Southwest Clean Air Agency

11815 NE 99th Street, Suite 1294 Vancouver, WA 98682-2454 Voice: (360) 574-3058 Fax: (360) 576-0925

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date stamp

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ADP #: _____

Date Fee Paid: _____

SWCAA ID #: _____

AIR DISCHARGE PERMIT ATTACHMENT

MOBILE AND STATIONARY SAND & GRAVEL AND CRUSHED STONE PLANTS PARTICULATE EMISSION AND REVIEW FEE WORKSHEET

Application Fee $500 + Review Fee _____ = $ _____ (to be submitted with application)[1]

Business Name: _____ Phone:_____ Date: _____

Business Address: _____

Street City County State Zip

Equipment Address: _____

Street City County State Zip

Pit Name: _____ **Plant ID:** _____ **Type of Plant:** ☐ Mobile ☐ Stationary

EMISSION POINTS AND ACTIVITIES	ESTIMATED THROUGHPUT (TPY)	PM EMISSION FACTOR (LB/TON)	NUMBER OF UNITS/POINTS/MILES	UNCONTROLLED PM EMISSIONS (TPY)	SUPPRESSION [2] EFFICIENCY ($1-\eta_c$)	CONTROLLED PM EMISSIONS (TPY)
EQUIPMENT (Output Aggregate Size)	A	B	C	(A*B*C/2000)=D	E	D*E=F
Primary Crushing (3" - 12")		0.0007 [3]			0.2	
Secondary Crushing (1" - 4")		0.006 [3]			0.2	
Tertiary Crushing (3/16" - 1")		0.006 [3]			0.2	
Screening		0.011 [3]			0.2	
Loading/Conveying/Piling (Per Transfer Point)		0.0007 [3]			0.2	
Hauling (miles)	N/A	6.2 lb/mile [4]	miles		0.2	
Blasting		0.0015 [5]			1.0	
TOTALS	N/A	N/A	N/A		N/A	

Notes on back TPY = Tons Per Year LB = Pounds TSP = Total Suspended Particulates (TSP = PM) PM = Particulate Matter PM_{10} = Particulate Matter ≤10µm diameter

1 - Submit application and fees by check or money order payable to: Southwest Clean Air Agency, 11815 NE 99th Street, Suite 1294, Vancouver, WA 98682. Fees to be submitted consist of an Application Fee of $500 plus a Review Fee based on SWCAA Regulation 400-110 (1)(d)(x).

2 - Efficiency shown is for wet suppression techniques. Adjust if using different techniques. Typical control efficiencies for fabric filter, 99 %; wet spray systems, 70 - 90 % (80% avg.).

3 - Reference EPA AP-42 Table 11.19.2-2. Emission factors for PM were obtained by multiplying PM_{10} by 2.1.

4 - Reference FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, EPA 454/R-95-012, August 1995, Page EF-67, SCC 3-05-020-11.

5 - Reference EPA AP-42, Table 11.9-1. Calculation assumes blast area of 17,000 ft^2, blast depth of 20 ft, and average material density of 3,240 lb/yd^3.

Explain below where proposed installation is different than allowed for with the emission estimate.

_____

_____

_____

_____

_____

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AIR DISCHARGE PERMIT ATTACHMENT

MOBILE AND STATIONARY SAND & GRAVEL AND CRUSHED STONE PLANTS PRODUCTION EQUIPMENT WORKSHEET

Business Name: _____ Date: _____ Phone: _____

Contact Name / Title: _____ Fax: _____

Production For This Job: _____ (tons total)

Maximum Annual Production: _____ (tons/year)

Proposed Operating Schedule:

_____ am to _____ pm _____ days per week _____ weeks per year _____ total hours per year

Maximum Operating Schedule:

_____ am to _____ pm _____ days per week _____ weeks per year _____ total hours per year

PRODUCT INFORMATION (e.g. pea gravel, oil rock, rip-rap, ½, _ , _ , 1½, 3"-0, etc.)

NAME / TYPE	TONS/YEAR	MOISTURE CONTENT	ORIGIN (e.g. stream bed, dry pit, wet pit, etc.)

EQUIPMENT INFORMATION

Equipment	Type/Configuration	Manufacturer / Model #	Serial #	Date of Mfg.	Capacity (tph)/Size
Primary Crusher					
Screen / Grade					
Secondary Crusher					
Screen / Grade					
Tertiary Crusher					
Screen / Grade					
Quaternary Crusher					
Screen / Grade					
Additional Crusher					
Additional Screen					
Other					
Other					

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AIR DISCHARGE PERMIT ATTACHMENT

MOBILE AND STATIONARY SAND & GRAVEL AND CRUSHED STONE PLANTS

CONTROL EQUIPMENT WORKSHEET

Business Name: _____ Date: _____ Phone: _____

EMISSION CONTROL EQUIPMENT

Type of Control Equipment:

☐ Baghouse (provide detailed information on baghouse worksheet)

Manufacturer: _____ Model #: _____ Size: _____ Serial #: _____

☐ Scrubber (provide detailed information on scrubber worksheet)

Manufacturer: _____ Model #: _____ Size: _____ Serial #: _____

☐ Wet Suppression (minimum water pressure to all points of application is 80 psig at the nozzle)

Control Points: (e.g. exit of jaw, exit of roll, end of conveyor, roadway, etc. - identify on plant layout sketch by number)

1. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
2. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
3. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
4. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
5. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
6. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
7. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
8. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
9. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____
10. _____ ☐ Fog ☐ Spray Bar ☐ Nozzle(s) ☐ Other _____

Mfg. of Fogger: _____ Model: _____ Flowrate: _____(gpm)
Mfg. of Spray Bar: _____ Model: _____ Flowrate: _____(gpm)
Mfg. of Nozzle: _____ Model: _____ Flowrate: _____(gpm)
Mfg. of Other: _____ Model: _____ Flowrate: _____(gpm)

Mfg. of Pump: _____ Model: _____ Size: _____ (hp) Capacity: _____(gpm) at 80 (psig)
(replaceable screen/filter with fine mesh to be installed down stream of pump to ensure spray nozzles do not get plugged)
(pressure gauges to be installed in water supply line at accessible points to verify 80 psig minimum at spray nozzles)

Source of Water: _____

☐ Other (describe below)

_____
_____
_____
_____

☐ Capacity of Water Truck: _____ (gal) Proposed Frequency: _____ (# times per day)
Alternate Dust Suppression Method / Material: _____ (e.g. magnesium chloride)

☐ Attach a sketch of your facility or plan drawing to this application showing the location of crushers, screens, conveyers, stock piles, emission control equipment, locations of spray nozzles, location of pump and water source, and distances to property boundaries. Also include arrows to show the flow of materials.