TECHNICAL SUPPORT DOCUMENT

Air Discharge Permit / Nonroad Engine Permit 23-3571
ADP/NEP Application CO-1063

Issued: March 30, 2023

City Bark

SWCAA ID - 2770

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ABBREVIATIONS

List of Acronyms

ADP	Air Discharge Permit
AP-42	Compilation of Emission Factors, AP-42, 5th Edition, Volume 1, Stationary Point and Area Sources – published by EPA
ASIL	Acceptable Source Impact Level
BACT	Best available control technology
CAS#	Chemical Abstracts Service registry number
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
EU	Emission Unit
MACT	Maximum Achievable Control Technologies
mfr	Manufacturer
NEP	Nonroad Engine Permit
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOV	Notice of Violation/
NSPS	New Source Performance Standard
PSD	Prevention of Significant Deterioration
RCW	Revised Code of Washington
SCC	Source Classification Code
SDS	Safety Data Sheet
SQER	Small Quantity Emission Rate listed in WAC 173-460
Standard	Standard conditions at a temperature of 68°F (20°C) and a pressure of 29.92 in Hg (760 mm Hg)
SWCAA	Southwest Clean Air Agency
T-BACT	Best Available Control Technology for toxic air pollutants
WAC	Washington Administrative Code

List of Units and Measures

acfm	Actual cubic foot per minute
bhp	Brake horsepower
dscfm	Dry Standard cubic foot per minute
gpm	Gallon per minute
gr/dscf	Grain per dry standard cubic foot
hp	Horsepower
hp-hr	Horsepower-hour
kW	Kilowatt
MMBtu	Million British thermal unit
ppm	Parts per million
ppmv	Parts per million by volume
ppmvd	Parts per million by volume, dry
ppmw	Parts per million by weight
psig	Pounds per square inch, gauge
rpm	Revolution per minute
scfm	Standard cubic foot per minute
tph	Ton per hour
tpy	Tons per year

List of Chemical Symbols, Formulas, and Pollutants

CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
HAP	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act
NO_x	Nitrogen oxides
O_2	Oxygen
PM	Particulate Matter with an aerodynamic diameter 100 µm or less
PM_{10}	PM with an aerodynamic diameter 10 µm or less
$PM_{2.5}$	PM with an aerodynamic diameter 2.5 µm or less
SO_2	Sulfur dioxide
SO_x	Sulfur oxides
TAP	Toxic air pollutant pursuant to Chapter 173-460 WAC
VOC	Volatile organic compound

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:	City Bark and Recycling, LLC
Applicant Address:	2419 NE Andresen Road, Vancouver, WA 98661
Facility Name:	City Bark
Facility Address:	850 Caples Road, Woodland, WA 98674
SWCAA Identification:	2770
Contact Person:	Jonathan James, Operations Manager
Primary Process:	Aggregate Crushing Plant
SIC/NAICS Code:	1429: Crushed and Broken Stone 212319: Other Crushed and Broken Stone Mining
Facility Classification:	Natural Minor; Nonroad Engine

2. FACILITY DESCRIPTION

City Bark is proposing to operate a portable aggregate crushing plant at the above described location. The proposed crushing plant consists of an impact crusher, an aggregate screen and associated material conveyance equipment.

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit / Nonroad Engine Permit application number CO-1063 (ADP/NEP Application CO-1063) dated December 20, 2022. City Bark submitted ADP/NEP Application CO-1063 requesting approval of the following:

- Operation of a Tesab model RJ1012TS impact crusher and integral diesel engine; and
- Operation of a CEC 5x12 aggregate screen and integral diesel engine.

The current permitting action provides approval for the proposed aggregate crushing plant as described in ADP/NEP Application CO-1063. This is the initial permitting action for this facility.

4. PROCESS DESCRIPTION

4.a Aggregate Crushing (*new*). The proposed rock crushing equipment will be used to crush aggregate material transported from other work sites. Raw aggregate will be fed into the crushing equipment using front-end loaders. Crushed aggregate will be transferred via conveyor belt from the aggregate screen to storage piles. Spray nozzles will be used to control fugitive dust emissions at the entrance of each crusher. Other emission points will be watered as necessary to control fugitive dust emissions. Wet suppression (sprinklers and hose sprays) will be used to control fugitive emissions from associated haul roads and storage piles.

5. EQUIPMENT/ACTIVITY IDENTIFICATION

5.a Impact Crusher - Tesab (*new*). This unit is a track-mounted impact crusher. Wet suppression is used to control dust emissions at the inlet of the crusher and as necessary at the finished product delivery belt.

