



TECHNICAL SUPPORT DOCUMENT

**Air Discharge Permit 23-3572
Air Discharge Permit Application CO-1065**

Issued: March 30, 2023

Sound Placement Services

SWCAA ID – 2323

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Southwest Clean Air Agency

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ABBREVIATIONS

List of Acronyms

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

List of Units and Measures

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

List of Chemical Symbols, Formulas, and Pollutants

C ₃ H ₈	Propane	PM	Particulate Matter with an aerodynamic diameter 100 µm or less
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	VOC	Volatile organic compound
O ₂	Oxygen		
O ₃	Ozone		

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: Sound Placement Services, LLC
Applicant Address: PO Box 1649, Castle Rock, WA 98611

Facility Name: Sound Placement Services, LLC
Facility Address: 4562 Westside Highway, Castle Rock, WA 98611

SWCAA Identification: 2323

Contact Person: Tom Howard, Manager

Primary Process: Concrete Batch Plant and Production of Concrete Products
SIC/NAICS Code: 3273: Ready Mix Concrete
327320: Mix Concrete Manufacturing

Facility Classification: Natural Minor

2. FACILITY DESCRIPTION

Sound Placement Services, LLC (Sound Placement Services) operates a truck mix concrete plant. The facility primarily produces pre-cast concrete products such as retaining walls, septic tanks, and sewer manholes.

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit (ADP) application number CO-1065 dated February 24, 2023. Sound Placement Services submitted ADP application CO-1065 requesting the following:

- Installation and operation of a replacement boiler

ADP 23-3572 will supersede ADP 20-3415 in its entirety.

4. PROCESS DESCRIPTION

- 4.a. Concrete Production. Concrete is produced at this facility using a truck-mix concrete batch plant. Bulk sand and aggregate are received in bulk and stored in outdoor piles. Cement is received pneumatically in bulk and stored in a vertical silo. To make concrete, a mixer truck is parked under a cement silo and water is added to the mixer. Cement, sand, and aggregate are slowly added through an enclosed loading chute from a cement silo via dedicated weigh hopper. Sand and aggregate are fed to the loading chute from a

conveyor fed hopper. The hopper is filled from storage by a front-end loader. Water used in the production process is heated when necessary, using a hot water boiler. Cement silos are vented to shaker style vent filters.

- 4.b. Boiler – Process Water. This facility operates on propane-fired hot water boiler to provide hot water to the manufacturing facility. The need for hot water is limited, therefore boiler operation is limited.

5. EQUIPMENT/ACTIVITY IDENTIFICATION

- 5.a. Concrete Batch Plant (existing). This unit is a truck-mix concrete batch plant. Concrete production has the potential to emit fugitive emissions from the loading of sand and aggregate into feed hoppers and the transfer of sand, aggregate, and cement to mixer trucks. The loading chute from the sand and aggregate conveyor and the cement silo/weigh hopper is almost completely closed. Materials are metered into the truck slowly both for product quality and to prevent the generation of significant dust. This unit has a maximum production capacity of approximately 36 cubic yards per hour.

- 5.b. Cement Silo (existing). This unit is a vertical bulk silo used to store cement. The unit is pneumatically loaded from trucks. The silo headspace is passively exhausted through a dedicated vent filter.

Make/Model:	McNeilus
Capacity:	36 tons
Vent Filter Make/Model:	Stephens/SV-170 (s/n 2659)
Number of Bags:	16
Bag Size:	7" diameter by 72" length
Filtration Area:	170 ft ²

- 5.c. Cement Silo (existing). This unit is a vertical bulk silo used to store cement. The unit is pneumatically loaded from trucks. The silo headspace is exhausted through a dedicated vent filter using a small electric blower.

Make/Model:	Vince Hagan
Capacity:	350 barrels
Vent Filter Make/Model:	Vince Hagan/ES-168B
Number of Bags:	14
Bag Size:	8" diameter by 35" length
Filtration Area:	86 ft ²

- 5.d. Boiler (new). This unit is used on an infrequent basis to supply hot water for use in the concrete batch plant. Unit operation is limited to 6,000 gallons of propane per year.

Boiler Manufacturer:	Camus
Model Number:	BF1020-2GI
Heat Rate:	1.02 MMBtu/hr

Fuel Consumption Rate: 5.9912 gal/hr
 Stack Dimensions: 15' high and 16" in diameter
 40 CFR 60 Subpart Dc: Not Applicable
 40 CFR 63 Subpart JJJJJ: Not Applicable

5.e. Fugitive Emissions – Haul Roads. Fugitive dust emissions are generated by truck traffic on facility haul roads. Haul roads have both paved and unpaved sections.

5.f. Equipment/Activity Summary.

