

February 2, 2023

Mr. Brent Kerr
Columbia Northwest Recycling
PO Box 947
North Plains, Oregon 97133

Subject: Final Air Discharge Permit / Nonroad Engine Permit for Installation of Crushing Equipment and Generator Engines

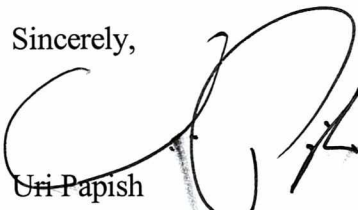
Dear Mr. Kerr:

A final determination to issue Air Discharge Permit / Nonroad Engine Permit 23-3563 has been completed for Air Discharge Permit / Nonroad Permit Application CL-3064 pursuant to Section 400-110(4) of the General Regulations for Air Pollution Sources of the Southwest Clean Air Agency (SWCAA). Public notice for Air Discharge Permit Application CL-3064 was published on SWCAA's internet website on November 27, 2018. SWCAA did not receive a request for a public comment period in response to the public notice and has concluded that significant public interest does not exist for this determination. Therefore, a public comment period will not be provided for this permitting action. Electronic copies of Air Discharge Permit / Nonroad Permit 23-3563 and the associated Technical Support Document are available for public review in the permit section of SWCAA's internet website (<http://www.swcleanair.gov/permits/adpfinal.asp>). Original copies are enclosed for your files.

This Air Discharge Permit / Nonroad Engine Permit may be appealed directly to the Pollution Control Hearings Board (PCHB) at P.O. Box 40903, Olympia, Washington 98504-0903 within 30 days of receipt as provided in RCW 43.21B.

If you have any comments, or desire additional information, please contact me or Vanessa McClelland at (360) 574-3058, extension 129.

Sincerely,



Uri Papish
Executive Director

UP: vm

Enclosures: Technical Support Document and Air Discharge Permit 23-3563





SWCAA
Southwest Clean Air Agency

**AIR DISCHARGE PERMIT / NONROAD ENGINE PERMIT
23-3563**

Issued: February 2, 2023

Columbia Northwest Recycling
Portable

SWCAA ID - 2155

REVIEWED BY:

Clinton H. Lamoreaux
Clinton Lamoreaux, Chief Engineer



APPROVED BY:

Uri Papish
Uri Papish, Executive Director

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1. Equipment/Activity Identification	1
2. Approval Conditions	1
Emission Limits	2
Operating Limits and Requirements	3
Monitoring and Recordkeeping Requirements	4
Emission Monitoring and Testing Requirements	5
Reporting Requirements	5
3. General Provisions	6
 Appendix A Emission Testing Requirements	

1. Equipment/Activity Identification

ID No.	Generating Equipment/Activity	Control Measure/Equipment
1	McCloskey S-190 Screen	High pressure wet suppression
2	Terex Finlay Impact Crusher	High pressure wet suppression
3	Metso Jaw Crusher	High pressure wet suppression
4	McCloskey R-230 Screen	High pressure wet suppression
5	McCloskey S-190 Screen	High pressure wet suppression
6	McCloskey Jaw Crusher	High pressure wet suppression
7	McCloskey S-190 Screen	High pressure wet suppression
8	McCloskey Impact Crusher	High pressure wet suppression
9	Caterpillar C4.4 Engine (nonroad engine, powers the McCloskey Screen)	Ultra-Low Sulfur Fuel (diesel)
10	Scania DC 13 Engine (nonroad engine, powers the Terex Finlay Impact Crusher)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 4 Certification
11	Caterpillar C9.3 Engine (nonroad engine, powers the Metso Jaw Crusher)	Ultra-Low Sulfur Fuel (diesel), EPA Interim Tier 4 Certification
12	Caterpillar C6.6 Engine (nonroad engine, powers the McCloskey R-230 Screen)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 3 Certification
13	Caterpillar C4.4 Engine (nonroad engine, powers the McCloskey S-190 Screen)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 3 Certification
14	Volvo Penta Engine (nonroad engine, powers the McCloskey Jaw Crusher)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 4 Certification
15	Perkins/Caterpillar C4.4 Engine (nonroad engine, powers the McCloskey S-190 Screen)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 2 Certification
16	Caterpillar C13 Engine (nonroad engine, powers the McCloskey Impact Crusher)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 3 Certification
17	John Deere Engine (stationary engine, powers Generac Generator)	Ultra-Low Sulfur Fuel (diesel)
18	Perkins Mondasa MP-1501 Engine (stationary engine, powers Stamford generator)	Ultra-Low Sulfur Fuel (diesel), EPA Tier 3 Certification
19	Haul Roads	Wet suppression