Make / Model:	Tesab / RJ1012TS (s/n 713981452)
Year Built:	2019
Capacity:	380 tph
NSPS Applicable:	Subpart OOO applicable

5.b Aggregate Screen - CEC (*new*). This unit is a tracked mounted 2-deck aggregate screen. Wet suppression is used to control dust emissions at the inlet of the screen and as necessary at associated material handling points.

Make / Model:	CEC / 5x12 (s/n 80230)
Year Built:	2008
Capacity:	380 tph
NSPS Applicable:	Subpart OOO

5.c Nonroad Engine - Caterpillar (*new*). This engine is an integral power unit for the Tesab impact crusher. The unit powers both the crusher and the tracks it is mounted on.

Make / Model:	Caterpillar C9.3B (s/n NGH00593)
Power Rating:	455 bhp
Fuel Type:	Diesel
Fuel Consumption:	23.08 gal/hr (estimated @ 7,000 Btu/hp-hr)
Model Year:	2019
EPA Certification:	Tier 4
NSPS/MACT Applicable:	No

5.d Nonroad Engine - Deutz (*new*). This engine is an integral power unit for the CEC aggregate screen. The unit powers both the screen and the tracks it is mounted on.

Make / Model:	Deutz BF4L014 (s/n 05327-51)
Power Rating:	104 bhp
Fuel Type:	Diesel
Fuel Consumption:	5.60 gal/hr
Model Year:	2008
EPA Certification:	Tier 3
NSPS/MACT Applicable:	No

5.e Equipment/Activity Summary.

ID No.	Equipment/Activity	Control Equipment/Measure
1	Rock Crusher (Tesab - Impact)	High Pressure Spray System
2	Aggregate Screen (CEC – Two deck)	High Pressure Spray System
3	Haul Roads and Conveyors	Wet Suppression
4	Diesel Engine (Caterpillar – 455 bhp)	Ultra-low Sulfur Diesel (≤0.0015% by wt)
5	Diesel Engine (Deutz – 104 bhp)	Ultra-low Sulfur Diesel (≤0.0015% by wt)

6. EMISSIONS DETERMINATION

Emissions to the ambient atmosphere from plant operations proposed in ADP/NEP Application CO-1063 consist of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM) sulfur dioxide (SO_2), toxic air pollutants (TAPs), and hazardous air pollutants (HAPs).

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 Rock Crushing and Screening (*new*). PM Emissions from rock crushing operations are calculated based on a maximum material throughput of 500,000 tpy, a control efficiency of 80% (wet suppression), and applicable emission factors. Except for primary crushing, all emission factors for rock crushing are 'controlled' factors from the 8/04 version of EPA AP-42, Table 11.19.2-2. Emission factors for tertiary crushing have been used as an upper limit for secondary crushing as suggested in the 8/04 version of the table.

Emission factors for primary crushing are derived from the 1/95 version of EPA AP-42, Table 11.19.2-2 which only provided an 'uncontrolled' PM factor for primary crushing. An 'uncontrolled' PM_{10} factor was calculated using a PM to PM_{10} ratio of 2.1:1 as specified in the 1/95 table footnotes. An 'uncontrolled' $PM_{2.5}$ factor was calculated using a PM to $PM_{2.5}$ ratio of 12:1 as cited for tertiary crushing in the 8/04 table.

Emissions from rock blasting operations are calculated from material throughput and Eq. 1 from AP-42 Section 11.9 (July 1998) for blasting assuming a horizontal blast area of 17,000 ft^2 with a blast depth of 20 ft and a material density of 3,240 lb/yd^3; this equates to 20,400 ton/blast. No control efficiency is calculated for blasting operations.

Total Emissions:	PM	1.29 tpy
	PM_{10}	0.51 tpy
	$PM_{2.5}$	0.075 tpy

Activity	Throughput (tpy)	Pollutant	Emission Factor - Controlled (lb/ton)	Turn Points	Emissions (tpy)
Primary crushing	500,000	PM	0.00014		0.035
		PM_{10}	0.000067		0.017
		$PM_{2.5}$	0.000012		0.003
Secondary crushing	500,000	PM	0.0012		0.300
		PM_{10}	0.00054		0.135
		$PM_{2.5}$	0.0001		0.025
Tertiary crushing	500,000	PM	0.0012		0.300
		PM_{10}	0.00054		0.135
		$PM_{2.5}$	0.0001		0.025
Screening	500,000	PM	0.0022		0.550
		PM_{10}	0.00074		0.185
		$PM_{2.5}$	0.00005		0.013
Loading/conveying	500,000	PM	0.00014	3	0.105
		PM_{10}	0.000046		0.035
		$PM_{2.5}$	0.000013		0.010
Blasting	0	PM	0.0015		0.000
		PM_{10}	0.00078		0.000
		$PM_{2.5}$	0.000045		0.000

