with capacities greater than 25 tons per hour and portable plants greater than 150 tons per hour that were constructed, reconstructed or modified after August 31, 1983. This regulation is applicable to the new equipment. This regulation is applicable to accessory equipment (e.g., screens or conveyors) whenever they are operated in conjunction with an affected crushing unit.
- 7.b. 40 CFR 63 Subpart ZZZZ (63.6580 et seq.) "National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines" establishes national emission limitations and operating limitations for HAP emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The diesel engine powering the new rock crushing equipment is not subject to this regulation because it is a nonroad engine.
- 7.c. 40 CFR 1039 "Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines" includes requirements for all nonroad engines. In accordance with Appendix A to Subpart A of Part 1074, states are precluded from requiring retrofitting of nonroad engines except that states are permitted to adopt and enforce any such retrofitting requirements identical to California requirements which have been authorized by EPA under section 209 of the Clean Air Act. States may enforce regulations such as hours of usage, daily mass emission limits, and sulfur limits on fuel.

The definition of nonroad engines in 40 CFR 1068.30 includes any internal combustion engine in (1)(iii) "That, by itself or in or on a piece of equipment, is portable or

transportable, meaning designed to be and capable of being carried or moved from one location to another..." "An internal combustion engine is not a nonroad engine if:... (iii) the engine otherwise included in Paragraph 1(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source...A location is any single site at a building, structure, facility or installation."

- 7.d. Revised Code of Washington (RCW) 70A.15.2040 empowers any activated air pollution control authority to prepare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution within its jurisdiction. An air pollution control authority may issue such orders as may be necessary to effectuate the purposes of the Washington Clean Air Act (RCW 70A.15) and enforce the same by all appropriate administrative and judicial proceedings subject to the rights of appeal as provided in Chapter 62, Laws of 1970 ex. sess. This law applies to the facility.
- 7.e. RCW 70A.15.2210 provides for the inclusion of conditions of operation as are reasonably necessary to assure the maintenance of compliance with the applicable ordinances, resolutions, rules and regulations when issuing an ADP for installation and establishment of an air contaminant source. This law applies to the facility.
- 7.f. Washington Administrative Code (WAC) 173-460 "Controls for New Sources of Toxic Air Pollutants" requires BACT for toxic air pollutants (T-BACT), identification and quantification of emissions of toxic air pollutants and demonstration of protection of human health and safety.
- 7.g. WAC 173-476 "Ambient Air Quality Standards" establishes ambient air quality standards for PM₁₀, PM_{2.5}, lead, SO₂, NO_x, ozone, and CO in the ambient air, which must not be exceeded. The facility emits PM₁₀, PM_{2.5}, SO_x, NO_x, and CO; therefore, certain sections of this regulation apply.
- 7.h. SWCAA 400-040 "General Standards for Maximum Emissions" requires all new and existing sources and emission units to meet certain performance standards with respect to Reasonably Available Control Technology (RACT), visible emissions, fallout, fugitive emissions, odors, emissions detrimental to persons or property, SO₂, concealment and masking, and fugitive dust. This regulation applies to the facility.
- 7.i. SWCAA 400-040(1) "Visible Emissions" requires that emissions of an air contaminant from any emissions unit must not exceed twenty percent opacity for more than three minutes in any one hour at the emission point, or within a reasonable distance of the emission point. This regulation applies to the facility.
- 7.j. SWCAA 400-040(3) "Fugitive Emissions" requires that reasonable precautions be taken to prevent the fugitive release of air contaminants to the atmosphere. This regulation applies to the facility.