2. Approval Conditions

The following tables detail the specific requirements of this Air Discharge Permit (ADP). In addition to the requirements listed below, equipment at this facility may be subject to other federal, state, and local regulations.

The requirement number is identified in the left-hand column. The text of the ADP requirement is contained in the middle column. The emission unit, equipment, or activity to which the permit requirement applies is listed in the right-hand column.

This ADP supersedes ADP 10-2962 in its entirety.

Emission Limits

Req.	Emission Limits	Equipment/ Activity ID								
1.	<p>Emissions from crushing operations (crushing, screening, and haul roads) must not exceed the following:</p> <table> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>4.04 tons per year</td> </tr> <tr> <td>PM₁₀</td> <td>1.10 tons per year</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.17 tons per year</td> </tr> </tbody> </table> <p>Emissions must be calculated from actual material throughput consistent with the methodology in Section 6 of the Technical Support Document for this ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM	4.04 tons per year	PM ₁₀	1.10 tons per year	PM _{2.5}	0.17 tons per year	1 – 8, 19
<u>Pollutant</u>	<u>Emission Limit</u>									
PM	4.04 tons per year									
PM ₁₀	1.10 tons per year									
PM _{2.5}	0.17 tons per year									
2.	<p>Emissions from the John Deere Engine must not exceed the following:</p> <table> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Nitrogen Oxides</td> <td>2.33 tons per year</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0.50 tons per year</td> </tr> </tbody> </table> <p>Emissions must be calculated using the methodology described in the Technical Support Document for this Air Discharge ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	Nitrogen Oxides	2.33 tons per year	Carbon Monoxide	0.50 tons per year	17		
<u>Pollutant</u>	<u>Emission Limit</u>									
Nitrogen Oxides	2.33 tons per year									
Carbon Monoxide	0.50 tons per year									
3.	<p>Emissions from the Perkins Mondasa MP-150 Engine must not exceed the following:</p> <table> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Nitrogen Oxides</td> <td>0.73 tons per year</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0.63 tons per year</td> </tr> </tbody> </table> <p>Emissions must be calculated using the methodology described in the Technical Support Document for this Air Discharge ADP.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	Nitrogen Oxides	0.73 tons per year	Carbon Monoxide	0.63 tons per year	18		
<u>Pollutant</u>	<u>Emission Limit</u>									
Nitrogen Oxides	0.73 tons per year									
Carbon Monoxide	0.63 tons per year									
4.	<p>Visible emissions from crushing, screening, and conveying equipment must not exceed zero percent (0%) opacity for more than three (3) minutes in any 1-hour period as determined in accordance with SWCAA Method 9.</p>	1 – 8								
5.	<p>Visible emissions from any haul roads must not exceed ten percent (10%) opacity for more than three (3) minutes in any 1-hour period as determined in accordance with SWCAA Method 9.</p>	19								

Req.	Emission Limits	Equipment/ Activity ID
6.	<p>Visible emissions from the nonroad and stationary diesel-fired engines must not exceed the following for more than three (3) minutes in any 1-hour period as determined in accordance with SWCAA Method 9:</p> <p>(a) Twenty percent (20%) during start-up or shutdown; and</p> <p>(b) Five percent (5%) at all other times.</p> <p>The start-up period is defined as the first twenty (20) minutes of operation from a cold start, and shutdown is defined as when fuel flow to the engine has stopped.</p>	9 – 18