ID No.	Equipment/Activity	Control Equipment/Measure
1	Concrete Batch Plant (Material Loadout/Handling)	Loading Chute Enclosure, Wet Suppression
2	Cement Silo (McNeilus – 36 ton)	Process Enclosure, Vent Filter
3	Cement Silo (Hagan – 350 barrel)	Process Enclosure, Vent Filter
4	Boiler (1.020 MMBtu/hr)	Low-ash Fuel (Propane)
5	Haul Roads	Low-Pressure Wet Suppression

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. Concrete Batch Plant/Loadout (existing). Potential emissions from operation of the concrete batch plant are calculated using emission factors from EPA AP-42, table 11.12-5 (6/06) and a maximum annual production of 15,000 cubic yards. All PM₁₀ emissions are assumed to be PM_{2.5}.

Concrete Produced =	15,000	cubic yards		
	PM	PM ₁₀	PM _{2.5}	
Concrete Emissions	lb/yd ³	lb/yd ³	lb/yd ³	Emissions Factor Source
aggregate delivery to ground storage	0.0064	0.0031	0.0031	AP-42 Table 11.12-5 (6/06)
sand delivery to ground storage	0.0015	0.0007	0.0007	AP-42 Table 11.12-5 (6/06)
aggregate transfer to conveyor	0.0064	0.0031	0.0031	AP-42 Table 11.12-5 (6/06)
sand transfer to conveyor	0.0015	0.0007	0.0007	AP-42 Table 11.12-5 (6/06)
aggregate transfer to elevated storage	N/A	N/A	N/A	Not conducted
sand transfer to elevated storage	N/A	N/A	N/A	Not conducted
cement delivery to silo	0.0002	0.0001	0.0001	AP-42 Table 11.12-5 (6/06)
cement supplement delivery to silo	N/A	N/A	N/A	Not conducted
weight hopper loading	0.0079	0.0038	0.0038	AP-42 Table 11.12-5 (6/06)
truck mix loading	0.0160	0.0045	0.0045	AP-42 Table 11.12-2 (6/06)
Total	0.0399	0.0160	0.0160	
Pollutant	lb/yd concrete	lb/yr	tpy	
PM	0.0399	599	0.30	
PM ₁₀	0.0160	240	0.12	
PM _{2.5}	0.0160	240	0.12	

Annual emissions must be calculated using the emission factors identified above unless new emission factors are developed through source testing.

- 6.b. Boiler (new). Potential emissions from operation of the hot water boiler are calculated from the maximum fuel usage of 6,000 gallons of propane per year and applicable emission factors. The emission factor for SO₂ is derived using mass balance and a maximum fuel sulfur content of 185 ppmw. Emission factors for all other pollutants are taken from EPA AP-42, section 1.5 (07/08).

Propane Consumption =	6,000	gal/yr				
Heat Input Rating =	1.02	MMBtu/hr				
Propane Heat Content =	91.5	MMBtu/1,000 gal for AP-42 emission factors				
Propane Heat Content =	92	MMBtu/1,000 gal for 40 CFR 98 GHG emission factors				
Operating Hours =	8,760	hours per year				
Propane Consumption =	5.99	gal/hr				
Propane Sulfur Content =	185	ppmw				
Propane Weight =	4.24	lbs/gallon				
	Emissions	Emissions	Emissions	Emissions	Emission Factor	
Pollutant	lb/MMBtu	lb/1,000 gal	lb/hr	tpy	Source	
NO _x	0.1471	13.46	0.081	0.040	AP-42 Section 1.5	
CO	0.0824	7.54	0.045	0.023	AP-42 Section 1.5	
VOC	0.0054	0.49	0.0030	0.0015	AP-42 Section 1.5	
SO _x as SO ₂	0.01715	1.57	0.0094	0.0047	Mass Balance	
PM	0.00745	0.68	0.0041	0.0020	AP-42 Section 1.5	
PM ₁₀	0.00745	0.68	0.0041	0.0020	AP-42 Section 1.5	
PM _{2.5}	0.00745	0.68	0.0041	0.0020	AP-42 Section 1.5	
			CO ₂ e	CO ₂ e	CO ₂ e	Emission Factor
Greenhouse Gases	kg/MMBtu	GWP	lb/MMBtu	lb/1,000 gal	tpy	Source
CO ₂	61.71	1	136.05	12,516	37.3	40 CFR 98
CH ₄	0.003	25	0.165	15	0.05	40 CFR 98
N ₂ O	0.0006	298	0.394	36	0.1	40 CFR 98
Total GHG - CO ₂ e	61.7136		136.607	12,568	37.5	

Annual emissions must be calculated using the emission factors identified above unless new emission factors are developed through source testing.