6.b Haul Roads (*new*). Potential emissions from unpaved haul roads are calculated based on an average truck weight of 33.25 tons, an average silt content of 4.8%, an average round trip distance of 0.1 miles, and the emission equation from EPA AP-42, Section 13.2.2 (11/06). The use of wet suppression is assumed to provide an overall control efficiency of 80% for fugitive dust emissions. Average truck weight represents an empty truck weight of 26,500 pounds and a 40,000 pound aggregate load. The 4.8% silt content is the average silt content listed for sand and gravel plant processing roads in AP-42 Table 13.2.2.1 (11/06).

Annual emissions will be calculated based on actual haul road traffic using the same methodology.

$$E = k\left(\frac{s}{12}\right)^{a}\left(\frac{w}{3}\right)^{b}$$ lb/vehicle mile travelled (uncontrolled)

Where: E = pounds of pollutant per vehicle mile traveled
w = average truck weight in tons
s = road surface silt content (%)
k, a and b (see table below)

Constant	**$PM_{2.5}$**	**PM_{10}**	**PM (PM_{30})**
k	0.15	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45

Average Truck Weight =	33.250	tons (assumes 26,500 lb empty truck weight)
Round Trip Distance =	0.10	miles
Average Load =	20.00	tons
Total # of Trips =	25,000	loads
Total Miles Traveled =	2,500	miles
Assumed Silt Content =	4.8	% (AP-42 Table 13.2.2-1)
Assumed Control (wet supp.) =	80	%

Pollutant	Uncontrolled EF lb/mile	Controlled EF lb/mile	Emissions tpy	Emission Factor Source
PM	7.62	1.52	1.90	AP-42 13.2.2 (11/06)
PM_{10}	1.94	0.39	0.49	AP-42 13.2.2 (11/06)
$PM_{2.5}$	0.30	0.06	0.074	AP-42 13.2.2 (11/06)

6.c Nonroad Engine – Caterpillar C9.3B (*new*). Estimated emissions from nonroad engine operation are calculated based on 1,500 hours of operation, use of ultra-low sulfur diesel (<0.0015% sulfur by weight), a maximum engine rating of 455 hp, and applicable emission factors. Annual emissions will be calculated from actual hours of operation using the emission factors identified below.

Hours of Operation =	1,500	hours				
Power Output =	455	horsepower				
Fuel Sulfur Content =	0.0015	% by weight				
Fuel Consumption Rate =	23.08	gal/hr				
Fuel Heat Content =	0.138	MMBtu/gal (40 CFR 98)				
	EF	Emissions				
Pollutant	lb/hr	tpy	EF Source			
NO_X	0.1420	0.107	Caterpillar			
CO	0.0750	0.056	Caterpillar			
VOC	0.0300	0.023	Caterpillar			
SO_X as SO_2	0.0050	0.0038	Mass Balance			
PM/PM_{10}	0.0075	0.0056	Caterpillar			
$PM_{2.5}$	0.0075	0.0056	Caterpillar			
			CO_2e	CO_2e		
Greenhouse Gases	kg/MMBtu	GWP	lb/MMBtu	lb/gallon	tpy, CO_2e	
CO_2	73.96	1	163.05	22.501	389	40 CFR 98
CH_4	0.003	25	0.165	0.023	0.4	40 CFR 98
N_2O	0.0006	298	0.394	0.054	0.9	40 CFR 98
Total GHG - CO_2e	73.9636		163.61	22.58	390.8	

6.d Nonroad Engine – Deutz BF4L014 (*new*). Estimated emissions from nonroad engine operation are calculated based on 1,500 hours of operation, use of ultra-low sulfur diesel (<0.0015% sulfur by weight) a maximum engine rating of 104 hp, and applicable emission factors. Annual emissions will be calculated from actual hours of operation using the emission factors identified below.

