TECHNICAL SUPPORT DOCUMENT

Air Discharge Permit / Nonroad Engine Permit 25-3685
ADP/NEP Application CO-1111

Issued: February 26, 2025

Copenhaver Construction

SWCAA ID - 2822

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Southwest Clean Air Agency

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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
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOV	Notice of Violation/
NSPS	New Source Performance Standard
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
SCC	Source Classification Code
SDS	Safety Data Sheet
SQER	Small Quantity Emission Rate listed in WAC 173-460
SWCAA	Southwest Clean Air Agency
WAC	Washington Administrative Code

List of Units and Measures

µg/m³	Micrograms per cubic meter
µm	Micrometer (10^{-6} meter)
acfm	Actual cubic foot per minute
bhp	Brake horsepower
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
rpm	Revolution per minute
tph	Ton per hour
tpy	Tons per year

List of Chemical Symbols, Formulas, and Pollutants

C_3H_8	Propane
CH_4	Methane
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
O_3	Ozone
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
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:	Copenhaver Construction, Inc.
Applicant Address:	22393 State Route 2 East, Creston, WA 99117
Facility Name:	Copenhaver Construction
Facility Address:	Portable (initial location) 460 Kalama River Road, Kalama, WA 98625
SWCAA Identification:	2822
Contact Person:	Guy Copenhaver, Manager
Primary Process:	Crushed and Broken Stone Mining and Quarrying
SIC/NAICS Code:	1442 / Construction Sand and Gravel 212321 / Construction Sand and Gravel Mining
Facility Latitude and Longitude	46° 02' 54.29" N 122° 50' 30.80" W
Facility Classification:	Natural Minor; Nonroad Engine

2. FACILITY DESCRIPTION

Copenhaver Construction (Copenhaver) operates a portable rock crushing plant that performs contract crushing services at various locations in Washington state.

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit / Nonroad Engine Permit application number CO-1111 (ADP/NEP Application CO-1111) dated February 5, 2025. Copenhaver submitted ADP/NEP Application CO-1111 requesting approval of the following:

- (1) KPI 3055 jaw crusher;
- (2) JCI K400 cone crushers;
- (2) Fab-Tech finish screens;
- (1) Fab-Tech scalp screen; and
- (1) Caterpillar engine-driven generator set.

The current permitting action provides approval for new crushing and screening equipment as proposed in ADP/NEP Application CO-1111.

4. PROCESS DESCRIPTION

4.a. Rock Crushing. Portable equipment is used to crush and screen raw aggregate mined from Abe Creek Quarry or other temporary locations. Crushing equipment is arranged in sequence for primary, secondary, and tertiary crushing. The screening unit is placed between the crushing stages to size material. Raw aggregate will be fed into the crushing equipment using payloaders. Crushed aggregate is transferred via conveyor belt from the crusher equipment to storage piles. High pressure spray/fog nozzles are used to

control fugitive dust emissions at the entrance of each crusher and screen. Other emission points are watered as necessary to control fugitive dust emissions.

4.b. Auxiliary Power Generation. Portions of this facility are powered by a portable diesel engine driven generator.

5. EQUIPMENT/ACTIVITY IDENTIFICATION

5.a. KPI / 3055 Jaw Crusher (*new*). This unit is an electrically powered, trailer mounted jaw 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:	KPI / 3055 (ID - PC420327)
Year Built:	2023
Capacity:	300 tph
NSPS Applicable:	Subpart OOO
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.b. JCI / K400 Cone Crusher (*new*). This unit is an electrically powered, trailer mounted cone 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:	JCI / K400 (ID – PC346817)
Year Built:	2017
Capacity:	300 tph
NSPS Applicable:	Subpart OOO
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.c. JCI / K400 Cone Crusher (*new*). This unit is an electrically powered, trailer mounted cone 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:	JCI / K400 (ID – PC347317)
Year Built:	2017
Capacity:	300 tph
NSPS Applicable:	Subpart OOO
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.d. Fab-Tech Aggregate Screen (*new*). This unit is a trailer mounted aggregate screen. Wet suppression is used as necessary to control dust emissions at associated material handling points.