- 7.k. SWCAA 400-040(4) "Odors" requires any source which generates odors that may unreasonably interfere with any other property owner's use and enjoyment of their property to use recognized good practice and procedures to reduce these odors to a reasonable minimum. This regulation applies to this facility.
- 7.l. SWCAA 400-040(6) "Sulfur Dioxide" requires that no person shall emit a gas containing in excess of 1,000 ppm of sulfur dioxide on a dry basis, corrected to 7% O₂ or 12% CO₂ as required by the applicable emission standard for combustion sources.
- 7.m. SWCAA 400-045 "Permit Applications for Nonroad Engines" requires, with a few exceptions, submittal of a permit application for installation of nonroad engines as defined in 40 CFR 1068.30. This regulation is applicable to the nonroad engine proposed for use by the permittee.
- 7.n. SWCAA 400-046 "Application Review Process for Nonroad Engines" requires that a nonroad engine permit be issued by the agency prior to the installation, replacement or alteration of any nonroad engine subject to the requirements of SWCAA 400-045. Each application must demonstrate that the installation will not cause an exceedance of any national or state ambient air quality standard.
- 7.o. SWCAA 400-050 "Emission Standards for Combustion and Incineration Units" requires that all provisions of SWCAA 400-040 be met and that no person is allowed to cause or permit the emission of PM from any combustion or incineration unit in excess of 0.23 g/Nm³_{dry} (0.1 gr/dscf) of exhaust gas at standard conditions.
- 7.p. SWCAA 400-060 "Emission Standards for General Process Units" requires that all new and existing general process units do not emit PM in excess of 0.23 g/Nm³_{dry} (0.1 gr/dscf) of exhaust gas.
- 7.q. SWCAA 400-109 "Air Discharge Permit Applications" requires that an ADP application be submitted for all new installations, modifications, changes, or alterations to process and emission control equipment consistent with the definition of "new source". Sources wishing to modify existing permit terms may submit an ADP application to request such changes. An ADP must be issued, or written confirmation of exempt status must be received, before beginning any actual construction, or implementing any other modification, change, or alteration of existing equipment, processes, or permits. This regulation applies to the facility.
- 7.r. SWCAA 400-110 "New Source Review" requires that SWCAA issue an ADP in response to an ADP application prior to establishment of the new source, emission unit, or modification. The new units meet the definition of a new source; therefore, this regulation applies to the facility.
- 7.s. SWCAA 400-111 "Requirements for Sources in a Maintenance Plan Area" requires that no approval to construct or alter an air contaminant source will be granted unless it is evidenced that:

- (1) The equipment or technology is designed and will be installed to operate without causing a violation of the applicable emission standards;
- (2) Emissions will be minimized to the extent that the new source will not exceed emission levels or other requirements provided in the maintenance plan;
- (3) BACT will be employed for all air contaminants to be emitted by the proposed equipment;
- (4) The proposed equipment will not cause any ambient air quality standard to be exceeded; and
- (5) If the proposed equipment or facility will emit any toxic air pollutant regulated under WAC 173-460, the proposed equipment and control measures will meet all the requirements of that Chapter.

The facility may be located in a maintenance plan area; therefore, this regulation applies to the facility.

- 7.t. SWCAA 400-113 "Requirements for New Sources in Attainment or Nonclassifiable Areas" requires that no approval to construct or alter an air contaminant source will be granted unless it is evidenced that:
- (1) The equipment or technology is designed and will be installed to operate without causing a violation of the applicable emission standards;
 - (2) BACT will be employed for all air contaminants to be emitted by the proposed equipment;
 - (3) The proposed equipment will not cause any ambient air quality standard to be exceeded; and
 - (4) If the proposed equipment or facility will emit any toxic air pollutant regulated under WAC 173-460, the proposed equipment and control measures will meet all the requirements of that Chapter.

