Order of Approval NSRP-02-TTCC-25

Order of Approval for an Asphalt and Concrete Recycling Operation at TTC Construction, Inc. (After the Fact).

IN THE MATTER OF approving a project which establishes a new air contaminant source at TTC Construction, Inc., at 12871 Summitview Road, in Yakima, WA. THIS ORDER OF APPROVAL IS HEREBY ISSUED TO:

Applicant/Permittee: TTC Construction, Inc.
Asphalt and Concrete Recycling Crushing Operation.

Located at: 12871 Summitview Road
Yakima, WA 98908

Contact: TTC Construction, Inc.
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Yakima, WA 98908
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IN COMPLIANCE WITH THE PROVISIONS OF THE REVISED CODE OF WASHINGTON (RCW), CHAPTER 70A.15 WASHINGTON CLEAN AIR ACT, SECTION, 2210, WASHINGTON ADMINISTRATIVE CODE (WAC) 173-400-110 and WAC 173-460-040.

ISSUE DATE: , 2025.

THIS ORDER OF APPROVAL PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

Operation of the equipment must be conducted in compliance with all data and specifications including all additional information submitted subsequent to the New Source Review (NSR) application under which this Order of Approval is issued unless otherwise specified herein. The conditions and limitations of this NSR Order of Approval are attached as follows:

1.0 DESCRIPTION OF THE SOURCE

1.1 TTC Construction, Inc., hereafter referred to as the Permittee, the Facility, TTCC or the Source, is a heavy civil construction company located at 12871 Summitview Road; Yakima, WA. The Facility, as part of its operations, includes an asphalt and concrete recycling operation ("Operation"), active since 2003 under Yakima County Planning Department (YCPD) Conditional Use Permit (CUP) No. 03-037.

1.2 As a result of communication with the Facility on December 26, 2024, the Permittee submitted a Notice of Construction (NoC) application on January 27, 2025, to the Yakima Regional Clean Air Agency (YRCAA) for the Operation at the location mentioned above.

1.3 The Operation involves receiving, crushing, screening, stockpiling and exporting asphalt and concrete materials. Dump trucks deliver material to the crushing area where a loader and excavators are used to move the material and feed the crusher. The crushing part of the Operation consists of a crusher, screen, and ancillary equipment. The recycled aggregate obtained from the crushing process is stockpiled and transported off-site for reuse. Figure 1 shows the Facility site plan and the approximate crushing area.

1.4 For the purpose of this Order of Approval (Order/Permit), the terms "crushing operation(s)" or "crushing and screening operation(s)" hereinafter refer exclusively to the crushing and screening of asphalt and concrete, excluding quarry operations.

1.5 The proposed equipment used in the Operation includes: one Cedar Rapids 5064 Horizontal Shaft Impactor (HSI) crusher powered by a Cummins QSK19 CM500 series Tier 3 nonroad diesel engine, and one CEC Road Runner Screen-It 5121 screen unit with three conveyors powered by a stationary CAT XQ230 Rental Generator Set equipped with a Cat C7.1 ACERT Tier 4 diesel engine. Figures 2 and 3 depict a diagram of the crusher and screen units, respectively.

1.6 Air emissions from this Operation include criteria air pollutants (CAPs) and hazardous air pollutants (HAPs) as defined by the Federal Clean Air Act (FCAA), and toxic air pollutants (TAPs) as defined by the WAC.

1.7 A Fugitive Dust Control Plan (FDCP) was submitted with the NoC application, proposing the following dust control measures: use of water spray systems at the crusher, screen, and conveyor transfer points (already installed); use of a natural berm as a windbreak to reduce wind-driven dust; and maintaining adequate moisture in materials to minimize dust generation.

1.8 The Permittee submitted site plans, specifications and diagrams for the equipment used in the Operation with the NSR application, which are included as part of this Order.

1.9 The YCPD exempted this project from State Environment Policy Act (SEPA) review as

signed by the Zoning & Subdivision Manager on January 28, 2025.

1.10 A 30-day public notice for this NSR was published on August 20, 2025 pursuant to the RCW 70A.15.2210 and WAC 173-400-171.

