Lane Regional Air Protection Agency
Standard Air Contaminant Discharge Permit

REVIEW REPORT

Wildish Sand & Gravel Co. **Permit No. 208893**
Plant 2, Stationary Rock Crusher
3600 Wildish Lane
Eugene, Oregon 97408
Website: https://www.wildish.com

Source Information:

SIC	1442 - Stationary Rock Crushing
NAICS	212321 - Construction Sand and Gravel Mining

Source Categories (LRAPA Title 37, Table 1)	B. 61 - Stationary Rock Crusher, 25,000 or more tons/year crushed C. 3 - Source electing to maintain the netting basis C. 4 Source that requests a PSEL equal to or greater than the SER for a regulated pollutant
Public Notice Category	II

Compliance and Emissions Monitoring Requirements:

Unassigned emissions	n
Emission credits	n
Special Conditions	y
Compliance schedule	n

Source test [date(s)]	n
COMS	n
CEMS	n
Ambient monitoring	n

Reporting Requirements:

Annual report (due date)	Feb 15
NSPS Report (due date)	n
Monthly report (due dates)	n

Excess emissions report	y
Other reports	n

Air Programs:

NSPS (list subparts)	OOO (Federal)
NESHAP (list subparts)	CCCCCC
CAM	n
Regional Haze (RH)	n
Synthetic Minor (SM)	y
Part 68 Risk Management	n
Title V	n
ACDP (SIP)	n
New Source Review (NSR)	n

Prevention of Significant Deterioration (PSD)	n
Acid Rain	n
Clean Air Mercury Rule (CAMR)	n
TACT	y

Permitting Action

1. The permit is a renewal for an existing Air Contaminant Discharge Permit (ACDP) which was issued on June 12, 2013 and was originally scheduled to expire on June 12, 2018. The existing permit remains valid until the proposed permit is issued because the facility submitted a timely and complete application for renewal.

   The facility indicated in their 2017 renewal application that no changes have been made to the permit since the last renewal.

Other Permits

2. The parent company, Wildish Building Material Co., has two other air quality permits for this location: the facility has a Standard permit for an asphalt plant (permit number 208871) and is also assigned to a General permit (AQGP-009) for a concrete plant (source number 208948).

3. Wildish Building Material Co. also has a GDF (Gasoline Dispensing Facility) registration with LRAPA for this location due to a gasoline throughput of less than 10,000 gallons per month.

Attainment Status

4. The facility is located in a maintenance area for CO and PM_{10}. The area is in attainment for all other criteria pollutants.

General Background Information

5. Wildish Sand & Gravel Co. ("Wildish" or "the facility") operates a stationary rock-crushing operation in Eugene, Oregon. The facility produces a maximum of 700 tons per hour of finished product. Fugitive emissions are controlled by water spray and track out reduction measures. The facility operates approximately 4,992 hours per year (16 hours per day, 6 days per week, and 52 weeks per year).

Reasons for Permit Issuance

6. The facility's activity is listed in LRAPA Title 37, Table 1, Part B and therefore is required to have an ACDP. This is an existing facility applying for a renewal of its ACDP. Lane Regional Air Protection Agency (LRAPA) has determined that the facility must obtain a Standard ACDP for the following reasons: The facility's requested PSEL is greater than the SER (Significant Emission Rate) for one or more regulated pollutants; and to maintain the facility's netting basis (LRAPA 37-0025(6)(a)(A)).