8. RACT/BACT/BART/LAER/PSD/CAM DETERMINATIONS

The proposed equipment and control systems incorporate BACT for the types and amounts of air contaminants emitted by the processes as described below:

- 8.a. BACT Determination – Rock Crushing/Screening. The use of high-pressure wet suppression systems, including spray or fog nozzles operating at a minimum pressure of 80 psig and a visual emission limit of 0% opacity, has been determined to meet the requirements of BACT for the proposed crushing and screening equipment. Because there are other wet suppression systems (e.g., sonic fogging systems) that utilize a lower water pressure but provide equivalent or superior levels of emission control, the permit will allow for wet suppression systems reviewed and approved by SWCAA that provide equivalent or superior control of particulate matter emissions.
- 8.b. BACT Determination – Fugitive Dust Emissions. The use of low-pressure wet suppression systems has been determined to meet the requirements of BACT for fugitive dust emissions from storage piles, material transfer points, and haul roads at this facility. For sources other than roadways, these controls must maintain visual emissions at 0% opacity as measured by

SWCAA Method 9. For haul roads, these controls must maintain visual emissions at or below 10% opacity as measured by SWCAA Method 9.

- 8.c. Nonroad Engine Tier Certification. The nonroad engine affected by this permitting action complies with applicable EPA certification requirements, but is not subject to BACT.

Other Determinations

- 8.d. Prevention of Significant Deterioration (PSD) Applicability Determination. This permitting action will not result in a potential increase in emissions equal to or greater than the PSD thresholds. Therefore, PSD review is not applicable to this action.
- 8.e. Compliance Assurance Monitoring (CAM) Applicability Determination. CAM is not applicable to any emission unit at this facility because it is not a major source and is not required to obtain a Part 70 (Title V) permit.

9. AMBIENT IMPACT ANALYSIS

- 9.a. Criteria Air Pollutant Review. Emissions of NO_x, CO, PM₁₀, PM_{2.5}, VOC (as a precursor to O₃), and SO₂ are emitted at levels where no adverse ambient air quality impact is anticipated.
- 9.b. Toxic Air Pollutant Review. This facility does not emit quantifiable amounts of TAPs. Toxic air pollutant impacts are presumed to be below regulatory significance.

Conclusions

- 9.c. Operation of new rock crushing equipment, as proposed in ADP/NEP application CL-3225, will not cause the ambient air quality requirements of 40 CFR 50 "National Primary and Secondary Ambient Air Quality Standards" to be violated.
- 9.d. Operation of new rock crushing equipment, as proposed in ADP/NEP application CL-3225, will not cause the requirements of WAC 173-460 "Controls for New Sources of Toxic Air Pollutants" or WAC 173-476 "Ambient Air Quality Standards" to be violated.
- 9.e. The crushing activities proposed in ADP/NEP application CL-3225 will not cause a violation of emission standards for sources as established under SWCAA General Regulations Sections 400-040 "General Standards for Maximum Emissions," 400-050 "Emission Standards for Combustion and Incineration Units," and 400-060 "Emission Standards for General Process Units."

10. DISCUSSION OF APPROVAL CONDITIONS

SWCAA has made a determination to issue ADP/NEP 23-3575 in response to ADP/NEP application CL-3225. ADP/NEP 23-3575 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards, as discussed below.

10.a. Supersession of Previous Permits. ADP/NEP 23-3575 supersedes ADP 11-2969 in its entirety.

10.b. Emission Limits. Annual emission limitations for the equipment addressed in this permitting action were established equal to the potential to emit identified in Section 6. Based on the information provided in the application, emission limits based on the throughput provided will not constrain operations. As discussed in Section 8, these emission limits meet the requirements of BACT. The nonroad engine that drives the crusher is not subject to BACT, and operation of the engine will not result in a violation of the ambient air quality standards when operated in accordance with the permit, therefore no emission limits were established for the nonroad engine.

Visible emissions from the nonroad engine was limited to 5% opacity. Visible emissions should not exceed this level if the engine is operating properly. For the nonroad engine, SWCAA uses this as a surrogate indicator that the engine is in good repair (rather than a tailpipe emission standard otherwise precluded by 40 CFR 1074). For the nonroad engine, this restriction is appropriate because if the engine is not maintained in good repair, emissions are likely to greatly exceed the expected emission level and could cause an exceedance of a state or federal ambient air quality standard.

10.c. Operational Limits and Requirements. Most of the requirements in this section are related to the use of wet suppression systems for the control of fugitive dust.