Make / Model:	Fab-Tech / Finish Screen (ID – PC820351317)
Year Built:	2017
Size:	8x20 (2-deck)
Capacity:	300 tph
NSPS Applicable:	Subpart OOO
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.e. Fab-Tech Aggregate Screen (*new*). This unit is a trailer mounted aggregate screen. Wet suppression is used as necessary to control dust emissions at associated material handling points.

Make / Model:	Fab-Tech / Finish Screen (ID – PC820351617)
Year Built:	2017
Size:	8x20 (2-deck)
Capacity:	300 tph
NSPS Applicable:	Subpart OOO
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.f. Fab-Tech Aggregate Screen (*new*). This unit is a trailer mounted aggregate screen. Wet suppression is used as necessary to control dust emissions at associated material handling points.

Make / Model:	Fab-Tech / Scalp Screen (ID – PC820351217)
Year Built:	2017
Size:	8x20
Capacity:	300 tph
NSPS Applicable:	Subpart OOO
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.g. Haul Roads and Storage Piles (*new*). Vehicle traffic and material handling operations generate fugitive dust emissions. Haul roads may be paved and/or unpaved depending on the location at which the facility is operating. Fugitive emissions from storage piles and haul roads are minimized with the use of low pressure wet suppression.

5.h. Nonroad Diesel Engine – Caterpillar Generator Set (*new*). This engine powers a trailer mounted generator set. This unit is classified as a nonroad engine due to its mobile use.

Make / Model:	Caterpillar / D3516DITA (s/n 73Z00513)
Power Rating:	1,615 bhp
Fuel Type:	Diesel
Fuel Consumption:	40.0 gal/hr
Model Year:	1991
EPA Certification:	N/A
Federal Regulations:	N/A
Exhaust:	8" diameter, vertical at ~12.3' above ground level
Location:	46° 02' 54.29" N 122° 50' 30.80" W (*initial location*)

5.i. Equipment/Activity Summary.

ID No.	Equipment/Activity	Control Equipment/Measure
1	KPI Jaw Crusher	High Pressure Wet Suppression
2	JCI Cone Crusher	High Pressure Wet Suppression
3	JCI Cone Crusher	High Pressure Wet Suppression
4	Fab-Tech Aggregate Screen	High Pressure Wet Suppression
5	Fab-Tech Aggregate Screen	High Pressure Wet Suppression

ID No.	Equipment/Activity	Control Equipment/Measure
6	Fab-Tech Aggregate Screen	High Pressure Wet Suppression
7	Haul Roads and Storage Piles	Wet suppression
8	Nonroad Engine – Caterpillar Generator Set (Caterpillar – 1,615 hp)	Ultra-low sulfur diesel

6. EMISSIONS DETERMINATION

Emissions to the ambient atmosphere from the new and existing equipment proposed in ADP/NEP Application CO-1111 consist of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM), and sulfur dioxide (SO_2).

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*). Potential emissions from aggregate crushing operations are calculated based on a maximum material throughput of 250,000 tpy and applicable emission factors. Except for primary crushing, all emission factors for rock crushing are 'controlled' emission 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 emission factor for primary crushing. An 'uncontrolled' PM_{10} emission factor was calculated using a PM to PM_{10} ratio of 2.1:1 as specified in the 1/95 table footnotes. An 'uncontrolled' $PM_{2.5}$ emission factor was calculated using a PM to $PM_{2.5}$ ratio of 12:1 as cited for tertiary crushing in the 8/04 version of the table. A control efficiency of 80% (wet suppression) was applied to produce 'controlled' emission factors.

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.

Annual emissions from aggregate crushing operations will be calculated based on actual material throughput using the same methodology.