Emission Unit Description

7. The facility controls particulate matter emissions by using water spray and track out reduction measures. Other specific emission sources include:

Emission Unit (EU)	Pollution Controls
Stationary Rock Crusher	Water spray and track out reduction measures

Emission Unit (EU)	Pollution Controls
Aggregate Insignificant Activities – Gasoline Dispensing Facility (GDF)	Submerged filling

Compliance History

8. The facility was inspected on the following dates:

Date Inspected	**Results**
07/07/1994	In Compliance
08/02/1995	In Compliance
04/22/1996	In Compliance
08/14/1997	In Compliance
04/08/1998	In Compliance
07/31/2003	In Compliance
04/11/2017	In Compliance – Monitoring and Reporting
04/25/2018	In Compliance – Fugitive Emissions
02/06/2019	In Compliance – Monitoring and Reporting

9. There have not been any enforcement actions issued to this facility.

Aggregate Insignificant Activity – Gasoline Dispensing Facility (GDF)

10. The facility has one above-ground gasoline storage tank with a 10,000 gallon capacity that was installed in 2000. The monthly throughput is less than 10,000 gallons. This emission unit is subject to the applicable requirements of LRAPA's emission standards for Gasoline Dispensing Facilities [LRAPA 44-170 through 44-280]. The GDF is also subject to the applicable federal requirements of 40 CFR 63 Subpart CCCCCC (6C).

    The GDF is considered an insignificant emission unit (IEU) because the emissions are below de minimis levels for VOC and HAPs. The GDF was installed prior to the 2008 applicability date for GDFs and is considered an existing source. The above-ground storage tank is 10,000 gallons and makes the facility subject to LRAPA 44-230(1)(a) through 44-230(1)(e) and LRAPA 44-190(5).

    Because this storage tank has a capacity of more than 250 gallons, the facility must comply with the work practices requirements and the submerged fill requirements in LRAPA 44-230. The facility is not subject to the vapor balancing requirements in LRAPA 44-240 because the throughput is below the thresholds in LRAPA 44-190(4).

Plant Site Emission Limits (PSELs) Information

11. The regulated pollutants emitted from processes at this facility are particulate matter (PM), particulate matter less than ten microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$).

    The facility existed during the baseline period (1978). The production rate in 1978 was 1,150,000 tons per year as reported in the LRAPA Emission Inventory file for this facility. Current baseline emissions and Plant Site Emission Limits (PSELs) are based upon ODEQ's emission factors for rock crushers. Previous baseline emissions estimates used the more detailed factors from AP-42. However, for consistency, the general permit emission factors are employed with this renewal. The table below summarizes the facility's annual plant site emissions.

Annual Plant Site Emission Limits (PSELs)
(tons per year)

Pollutant	Baseline Emission Rate	Netting Basis		Plant Site Emission Limit (PSEL)			Increase over Netting Basis	SER
	(ton/yr)	Previous (ton/yr)	Proposed (ton/yr)	Previous (ton/yr)	**Proposed (ton/yr)**	Change (ton/yr)	(ton/yr)	(ton/yr)
PM	23.6	23	23	47	**47**	0	24	25
PM_{10}	11.5	12	12	26	**26**	0	14	15
$PM_{2.5}$	NA	0.7	0.7	9	**9**	0	8.3	10

a. The proposed PSELs are derived by adding the generic PSEL level to the netting basis except for $PM_{2.5}$. The Potential to Emit (PTE) for $PM_{2.5}$ is less than the 10 ton/yr SER so the generic PSEL level is used for $PM_{2.5}$.

b. PSELs for CO, NO_X, SO_2,VOCs, HAPs, and GHGs are not included in this permit since emissions of these pollutants are less than the respective de minimis emission rates.

c. The PSEL is a federally enforceable limit on the potential to emit.

d. The $PM_{2.5}$ PSEL and netting basis was established as part of the previous permit renewal.

e. Detailed emission calculations are attached to this review report.

f. Recordkeeping of the parameters listed in Condition 29 of the permit will be used to ensure compliance with the PSELs.

Significant Emission Rate (SER)

12. Additional permit requirements, such as New Source Review (NSR) and Prevention of Significant Deterioration (PSD), may be triggered if the PSEL increase over the Netting Basis is greater than the SER. The proposed PSEL minus the Netting Basis is less than the SER for each pollutant, thus no further air quality analysis is required.