Operating Limits and Requirements

Req.	Operating Limits and Requirements	Equipment/ Activity ID
7.	Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.	Facility-wide
8.	Operations that cause or contribute to a nuisance odor must use recognized good practice and procedures to reduce these odors to a reasonable minimum.	Facility-wide
9.	Emission units and activities identified in this ADP must be maintained and operated in total and continuous conformity with the conditions identified in this ADP. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this ADP, including directing the facility to cease operations until corrective action can be completed.	1 – 19
10.	Each pollution control device (e.g., water spray or fog systems) must be operated whenever the processing equipment served by that air pollution control device is in operation. Control devices must be operated and maintained in accordance with the manufacturer's specifications. Furthermore, air pollution control devices must be operated in a manner that minimizes emissions.	1 – 8
11.	Material handling points, including, but not limited to, conveyor transfer points, aggregate storage piles, and haul roads must be watered as necessary to control fugitive dust emissions.	Facility-wide
12.	Each rock crusher and screen must be equipped with a high-pressure water spray system or other wet suppression system reviewed and approved by SWCAA to provide equivalent or superior control of particulate matter emissions. Each high-pressure spray system must be capable of maintaining an operating pressure of 80 psig or greater and must maintain 80 psig or greater during operation. A functional pressure gauge must be maintained onsite, and a connection point provided for the purpose of demonstrating compliance with the minimum pressure requirement for high pressure spray systems.	1 – 8
13.	Spray/fog nozzles in the water spray systems for the crushers and screens must be visually inspected once per week when in operation to ensure proper function. Clogged or defective nozzles must be replaced or repaired prior to subsequent operation.	1 – 8

Req.	Operating Limits and Requirements	Equipment/ Activity ID						
14.	Additional wet suppression must be provided, as necessary, to control fugitive dust from haul roads, rock crushing, screening, and material handling equipment in the event that process changes or weather patterns result in insufficient water application to control fugitive dust from plant operations.	1 – 8, 19						
15.	The permittee must notify SWCAA at least 10 business days in advance of relocating any piece of approved equipment and must submit operational information (production quantities, hours of operation, location of nearest neighbor, etc.) sufficient to demonstrate that the proposed operation will comply with the emission standards for a new source, and will not cause a violation of applicable ambient air quality standards, and if in a nonattainment area, will not interfere with scheduled attainment of ambient standards.	Facility-wide						
16.	The stationary and nonroad diesel engines must only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engines must not exceed 0.0015% by weight (15 ppm). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.	9 – 18						
17.	The diesel engines must each be equipped with a non-resettable hour meter to record hours of operation.	9 – 18						
18.	Operation of the stationary diesel engines must not exceed: <table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: left;"><u>Engine</u></th> <th style="text-align: left;"><u>Hours Per Year</u></th> </tr> </thead> <tbody> <tr> <td>John Deere Engine</td> <td>1,000</td> </tr> <tr> <td>Perkins Mondasa MP-1501 Engine</td> <td>1,000</td> </tr> </tbody> </table>	<u>Engine</u>	<u>Hours Per Year</u>	John Deere Engine	1,000	Perkins Mondasa MP-1501 Engine	1,000	17 – 18
<u>Engine</u>	<u>Hours Per Year</u>							
John Deere Engine	1,000							
Perkins Mondasa MP-1501 Engine	1,000							
19.	Emissions from the engine exhausts must be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.	9 – 18						

Monitoring and Recordkeeping Requirements

Req.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID
20.	With the exception of data logged by an automated computer system, each record required by this ADP must include the date and the name of the person making the record entry. If a control device or process is not operating during a specific time period, a record must be made to that effect.	Facility-wide
21.	All records required by this ADP must be kept for a minimum period of no less than three (3) years and must be maintained in a form readily available for inspection by SWCAA representatives.	Facility-wide
22.	Excess emissions and upset conditions must be recorded for each occurrence.	1 – 19