Total Emissions:	PM	0.77 tpy
	PM_{10}	0.29 tpy
	$PM_{2.5}$	0.049 tpy

Activity	Throughput (tpy)	Pollutant	Emission Factor - Controlled (lb/ton)	Turn Points	Emissions (tpy)
Primary crushing	250,000	PM	0.00014		0.018
		PM_{10}	0.000067		0.008
		$PM_{2.5}$	0.000012		0.002
Secondary crushing	250,000	PM	0.0012		0.150
		PM_{10}	0.00054		0.068
		$PM_{2.5}$	0.0001		0.013
Tertiary crushing	250,000	PM	0.0012		0.150
		PM_{10}	0.00054		0.068
		$PM_{2.5}$	0.0001		0.013
Screening	250,000	PM	0.0022		0.275
		PM_{10}	0.00074		0.093
		$PM_{2.5}$	0.00005		0.006
Loading/conveying	250,000	PM	0.00014	10	0.175
		PM_{10}	0.000046		0.058
		$PM_{2.5}$	0.000013		0.016

6.b. Haul Roads (*new*). Potential emissions from unpaved haul roads are calculated based on an average truck weight of 27 tons, an average silt content of 4.8%, an average round trip distance of 0.5 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 17 tons and aggregate loads of 20 tons. 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 = 4.9 (PM_{30}), 1.5 (PM_{10}). 0.15 ($PM_{2.5}$)
a = 0.7 (PM_{30}), 0.9 (PM_{10}). 0.9 ($PM_{2.5}$)
b = 0.45 (PM_{30}), 0.45 (PM_{10}). 0.45 ($PM_{2.5}$)

Material Shipped =	250,000	tons
Average Truck Weight =	27.0	tons
Round Trip Distance =	0.50	miles
Average Load =	20.0	tons
Total # of Trips =	12,500	loads
Total Miles Traveled =	6,250	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	6.94	1.39	4.33	AP-42 13.2.2 (11/06)
PM_{10}	1.77	0.35	1.10	AP-42 13.2.2 (11/06)
$PM_{2.5}$	0.18	0.04	0.110	AP-42 13.2.2 (11/06)

6.d. Nonroad Diesel Engine – Caterpillar Generator Set (*new*). Potential emissions from engine operation are calculated based on 1,800 hr/yr of operation at full rated load, use of ultra-low sulfur diesel (<0.0015% sulfur by weight), and applicable emission factors. Sulfur oxide emissions are estimated using mass balance methodology, assuming all fuel sulfur is converted to sulfur dioxide. Annual emissions will be calculated from actual hours of operation using the emission factors identified below.

Operation =	1,800	hr/yr
Power Output =	1,698	horsepower
Fuel Sulfur Content =	0.0015	% by weight
Fuel Consumption Rate =	40.0	gal/hr
Fuel Heat Content =	0.138	MMBtu/gal (40 CFR 98)

Pollutant	Emissions lb/hr	tpy	EF Source
NO_X	40.75	36.68	AP-42 Table 3.4-1
CO	9.34	8.41	AP-42 Table 3.4-1
VOC	1.20	1.080	AP-42 Table 3.4-1
SO_X as SO_2	0.0086	0.0077	Mass Balance
$PM/PM_{10}/PM_{2.5}$	1.19	1.070	AP-42 Table 3.4-1

	EF		Emissions		
	kg/MMBtu	lb/MMBtu	lb/gallon	tpy	
CO_2e	73.9636	163.61	22.58	813	40 CFR 98

6.f. 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	36.68	36.68
CO	8.41	8.41
VOC	1.08	1.08
SO_2	0.008	0.008
Lead	0.00	0.00
PM	5.96	5.96
PM_{10}	2.25	2.25
$PM_{2.5}$	1.01	1.01
TAP	0.0	0.0
HAP	0.0	0.0
CO_2e	813	813

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-1111.

7.b. 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" applies to each compression ignition (CI) internal combustion engine (ICE) that commences construction after July 11, 2005 and is manufactured after April 1, 2006, or that is modified or reconstructed after July 11, 2005. The Caterpillar Generator engine is classified as a nonroad engine and not subject to NSPS.