Criteria Pollutants

13. A major source is a facility that has the potential to emit 100 tons per year or more of any criteria pollutant, as specified in the definition of "Major Source" (LRAPA Title 12). This facility is not a major source of criteria pollutant emissions.

14. A source that has potential to emit at the major source levels but accepts a PSEL below major source levels is called a synthetic minor (SM). This source does have the potential to emit at major source levels, therefore it is a synthetic minor.

Hazardous Air Pollutants (HAPs)/Toxic Air Contaminants

15. Under the Cleaner Air Oregon program, only existing sources that have been notified by LRAPA and new sources are required to perform risk assessments. This source has not been notified by LRAPA and is therefore, not yet required to perform a risk assessment or report annual emissions of toxic air contaminants.

    LRAPA required reporting of approximately 600 toxic air contaminants in 2016 and regulates approximately 260 toxic air contaminants that have Risk Based Concentrations established in rule. All 187 hazardous air pollutants are on the list of approximately 600 toxic air contaminants. The hazardous air pollutants and toxic air contaminants listed below were reported by the source in 2016 and verified by LRAPA. After the source is notified by LRAPA, they must update their inventory and perform a risk assessment to see if they must reduce risk from their toxic air contaminant emissions. Until then, sources will be required to report toxic air contaminant emissions triennially.

16. A major source for hazardous air pollutants (HAPs) is a facility that has the potential to emit 10 or more tons per year of any single HAP or 25 or more tons per year of combined HAPs. This facility is not a major source of hazardous air pollutants. Provided below is a summary of the HAP and toxic air contaminant emissions.

Hazardous Air Pollutant/Toxic Air Contaminants	Potential to Emit (pounds/year)
*Silica, crystalline (respirable)	760
*Aluminum	114
Manganese	4
*Barium	1.7
*Zinc	0.75
Lead	0.38
*Copper and copper compounds	0.28
Chromium trioxide	0.21
Nickel	0.21
Arsenic	0.17
Cobalt	0.084
Beryllium	0.008
Cadmium	0.008
Selenium	0.008
Total	881.85

*Indicates toxic air contaminants reported that are not hazardous air pollutants.

National Emission Standards for Hazardous Air Pollutants (NESHAPS) Applicability

17. The facility is subject to 40 CFR 63, Subpart CCCCCC, Gasoline Dispensing Facilities, but this subpart has not been adopted by LRAPA. Under LRAPA 37-0066(3)(a), Standard ACDPs exclude federal requirements not adopted by the LRAPA Board of Directors. Therefore, the requirements for Subpart CCCCCC are not included in the permit, but the table below summarizes the parts of Subpart CCCCCC that are applicable to the facility.

40 CFR 63 Subpart 6C Citation	Description	Applicable to Source (Yes/No)	Comments	Permit Condition
63.11110	Purpose	Yes	None	--
63.11111	Applicability	Yes	The facility is a GDF and has a monthly throughput of less than 10,000 gallons per month.	--
63.11112	Emission sources covered	Yes	Gasoline storage tanks and associated equipment are applicable	--
63.11113	Compliance dates	Yes	The compliance date for an existing source is no later than January 10, 2008.	--
63.11115	General duties	Yes	None	--
63.11116	Requirements: <10,000 gallons per month	Yes	None	--
63.11117	Requirements: ≥ 10,000 gallons per month	No	None	--
63.11118	Requirements: ≥ 100,000 gallons per month	No	None	--
63.11120	Testing and monitoring	No	None	--
63.11124	Notifications	Yes	None	--
63.11125	Recordkeeping	Yes	Keep records of malfunctions as listed under 40 CFR 63.11125(d)	--
63.11126	Reporting	Yes	Report any malfunctions.	--
63.11130	General provisions	Yes	None	--
63.11131	Implementation and enforcement	Yes	None	--
63.11132	Definitions	Yes	None	--

New Source Performance Standards (NSPS) Applicability

18. LRAPA adopted the NSPS 40 CFR Part 60, Subpart OOO, Nonmetallic Mineral Processing Plant, by reference for major sources only (LRAPA Title 46-535(3)-qqq). The facility is not a major source and is therefore subject to the standards, monitoring, and testing requirements of Subpart OOO through EPA but not through LRAPA.