Req.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID
23.	<p>The following information must be collected, recorded at the intervals specified below, and readily available on-site for inspection:</p> <ul style="list-style-type: none"> (a) Visual inspection and maintenance of spray/fog nozzles must be recorded for each occurrence; (b) Quantity and size of material throughput must be recorded monthly for each site; (c) Air quality related complaints must be recorded for each occurrence; (d) Maintenance of spray/fog nozzles must be recorded for each occurrence; (e) The number of hours each stationary and nonroad diesel engine is operated must be recorded for each site and each calendar year; (f) The fuel sulfur content of the diesel burned in the stationary and nonroad diesel engines must be determined and recorded for each fuel delivery. A fuel certification from the fuel supplier or test results using an appropriate method listed in 40 CFR 60.17 may be used to comply with this requirement; and (g) Relocation of equipment identified in this ADP must be recorded for each occurrence. 	1 – 19

Emission Monitoring and Testing Requirements

Req.	Emission Monitoring and Testing Requirements	Equipment/ Activity ID
24.	<p>An initial emissions test must be conducted for all rock crushing and screening equipment subject to 40 CFR 60 Subpart OOO that has not previously been tested. Testing must be completed no later than 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up. For the purposes of this requirement, the 60 and 180 day clocks begin the day the affected facility is installed in Clark, Cowlitz, Lewis, Skamania, or Wahkiakum counties or the day this ADP is issued, whichever is later. All emission testing must be conducted in accordance with Appendix A of this ADP and the requirements of 40 CFR 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants."</p>	1 - 8

Reporting Requirements

Req.	Reporting Requirements	Equipment/ Activity ID
25.	<p>Upset conditions must be reported to SWCAA as soon as possible after discovery. Outside of normal business hours, upset conditions may be reported by email, fax, or leaving a telephone message with SWCAA.</p>	Facility-wide
26.	<p>Excess emissions must be reported to SWCAA as follows:</p> <ul style="list-style-type: none"> (a) As soon as possible, but no later than twelve (12) hours after discovery for emissions that represent a potential threat to human health or safety; (b) As soon as possible, but no later than forty-eight (48) hours after discovery for emissions which the Permittee wishes to claim as unavoidable pursuant to SWCAA 400-107(1); and (c) No later than thirty (30) calendar days after the end of the month of discovery for all other excess emissions. 	Facility-wide

Req.	Reporting Requirements	Equipment/ Activity ID
27.	Deviations from permit conditions must be reported no later than 30 days after the end of the month during which the deviation is discovered.	Facility-wide
28.	All air quality related complaints received by the Permittee must be reported to SWCAA within three (3) calendar days of receipt. Complaint reports must include the date and time of the complaint, the name and contact information (if available) for the complainant, the nature of the complaint, and any actions taken by the Permittee to address the complaint.	Facility-wide
29.	The following emission-related information must be reported to SWCAA by March 15 th for the previous calendar year: <ul style="list-style-type: none"> (a) The total quantity and size of material crushed at each location; (b) The total quantity and type of material screened at each location; (c) The average length of unpaved haul road controlled by the permittee at each location; (d) The total number of hours each stationary and nonroad diesel engine operated at each location; and (e) Air emissions of criteria air pollutants, volatile organic compounds, toxic air pollutants (TAPs), and hazardous air pollutants (HAPs) for each location. 	Facility-wide

3. General Provisions

No.	General Provisions
A.	The equipment specified in ADP / Nonroad Application CL-3064 and this ADP must be maintained and operated in total and continuous conformity with the conditions identified in this ADP. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this ADP, including directing the facility to cease operations until corrective action can be completed.
B.	For the purpose of ensuring compliance with this ADP, duly authorized representatives of the Southwest Clean Air Agency must be permitted access to the permittee's premises and the facilities being constructed, owned, operated and/or maintained by the permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this ADP and applicable regulations and to perform or require such tests as may be deemed necessary.
C.	The provisions, terms and conditions of this ADP must be deemed to bind the permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the permittee.
D.	The requirements of this ADP shall survive any transfer of ownership of the source or any portion thereof.
E.	This ADP must be posted conspicuously at or be readily available near the source.
F.	Approval to construct or modify specific pollution generating equipment shall become invalid if construction is not commenced within eighteen months after the date of issuance of this ADP, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time.