The permit allows the use of "#2 diesel or better" by the crusher engine. In this case, "or better" includes road-grade diesel fuel with a lower sulfur content, biodiesel, and mixtures of biodiesel and road-grade diesel that meet the definition of "diesel" and contain no more than 0.0015% sulfur by weight.

10.d. Monitoring and Recordkeeping Requirements. Sufficient monitoring and recordkeeping were established to document compliance with the annual emission limits and provide for general requirements (e.g., excess emission reporting, annual emission inventory submission).

10.e. Emission Monitoring and Testing Requirements. See Section 12.

10.f. Reporting Requirements. The permit requires reporting of the annual air emissions inventory, and reporting of the data necessary to develop the inventory. Excess emissions must be reported immediately in order to qualify for relief from monetary penalty in accordance with SWCAA 400-107. In addition, prompt reporting was required because it allows for accurate investigation into the cause of the event and prevention of similar future incidents.

11. START-UP AND SHUTDOWN/ALTERNATIVE OPERATING SCENARIOS/POLLUTION PREVENTION

- 11.a. Start-up and Shutdown Provisions. Pursuant to SWCAA 400-081 "Start-up and Shutdown," technology-based emission standards and control technology determinations must take into consideration the physical and operational ability of a source to comply with the applicable standards during start-up or shutdown. Where it is determined that a source is not capable of achieving continuous compliance with an emission standard during start-up or shutdown, SWCAA will include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during start-up or shutdown.

Diesel Engine. The diesel engine associated with rock crushing operations may exhibit excess opacity upon startup even when in proper working order. Accordingly, the visual emissions limits listed in the permit for this unit is not applicable during the startup period defined in the permit. The general opacity standard from SWCAA 400-040 of 20% continues to apply during startup and shutdown.

- 11.b. Alternate Operating Scenarios. SWCAA conducted a review of alternate operating scenarios applicable to equipment affected by this permitting action. Neither SWCAA nor the permittee identified or proposed any applicable alternate operating scenarios. Therefore, none were included in the approval conditions.
- 11.c. Pollution Prevention Measures. SWCAA conducted a review of possible pollution prevention measures for the facility. No pollution prevention measures were identified by either the permittee or SWCAA separate or in addition to those measures required under BACT considerations. Therefore, none were included in the approval conditions.

12. EMISSION MONITORING AND TESTING

- 12.a. Emission Testing Requirements – Rock Crushing Equipment. Affected rock crushers and associated screening equipment and belt conveyors are required to perform one-time opacity observations as required by 40 CFR 60 Subpart OOO.

13. FACILITY HISTORY

- 13.a. Previous Permitting Actions. The following past permitting actions have been taken by SWCAA for this facility:

Permit	Application	Date Issued	Description
11-2969	CL-1935	04/05/2011	Approval to operate a portable Kleeman impact crusher and associated diesel-fired engine. Superseded by ADP 23-3575.

- 13.b. Compliance Status. A search of source records on file at SWCAA did not identify any outstanding compliance issues at this facility.

14. PUBLIC INVOLMENT OPPORTUNITY

- 14.a. Public Notice for ADP/NEP Application CL-3225. Public notice for ADP/NEP application CL-3225 was published on the SWCAA website for a minimum of fifteen (15) days beginning on March 1, 2023.
- 14.b. Public/Applicant Comment for ADP/NEP Application CL-3225. SWCAA did not receive specific comments, a comment period request, or any other inquiry from the public or the applicant regarding ADP/NEP application CL-3225. Therefore, no public comment period was provided for this permitting action.
- 14.c. State Environmental Policy Act. SWCAA has determined that this project is exempt from SEPA requirements pursuant to WAC 197-11-800(3) and has issued Determination of SEPA Exemption 23-017. This project only involves repair, remodeling, maintenance, or minor alteration of existing structures, equipment or facilities, and will not involve material expansions or changes in use. There is no physical change proposed in the project that would have an adverse impact on the environment beyond that which has already been evaluated under previous SEPA reviews.