7.c. 40 CFR 63 Subpart ZZZZ "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 Caterpillar generator engine is classified as a nonroad engine and not subject to NESHAP/MACT.

7.d. 40 CFR 1039 "Control of Emissions from New and In-use Nonroad Compression Ignition Engines" establishes standards for new nonroad 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.e. 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.f. 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.g. Washington Administrative Code (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.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, sulfur dioxide, concealment and masking, and fugitive dust.

7.i. 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 1039. This regulation is applicable to the nonroad engines proposed for use by the permittee.

7.j. 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.k. 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.l. 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.m. 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.n. 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.o. 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:

8.a. Nonroad Engine. The nonroad engine proposed in this permitting action is not subject to BACT.

New BACT Determinations

8.b. BACT Determination – Rock Crushing and Aggregate Screening. The 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. 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.c. BACT Determination – Fugitive Dust. The 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 for this source.

Other Determinations

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

Conclusions

9.a. Operation of new rock crushing equipment, as proposed in ADP/NEP Application CO-1111, 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.b. Operation of new rock crushing equipment, as proposed in ADP/NEP Application CO-1111, 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.c. Operation of new rock crushing equipment, as proposed in ADP/NEP Application CO-1111, 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 25-3685 in response to ADP/NEP Application CO-1111. ADP/NEP 25-3685 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-1111. 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 25-3685 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. Specific monitoring requirements are established for hours of operation, haul road mileage, and material throughput.

10.c. Reporting Requirements. ADP/NEP 25-3685 establishes general reporting requirements for annual air emissions, upset conditions and excess emissions. Specific reporting requirements are established for hours of operation, haul road mileage, and material throughput. Reports are to be submitted on an annual basis.

10.d. Rock Crushing Equipment. Permit requirements for the proposed rock crushing equipment are consistent with the operating scheme and material data submitted by the applicant. Visible emission limits have been established consistent with proper operation of the proposed equipment and wet suppression systems. High pressure spray systems (≥80 psig) have been determined to be a minimum BACT requirement for individual rock crushers and screens.

10.e. Nonroad Engine – Visible Emission Limits. Visible emissions from nonroad engines are limited to 10% opacity. Visible emissions should not exceed this level if the engines are operating properly. For nonroad engines, SWCAA uses this as a surrogate indicator that the engines are in good repair (rather than a tailpipe emission standard otherwise precluded by 40 CFR 1039). This restriction is appropriate because if the engine is not maintained in good repair, emissions are likely to greatly exceed expected emission levels and could cause an exceedance of a state or federal ambient air quality standard.

10.f. Nonroad Engine – Fuel Limitation. The use of ultra-low-sulfur diesel ($\leq$0.0015% by weight) is a reasonable control measure that reduces SO_X and PM emissions relative to fuels with a higher sulfur content. The permit allows the use of "#2 diesel or better." 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.

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.

Diesel Engine Startup. Diesel engines may exhibit higher than normal opacity during startup. Accordingly, the visual emissions limit for the diesel engine power unit is not applicable during the startup period defined in the permit. General opacity standards continue to apply.

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 from 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 rock 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. No notices of violation have been issued to the Copenhaver facility in the last 5 years.

14. PUBLIC INVOLVEMENT OPPORTUNITY

14.a. Public Notice for ADP/NEP Application CO-1111. Public notice for ADP/NEP Application CO-1111 was published on the SWCAA internet website for a minimum of (15) days beginning on February 6, 2025.

14.b. Public/Applicant Comment for ADP/NEP Application CO-1111. SWCAA did not receive specific comments, a comment period request or any other inquiry from the public regarding this ADP/NEP 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 Copenhaver in conjunction with ADP Application CO-1111. After reviewing the checklist, SWCAA has made a Determination of Nonsignificance (DNS 25-006) concurrent with issuance of ADP 25-3685.