Hours of Operation =	1,500	hours				
Power Output =	104	horsepower				
Fuel Sulfur Content =	0.0015	% by weight				
Fuel Consumption Rate =	5.60	gal/hr				
Fuel Heat Content =	0.138	MMBtu/gal (40 CFR 98)				
	EF	Emissions				
Pollutant	lb/hr	tpy	EF Source			
NO_X	0.75	0.56	Caterpillar			
CO	0.13	0.095	Caterpillar			
VOC	0.034	0.026	Caterpillar			
SO_X as SO_2	0.0012	0.00090	Mass Balance			
PM/PM_{10}	0.015	0.0113	Caterpillar			
$PM_{2.5}$	0.015	0.0113	Caterpillar			
			CO_2e	CO_2e		
Greenhouse Gases	kg/MMBtu	GWP	lb/MMBtu	lb/gallon	tpy, CO_2e	
CO_2	73.96	1	163.05	22.501	95	40 CFR 98
CH_4	0.003	25	0.165	0.023	0.1	40 CFR 98
N_2O	0.0006	298	0.394	0.054	0.2	40 CFR 98
Total GHG - CO_2e	73.9636		163.61	22.58	94.8	

6.e Emissions Summary/Facility-wide Potential to Emit. Facility-wide potential to emit as calculated in the sections above is summarized below.

Pollutant	Potential Emissions (tpy)	Project Increase (tpy)
NO_X	0.67	0.67
CO	0.15	0.15
VOC	0.048	0.048
SO_2	0.0046	0.0046
Lead	0.0	0.0
PM	3.21	3.21
PM_{10}	1.01	1.01
$PM_{2.5}$	0.17	0.17
TAP	0.0	0.0
HAP	0.0	0.0
CO_2e	486	486

7. REGULATIONS AND EMISSION STANDARDS

Regulations 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 regulations, codes, or requirements listed below.

7.a Title 40 Code of Federal Regulations Part 60 (40 CFR 60) Subpart OOO "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. More stringent requirements apply to affected facilities constructed, reconstructed or modified on or after April 22, 2008. This subpart is applicable to the rock crushing equipment proposed in ADP/NEP Application CO-1063.

7.b 40 CFR 1039 "Control of Emissions from New and In-use Nonroad Compression Ignition Engines" establishes standards for new non-road engines beginning with the 2008 model year for certain categories. The applicable year varies by engine category. In accordance with the relevant subpart, nonroad engines must meet the appropriate EPA Tier certification standards based on engine size and year of manufacture. Emission standards formerly codified in 40 CFR 89 have been moved to 40 CFR 1039 Appendix I. This subpart is applicable to the nonroad engines at this facility.

The definition of "nonroad engine" for this subpart is found in 40 CFR 1068.30 and includes any internal combustion engine that (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."

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 limitations on hours of usage, daily mass emission limits, and sulfur limits on fuel as necessary.

7.c 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 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.

7.d 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 Air Discharge Permit for installation and establishment of an air contaminant source.

7.e Washington Administrative Code (WAC) 173-460 "Controls for New Sources of Toxic Air Pollutants" requires Best Available Control Technology 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.f WAC 173-476 "Ambient Air Quality Standards" establishes ambient air quality standards for PM_{10}, $PM_{2.5}$, lead, sulfur dioxide, nitrogen dioxide, ozone, and carbon monoxide in the ambient air, which shall not be exceeded.

7.g 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, sulfur dioxide, concealment and masking, and fugitive dust.

7.h SWCAA 400-045 "Permit Applications for Nonroad Engines" requires, with a few exceptions, submittal of a permit application for installation of nonroad engines. This regulation is applicable to the nonroad engines proposed for use by the permittee.

7.i 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.j SWCAA 400-050 "Emission Standards for Combustion and Incineration Units" requires that all provisions of SWCAA 400-040 be met and that no person shall cause or permit the emission of particulate matter from any combustion or incineration unit in excess of 0.23 grams per dry cubic meter (0.1 grains per dry standard cubic foot) of exhaust gas at standard conditions.

7.k SWCAA 400-060 "Emission Standards for General Process Units" prohibits particulate matter emissions from all new and existing process units in excess of 0.1 grains per dry standard cubic foot of exhaust gas.

7.l SWCAA 400-109 "Air Discharge Permit Applications" requires that an Air Discharge Permit 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 Air Discharge Permit application to request such changes. An Air Discharge Permit 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.

7.m SWCAA 400-110 "New Source Review" requires that SWCAA issue an Air Discharge Permit in response to an Air Discharge Permit application prior to establishment of the new source, emission unit, or modification.