19. 40 CFR Part 60, Subpart UUU is not applicable to the facility because there are no operations of any of the affected equipment at the plant site (e.g. dryers or calciners).

TACT Applicability

20. The facility is required to meet Typically Available Control Technology since emissions of PM are greater than five (5) tons per year. While a formal TACT determination has not been completed, LRAPA has determined the facility is likely meeting TACT by conducting the following activities: [LRAPA 32-008]

    a. Emission of PM from this facility will be controlled by the use of water sprays or their equivalent at all screening points and on other areas of the facility as required by the Fugitive Dust Control Plan. This type of control equipment is considered TACT for this industry; and

    b. Preventive maintenance will be required for the control equipment as a means to assure effective performance; and

    c. A Fugitive Dust Control Program is required for the yard and haul roads.

Process Weight Limit

21. There have been no source tests required, nor performed at this facility. The use of emission factors is allowed because there is no established reference method to test for fugitive particulate emissions.

Source Testing

22. There have been no source tests required, nor performed at this facility. The use of emission factors is allowed because there is no established reference method to test for fugitive particulate emissions.

Operation and Maintenance Requirements (O&M)

23. The facility is required to maintain water spray control devices on all three (3) screening points at the plant site. Emission estimates and the annual production limit are based on emission factors which assume that the three (3) transfer points are controlled with water sprays.

Additional Limitations

24. The permit includes visible emissions standards, and the fugitive dust emission requirements in LRAPA 48-015. Following the Fugitive Dust Control Program, and the O&M Plan should assure compliance with the visible emissions, and the fugitive dust requirements.

Public Notice

25. The draft permit was on public notice from June 30, 2020 to August 3, 2020. No written comments were submitted during the 35-day comment period.

Wildish Crusher Emission Details

Rock Crushers with Ancillary Equipment					
Pollutant	Projected Max. Throughput (ton/yr)	Emission Factor (lbs PM/ton)	Conversion Factor (tons/lb)	Annual Emissions (tons)	Potential to Emit (tons)
PM	2,300,000	0.04	0.0005	46	122.6
PM_{10}	2,300,000	0.02	0.0005	23	61.3
$PM_{2.5}$	2,300,000	0.0012	0.0005	1.4	3.7

PM Emission Factors were obtained from DEQ AQ-EF06 for rock crushing opertions controlled by water spray

Projected Annual Emissions = Projected Maximum Throughput x Emission Factor x Conversion Factor.

Potential to Emit based on maximum production rate at full time operation (700 ton/hr x 24 hr/day x 365 day/yr)

1978 Baseline and Netting Basis				
Pollutant	Projected Max. Throughput (ton/yr)	Emission Factor (lbs PM/ton)	Conversion Factor (tons/lb)	Annual Emissions (tons)
PM	1,150,000	0.04	0.0005	23.0
PM_{10}	1,150,000	0.02	0.0005	11.5

PM Emission Factors were obtained from DEQ AQ-EF06 for rock crushing opertions controlled by water spray

$PM_{2.5}$ Netting Basis	
PM_{10} Revised Netting Basis	12.0
$PM_{2.5}$ Fraction	0.06
$PM_{2.5}$ Netting Basis	0.7
$PM_{2.5}$ PSEL	9.0

$PM_{2.5}$ Fraction = (EF/EF)

$PM_{2.5}$ Netting Basis = Netting Basis x Fraction

$PM_{2.5}$ PTE is less than the 10 ton/yr SER so the Generic PSEL is used for $PM_{2.5}$.