6.c. Unpaved Haul Roads (existing). Potential emissions from unpaved haul roads are calculated using an equation from EPA AP-42, section 13.2.2 (11/06).

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

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 (lb/vehicle mile traveled)	0.15	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45

Average Truck Weight =	21.298	tons (assumes 26,500 lb empty truck weight)		
Round Trip Distance =	0.25	miles		
Average Load =	8.00	yards		
Total # of Trips =	1,875	loads		
Total Miles Traveled =	469	miles		
Assumed Silt Content =	4.8	% (Table 13.2.2-1 for Sand and Gravel Processing)		
Assumed Control (wet supp.) =	80	% Engineering Assumption (same as Sec. 13.2.2 citation)		
		Uncontrolled	Controlled	
		EF	EF	Emissions
Pollutant	lb/mile	lb/mile	tpy	Emission Factor Source
PM	6.23	1.25	0.29	AP-42 13.2.2 (11/06)
PM ₁₀	1.59	0.32	0.074	AP-42 13.2.2 (11/06)
PM _{2.5}	0.24	0.049	0.011	AP-42 13.2.2 (11/06)

6.d. Paved Haul Roads (existing). Potential emissions from paved haul roads are calculated using an equation from EPA AP-42 section 13.2.1 (11/06).

$$E = k \left(\frac{sL}{2} \right)^{0.65} * \left(\frac{W}{3} \right)^{1.5} \left(1 - \frac{P}{4N} \right)$$

Where: E = pounds of pollutant per vehicle mile traveled
 sL = road surface silt loading (g/m²)
 W = average vehicle weight (tons)
 P = average # of wet (>0.01" inches of rain) days in time period
 N = number of days in the averaging period
 k = particle size multiplier (lb/vehicle mile traveled (VMT))
 k = 0.082 lb/VMT for PM
 k = 0.016 lb/VMT for PM₁₀
 k = 0.0024 lb/VMT for PM_{2.5}

Average Truck Weight =	21.298	tons
Round Trip Distance =	0.25	miles
Average Load =	8.00	yards
Total # of Trips =	1,875	loads
Total Miles Traveled =	469	miles
silt loading =	0.6	g/m ² (AP-42 Table 13.2.1-4 (11/06))
# of wet days >0.01" =	175	days per year based on WRCC data, 1931-2006 average

Pollutant	k lb/mile	Emissions lb/mile	Emissions tpy	Emission Factor Source
PM	0.0820	0.624	0.15	AP-42 Sec. 13.2.1 (11/06)
PM ₁₀	0.0160	0.122	0.029	AP-42 Sec. 13.2.1 (11/06)
PM _{2.5}	0.0024	0.018	0.0043	AP-42 Sec. 13.2.1 (11/06)

6.e. Emissions Summary

Air Pollutant	Potential to Emit (tpy)	Project Impact (tpy)
NO _x	0.04	N/A
CO	0.02	N/A
VOC	0.00	N/A
SO ₂	0.00	N/A
PM	0.59	N/A
PM ₁₀	0.20	N/A
PM _{2.5}	0.13	N/A

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. 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 tph and portable plants greater than 150 tph that were constructed, reconstructed or modified after August 31, 1983.

This facility processed less than 25 tph, therefore this regulation does not apply.

- 7.b. 40 CFR 63 Subpart JJJJJ [§63.11193 et seq] "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources" establishes national emission limitations and operating limitations for HAP emitted from boilers fired on specific fuels at area sources.

The facility is an area source of HAP and the boiler is classified as a gas boiler therefore, this regulation does not apply to the facility.

- 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 (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.
- 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 ADP for installation and establishment of an air contaminant source.
- 7.e. 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.f. 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.g. 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.h. SWCAA 400-040(2) "Fallout" requires that emissions of PM from any source must not be deposited beyond the property under direct control of the owner(s) or operator(s) of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited. This regulation applies to the facility.
- 7.i. 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.j. 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 source must be managed properly to maintain compliance with this regulation. This regulation applies to the facility.
- 7.k. SWCAA 400-040(6) "Sulfur Dioxide" requires that no person is allowed to emit a gas containing in excess of 1,000 ppm of SO₂, corrected to 7% O₂ or 12% CO₂ as required by the applicable emission standard for combustion sources.

The facility emits SO₂; therefore, this regulation applies to the facility.

- 7.l. SWCAA 400-040(8) "Fugitive Dust Sources" requires that reasonable precautions be taken to prevent fugitive dust from becoming airborne, and minimize emissions. This regulation applies to the facility.
- 7.m. 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.

The facility has combustion units; therefore, this regulation applies to the facility.

- 7.n. 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. The facility has general process units; therefore, this regulation applies to the facility.

- 7.o. 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.p. 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.
- 7.q. 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.