2.0 DETERMINATIONS:

In relation to the operation described herein, the Yakima Regional Clean Air Agency (YRCAA) determines that the Permittee shall comply with all applicable federal, state and local rules, regulations and laws including but not limited to the following determinations:

2.1 This Operation constitutes a new source of air contaminants requiring a new source review pursuant to RCW 70A.15.2210, WAC 173-400-110, and 173-460-040. This Order of Approval is issued in accordance with those requirements;

2.2 The Facility is located in an area designated as in attainment with all state and federal air quality standards for criteria pollutants;

2.3 The Facility is not a major stationary source as of the date of issuance of this Order nor is this operation subject to the Prevention of Significant Deterioration (PSD) permitting requirements pursuant to WAC 173-400-700 through 173-400-750;

2.4 The Facility is subject to the annual Registration Program pursuant to WAC 173-400-099 and YRCAA Regulation 1, Section 4.01. The Facility will be classified and assessed fees according to the annual approved YRCAA registration classification;

2.5 This Operation is subject to the requirements of 40 CFR Part 60 Subpart OOO.

2.6 The CAT C7.1 ACERT stationary diesel engine is subject to the requirements of 40 CFR Part 60 Subpart IIII, and 40 CFR Part 63 Subpart ZZZZ;

2.7 Corresponding air emissions associated with this Operation are provided in in Appendix A. Crushing and screening operation emissions were calculated using the maximum allowable operating hours and crusher rate capacity in conjunction with emission factors. Stockpiles and road emissions were calculated based on the maximum allowable output of reclaimed material per year and equipment specifications;

2.8 Emission factors for this Operation were obtained from the U.S. Environmental Protection Agency (EPA) “AP-42” and Washington State Department of Ecology (Ecology) “Technical Support Document for Stationary and Portable Rock Crushing Operations - General Order of Approval No. 11AQ-GO-01”, accordingly to each part of the Operation;

2.9 Ambient air impacts were evaluated using the U.S. EPA-approved AERMOD dispersion model. The modeling demonstrates that the proposed Operation will not cause or

contribute to exceedances of the National Ambient Air Quality Standards (NAAQS) under 40 CFR Part 50 or the Acceptable Source Impact Level (ASIL) as set forth in WAC 173-460-150, provided this Operation is performed in accordance with the application materials and the conditions of this Order; and

2.10 Best Available Control Technology (BACT) and Toxic Best Available Control Technology (t-BACT) shall be satisfied for any proposed new facility or modified air emission source to control air emissions pursuant to RCW 70A.15.2210, WAC 173 400-113 and WAC 173-460-060. YRCAA finds BACT and t-BACT to be satisfied as detailed in Section 3 of this Order.

THEREFORE, it is hereby ordered the operation as described above and in the NoC application, including any detailed plans, specifications, and other information submitted in reference thereto, is **approved** for operation, based upon the specifications submitted and **subject to the** conditions set forth herein:

3.0 OPERATIONAL APPROVAL CONDITIONS

3.1 Authorized Equipment

This Order authorizes the operation of the equipment and activities listed in Table 1, which in combination constitute the Operation at the location specified herein this Order, in accordance with the specifications submitted with the NSR application to YRCAA:

Table 1 – Authorized equipment and activities list.

# of Units	Equipment/Activity	Manufacturer, Model Number, Serial Number	Specifications
1	Horizontal Shaft Impactor (HSI) crusher	Cedar Rapids, 5064, 49370	Allowable rate capacity = 100 tons per hour (tons/hr)
1	Nonroad diesel engine	Cummins, QSK19 CM500, 60606432	Tier 3, 597 kW, 800 hp
1	Screen unit equipped with three conveyors	CEC Road Runner Screen-It, 5121, Unknown	5x12, 2-deck
1	Rental generator set	Caterpillar, XQ230, Unknown	Equipped with a stationary diesel engine Cat C7.1 ACERT, Tier 4 (engine family NPKXL07.0BN1) 182kW, 277 hp, 14.7 gallons per hour
NA	Roads and working areas	NA	Unpaved, used by dump trucks, excavators and loader
NA	Stockpiles	NA	Crushed asphalt and concrete

All equipment listed in Table 1 shall be operated and maintained in accordance with the specifications submitted to the YRCAA with the NoC application, the manufacturer's recommendations, and the conditions of this Order.

3.1.1 The Permittee may replace the rental generator set, provided the replacement set

is a "like-for-like" unit. To demonstrate this, the replacement engine must meet all of the following criteria:

a. The engine must have an EPA Tier 4 Final certification, and its manufacturer's emission certificate must show emission factors equal to or less than the following:

Pollutant	Emission Factor Limit (g/kW-hr)
Non-Methane Hydrocarbons (NMHC)	0.01
Nitrogen Oxides (NOx)	0.27
Carbon Monoxide (CO)	1.3
Particulate Matter (PM)	0.002

b. The engine's maximum power rating shall be equal to or less than 182 kW.

c. The engine must be equipped with a non-resettable hour meter.