7.n SWCAA 400-113 "Requirements for New Sources in Attainment or Nonclassifiable Areas" requires that no approval to construct or alter an air contaminant source shall 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) Best Available Control Technology 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 Best Available Control Technology (BACT) for the types and amounts of air contaminants emitted by the processes as described below:

New BACT Determinations

8.a BACT Determination – Aggregate Crushing and Screening. The proposed use of high pressure wet suppression systems, including spray or fog nozzles operating at a minimum pressure of 80 psig, has been determined to meet the requirements of BACT for the proposed crushing and screening equipment at this facility. 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 allows for the use of wet suppression systems reviewed and approved by SWCAA that provide equivalent or superior control of particulate matter emissions.

8.b BACT Determination – Fugitive Dust. The proposed use of wet suppression 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.

Other Determinations

8.c Nonroad Engine Tier Certification. The nonroad engines cited in this permitting action comply with applicable EPA certification requirements but are not subject to BACT.

8.d Prevention of Significant Deterioration (PSD) Applicability Determination. The potential to emit of this facility is less than applicable PSD applicability thresholds. Likewise, 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 permit.

9. AMBIENT IMPACT ANALYSIS

9.a 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.b Operation of an aggregate crushing plant, as proposed in ADP/NEP Application CO-1063, will not cause the ambient air quality requirements of Title 40 Code of Federal Regulations (CFR) Part 50 "National Primary and Secondary Ambient Air Quality Standards" to be violated.

9.c Operation of an aggregate crushing plant, as proposed in ADP/NEP Application CO-1063, 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.d Operation of an aggregate crushing plant, as proposed in ADP/NEP Application CO-1063, 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 23-3571 in response to ADP/NEP Application CO-1063. ADP/NEP 23-3571 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards as discussed below.

10.a General Basis. Permit requirements for equipment affected by this permitting action incorporate the operating schemes proposed by the applicant in ADP/NEP Application CO-1063. Permit requirements established by this action are intended to implement BACT, minimize emissions, and assure compliance with applicable requirements on a continuous basis. Emission limits for approved equipment are based on the maximum potential emissions calculated in Section 6 of this Technical Support Document.

10.b Monitoring and Recordkeeping Requirements. ADP/NEP 23-3571 establishes monitoring and recordkeeping requirements sufficient to document compliance with applicable emission limits, ensure proper operation of approved equipment and provide for compliance with generally applicable requirements.

10.c Reporting Requirements. ADP/NEP 23-3571 establishes general reporting requirements for annual air emissions, upset conditions and excess emissions. Specific reporting requirements are established for hours of operation and material throughput. Reports are to be submitted on an annual basis.

10.d Aggregate Crushing and Conveying Equipment. Permit requirements for the proposed rock crushing equipment are consistent with the operating scheme and material data submitted by the applicant. Visible emissions from crushing and conveying equipment are limited to 0% opacity, consistent with proper operation of the proposed wet suppression systems and the requirements of 40 CFR 60, Subpart OOO.

10.e Nonroad Diesel Engines. Permit requirements for the proposed diesel engines are based on proposed primary service. Visible emissions from engines are limited to 5% opacity. Visible emissions should not exceed this level if the engines are operating properly and can be used as a surrogate indicator that the engine is in good repair (rather than a tailpipe emission standard otherwise precluded by 40 CFR 1074). For nonroad engines, 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.

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 shall 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 shall include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during start-up or shutdown.

Nonroad Diesel Engines. Visible emissions from diesel engines 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 these units are 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. The permittee did not propose or identify any applicable alternate operating scenarios. Therefore, none were included in the permit requirements.

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 permit requirements.

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. All of the crushing and screening equipment addressed by this permitting action is subject to the initial testing requirements of 40 CFR 60 Subpart OOO.

13. FACILITY HISTORY

13.a Previous Permitting Actions. SWCAA has not previously issued any permits for this facility.

13.b Compliance History. A search of source records on file at SWCAA identified the following compliance issues at this facility during the past five (5) years:

Date	NOV Number	Violation
10/28/2022	10630	Operation of unpermitted rock crusher and aggregate screen.

14. PUBLIC INVOLVEMENT OPPORTUNITY

14.a Public Notice for ADP/NEP Application CO-1063. Public notice for ADP/NEP Application CO-1063 was published on the SWCAA internet website for a minimum of (15) days beginning on January 6, 2023.

14.b Public/Applicant Comment for ADP/NEP Application CO-1063. SWCAA did not receive specific comments, a comment period request or any other inquiry from the public regarding this ADP/NEP permit application. Therefore no public comment period was provided for this permitting action.

14.c State Environmental Policy Act. A complete SEPA checklist was submitted by City Bark in conjunction with ADP/NEP Application CO-1063. After reviewing the checklist, SWCAA has made a Determination of Non Significance (DNS 23-013) concurrent with issuance of ADP 23-3571.