The facility is located in an area that is in attainment for (PM, NO_x, CO, SO₂, O₃); therefore, this regulation applies to the facility.

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 – Cement Storage Silo. The use of process enclosure and high efficiency fabric filtration has been determined to meet the requirements of BACT for cement storage silos at this facility.
- 8.b. BACT Determination – Boiler. The proposed use of low-sulfur fuel (natural gas) and proper combustion controls has been determined to meet the requirements of BACT for the types and quantities of emissions from the boiler. A model was available that had a lower guarantee for NO_x emissions, however the cost of the lower emission unit was more than \$20,000 more than the unit selected. The cost per ton of NO_x emissions reduction was

calculated by SWCAA to be greater than \$27,000 per ton. The unit selected was determined to meet the criteria of BACT due to the exorbitant cost of the lower emission unit.

- 8.c. 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.d. 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, PM, 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.
The new equipment and modifications proposed in ADP application CO-1065 will not affect the type or quantity of TAP emissions from the boiler. The TAP emissions associated with this facility are quantified in Section 6 of this Technical Support Document. All incremental increases in individual TAP emissions are less than the applicable small quantity emission rate (SQER) identified in WAC 173-460.

Conclusions

- 9.c. Construction and operation of a replacement boiler, as proposed in ADP application CO-1065, 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. Construction and operation of a replacement boiler, as proposed in ADP application CO-1065, 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. Construction and operation of a replacement boiler, as proposed in ADP application CO-1065, will not violate 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 23-3572 in response to ADP application CO-1065. ADP 23-3572 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards as discussed below.

- 10.a. Supersession of Previous Permits. ADP 23-3572 supersedes ADP 20-3415 in its entirety. Compliance will be determined under this ADP, not previously superseded ADPs. Existing approval conditions for units not affected by this project have been carried forward unchanged.
- 10.b. Emission Limits. Facility-wide emission limits are based on the sum of the emission limits for approved equipment calculated in Section 6 of this TSD.
- 10.c. Operational Limits and Requirements. The propane boiler has been limited to 6,000 gallons usage per year. BACT was determined based on this limited usage.
- 10.d. Monitoring and Recordkeeping Requirements. ADP 23-3572 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.e. Reporting Requirements. ADP 23-3572 establishes general reporting requirements for annual air emissions, upset conditions, and excess emissions. Specific reporting requirements are established for fuel consumption and material throughput. Reports are to be submitted on an annual basis.

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.

To SWCAA's knowledge, this facility can comply with all applicable standards 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 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. There are no formal emission monitoring or testing requirements for this facility. Emission monitoring and/or testing of the boiler with a combustion analyzer or equivalent was not required because unit operation is very limited ($\leq 6,000$ gallons of propane per year). Emission monitoring and/or testing of the cement silo vent filters was not required due to their displacement configuration and infrequent use.

13. FACILITY HISTORY

- 13.a. General History. A portable concrete batch plant was initially permitted at this location in 2009. That equipment was replaced with the current stationary truck-mix batch plant and propane-fired boiler in 2013.
- 13.b. Previous Permitting Actions. The following past permitting actions have been taken by SWCAA for this facility:

Date Issued	Application	Permit	Description
6/18/2020	CO-1030	20-3415	Increase in boiler fuel consumption limit from 3,000 gallons per year to 6,000 gallons per year.
3/4/2019	CO-1008	19-3325	Installation of new storage silo and increase production from 10,000 cubic yards per year to 15,000 cubic yards per year.
5/15/2014	CO-935	14-3094	Installation for replacement of parts of the batch mix concrete plant and the installation of a propane-fired hot water boiler.
3/2/2009	CO-863	09-2851	Installation of a portable batch mix concrete batch plant.

- 13.c. Compliance History. The following is a summary of all violations that have occurred in the past five years:

NOV	Date	Violation
10215	May 14, 2020	The facility exceeded the propane usage limit. Permit application CO-1030 requested in increase the propane usage limit in response to this exceedance.

14. PUBLIC INVOLVEMENT OPPORTUNITY

- 14.a. Public Notice for ADP Application CO-1065. Public notice for ADP application CO-1065 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 Application CO-1065. SWCAA did not receive specific comments, a comment period request, or any other inquiry from the public or the applicant regarding ADP application CO-1065. Therefore, no public comment period was provided for this permitting action.
- 14.c. State Environmental Policy Act. This project is exempt from SEPA requirements pursuant to WAC 197-11-800(3) since it only involves repair and/or maintenance of existing structures, equipment or facilities, and will not involve material expansions or changes in use. SWCAA issued a Determination of SEPA Exempt (SWCAA 23-014) concurrent with issuance of ADP 23-3572.