Use of a rental generator that does not meet the criteria above shall be considered a modification and will require the submission of a NoC application to, and an Order of Approval from, the YRCAA prior to installation.

3.1.2 The existing Detroit diesel generator, model 12V71, serial number 471449UEZE57, in its current configuration, is not authorized by this Order and shall not be used to power any part of the crushing and screening operation. Future use of this engine is contingent upon it being modified and certified to meet, at a minimum, EPA Tier 4 emission standards. Prior to its use, the Permittee must submit a NoC application to the YRCAA and receive an Order of Approval authorizing its operation.

3.2 Best Available Control Technology (BACT) and Toxic BACT (t-BACT) Requirements

The Permittee shall implement and maintain the following operational and design controls identified as BACT and t-BACT to minimize emissions of CAPs, HAPs and TAPs. These controls are enforceable conditions of this Order.

Crusher, screen and conveyors

3.2.1 The proposed water spray system must include water spray nozzles that shall be used at the crusher inlet, crusher, screen, conveyors and at all dust-generating points at all times during crushing operations to minimize release of dust.

3.2.2 Spray nozzles shall be spraying water along the complete width of the conveyors

and transfer points in a quantity to suppress dust emissions. Thus, multiple nozzles may be required.

Stockpiles

3.2.3 Spray nozzles shall be used to water all aggregate stockpiles and material handling areas to ensure no visible dust emissions are generated.

Roads and working areas

3.2.4 Water or dust palliative material shall be applied to all unpaved roads, unpaved areas and graveled roads used for this Operation at a frequency sufficient to prevent visible dust from vehicle traffic.

3.2.5 Vehicle speeds on unpaved roads, unpaved areas, and graveled roads used for this Operation shall be limited to 5 miles per hour (mph), as submitted with the NSR application. However, if these roads or areas are adequately treated with dust palliative material or water to prevent visible dust from being generated by moving vehicles, the speed limit may be exceeded, provided there are no visible emissions entrained moving vehicles.

Diesel engines

3.2.6 Only ultra-low sulfur diesel (ULSD) or ultra-low biodiesel with a maximum sulfur content of 15 parts per million (ppm) or 0.0015% sulfur by weight or less shall be used as fuel for generators.

3.2.7 Diesel engines shall be equipped with a non-resettable hour meter, which shall be operating at all times during crushing operations. These meters must be easily reachable.

3.2.8 The nonroad engine must meet, at a minimum, EPA Tier 3 nonroad emission standards. An EPA certification for the engine shall be submitted to YRCAA within ninety (90) days of issuance this Order.

Facility-wide

3.2.9 The Permittee shall maintain a vertical material drop distance of no more than three (3) feet between the discharge point and the surface of the receiving stockpile or designated dump area. The drop distance shall be measured at the time of unloading.

3.2.10 If YRCAA substantiates three (3) or more dust complaints within any 12-month period that are found to be direct result of this Operation, the Permittee shall, within a period of time approved by the Agency, install and maintain additional

controls (e.g. windbreaks, vegetative cover) to reduce fugitive dust emissions.

3.3 Operation and Maintenance (O&M) Plan

3.3.1 The Permittee shall develop and implement an O&M plan for this Operation and the equipment listed in Table 1, and it must include a Dust Control Plan. The O&M plan must be based on manufacturer's specifications, and be developed within ninety (90) days after the issuance of this Permit. It must include at minimum:

a. Startup, normal operation, and shutdown operational procedures and parameters;

b. Material acceptance plan that details the procedures the Permittee will use to ensure that only approved materials are received at the facility to be processed at this Operation.

c. Scheduled inspections, calibrations and routine, preventive and corrective maintenance procedures, including replacement of equipment or parts for wear and tear;

d. Monitoring and inspection procedures for routine quality control checks;

e. Emergency and malfunction contingency procedures, including description, immediate actions, trouble-shooting steps, incident reporting, and post-incident review; and

f. Operator training and certification requirements with the equipment and conditions in this Order pertinent to operation.