No.	General Provisions
G.	This ADP does not supersede requirements of other Agencies with jurisdiction and further, this ADP does not relieve the permittee of any requirements of any other governmental Agency. In addition to this ADP, the permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
H.	Compliance with the terms of this ADP does not relieve the permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, RCW 70A.15, Title 173 WAC or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
I.	If any provision of this ADP is held to be invalid, all unaffected provisions of the ADP shall remain in effect and be enforceable.
J.	No change in this ADP shall be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the permittee for the relief sought.
K.	The Southwest Clean Air Agency may, in accordance with RCW 70A.15 impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this ADP, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.

Appendix A
Emission Testing Requirements
Rock Crushing / Screening Equipment

1. Introduction:

- a. The purpose of this emission testing requirement is to demonstrate compliance with the visual emissions limitations of this ADP and 40 CFR 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants."
- b. Emission testing must be performed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up for each applicable rock crusher and aggregate screen which has not previously conducted an initial emissions test consistent with the requirements of 40 CFR 60.8 and 60.675. For the purposes of this requirement, the 60 and 180 day clocks begin the day the affected facility is installed in Clark, Cowlitz, Lewis, Skamania or Wahkiakum counties or the day this ADP is issued, whichever is later. If the unit is not in SWCAA's jurisdiction within this time frame or leaves SWCAA's jurisdiction within this time frame, the emission testing must be conducted within 60 days of coming into, or returning to, SWCAA's jurisdiction.
- c. A comprehensive test plan must be submitted to SWCAA for review and approval a minimum of ten business days prior to testing.
- d. SWCAA personnel must be informed of the proposed test date and location at least five business days prior to testing so that a representative may be present during testing.
- e. A minimum of 30 minutes of observations must be conducted as required by 40 CFR 60.675(c)(3).
- f. Testing must include all constituents identified below. The sampling methods identified in Section 2 below must be used unless alternate methods are approved by SWCAA in advance of the emission testing.

2. Testing Requirements:

- a.

<u>Constituents to be measured:</u>	<u>Test Methods or Equivalent:</u>
(1) Opacity of visible emissions	EPA Method 9
- b. Process Points to Be Tested:
 - (1) Affected rock crushers and aggregate screens; and
 - (2) Each conveyor transfer point associated with affected emission units.

3. Source Operation:

- a. A complete record of production related parameters including production rate, size of product being processed, start-ups, shutdowns, and adjustments must be kept during emissions testing to correlate operations with emissions and must be recorded in the test results report.
- b. Source operations during the emissions test must be representative of maximum intended operating conditions.

Appendix A
Emission Testing Requirements
Rock Crushing / Screening Equipment

4. Reporting Requirements:

- a. Opacity observation data must be reduced and analyzed using the protocols in EPA Method 9 and SWCAA Method 9.
- b. Compliance must be determined by comparing the reduced opacity data with the visible emission limits contained in this ADP and the New Source Performance Standard for Nonmetallic Mineral Processing Plants (40 CFR 60.670 et seq. (Subpart OOO)).
- c. A final emission test report must be prepared and submitted to SWCAA within 45 calendar days of test completion. Each report must be provided in an electronic format acceptable to SWCAA and as a hard (paper) copy. Each report must include:
 - (1) A description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
 - (2) Time and date of the test and identification and qualifications of the personnel involved;
 - (3) A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit;
 - (4) A summary of control system or equipment operating conditions;
 - (5) A summary of production related parameters;
 - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation;
 - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation;
 - (8) Copies of field data and example calculations;
 - (9) Chain of custody information;
 - (10) Discussion of any abnormalities associated with the results; and
 - (11) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.