3.4 General Operational Conditions

3.4.1 The crusher throughput shall not exceed 100 tons per hour (tons/hr) of asphalt and concrete only.

3.4.2 Operating hours for crushing operations and diesel engines use shall not exceed 3.5 hours per day (hr/day) and 490 hours per year (hr/yr).

3.4.3 Annual production of crushed asphalt and concrete shall not exceed 49,000 tons per year (tpy).

3.4.4 The Permittee shall determine the weight of all material as it is fed to the crusher using a reliable and verifiable method. Acceptable methods include, but are not limited to: a belt scale installed on the crusher feed conveyor; an integrated weigh hopper; or calibrated scales on the loader used to feed the crusher. The chosen

method must be installed, maintained, and calibrated per manufacturer's specifications.

3.4.5 Crushing operations shall only be conducted between official sunrise and sunset; this is during daylight hours only, at any time of the year.

3.4.6 All crushing, screening and stockpiling operations shall remain within the approved crushing area shown in Figure 1, maintaining a minimum buffer of 65 feet from any property line.

3.4.7 Only asphalt and concrete materials shall be processed as part of this Operation. Other types of materials are prohibited to be crushed. Materials prohibited to be processed include, but are not limited to, presumed asbestos containing material and material containing PCS exceeding Model Toxics Control Act (MACT) Method A cleanup levels.

3.4.8 The Operation shall not be commenced or continued if:

a. Dust suppression materials (e.g., water) are unavailable; or

b. Conditions such as high winds render dust abatement procedures ineffective in controlling dust impacts from the Facility to adjoining properties, businesses, or roadways.

Operations shall remain suspended until dust suppression measures are restored or weather conditions improve to allow effective control.

3.4.9 The Permittee shall take all reasonable precautions to prevent the track-out of soil or dust onto paved public roads. There precautions shall include, at a minimum, the operation of a tire wash for all trucks exiting the site when evidence of soil transport is visible.

3.4.10 The Permittee shall perform visual inspections of the water spray systems prior to commencing operations each day and periodically throughout the operating day to verify proper water flow through spray nozzles and sprayers. If at any time water flow is inadequate or the system is not function properly to control dust emissions, the Permittee shall immediately cease operation and take corrective action(s) as set forth in the approved O&M plan until water flow through spray nozzles and sprayers is adequate to control dust emissions.

3.4.11 The Permittee shall conduct an initial performance test to demonstrate compliance with the opacity limits specified in this Order and 40 CFR Part 60, Subpart OOO. The test shall be performed according to the following requirements:

a. Timing: The performance test must be conducted no later than 60 days after

startup of the crushing operation. If the test date falls during a season shutdown, the Permittee may, with written approval from YRCAA, postpone the test until no later than 60 calendar days after resuming operation.

b. Operating Conditions: The test shall be conducted while the equipment is operating at no less than ninety (90) percent of its maximum permitted throughput rate.

c. Test Method: All opacity observations shall be conducted by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9 (Method 9) and the specific procedures in 40 CFR 60.675(c)(1). At the time of the test, the Permittee shall designate in writing which upstream water spray(s) are being relied upon to control emissions to qualify for the 5-year repeat testing exemption.

3.4.12 To demonstrate compliance for sources not subject to the initial performance test requirement of 40 CFR Part 60, Subpart OOO, the Permittee shall conduct an initial opacity evaluation for the diesel engines, unpaved roads and stockpiles. This evaluation shall be conducted concurrently with the initial performance test. All opacity observations shall be conducted by a certified reader in accordance with EPA Method 9.

3.4.13 The Permittee shall conduct an opacity evaluation to demonstrate ongoing compliance with the opacity limits specified herein this Order, beginning one calendar year after the completion of the initial performance test specified in this Order, annually thereafter, and whenever deemed necessary by the Agency. All annual opacity evaluations shall be conducted using EPA Method 9 by a certified reader and shall be conducted during operation at ninety percent (90%) of full load or greater.

3.4.14 If any opacity limit is exceed, the Permittee shall immediately cease operation of the source creating the emissions and take corrective actions per the O&M plan until compliance with opacity limits is restored.

3.4.15 This crushing and screening operation is required to repeat the performance test every five (5) years pursuant to 40 CFR 60.675. However, the crushing and screening operation is exempt from this requirement provided the Permittee conducts and maintains records of the daily visual water spray inspections as required by this Order. These daily inspections and the associated records satisfy the minimum monthly inspection and recordkeeping requirements for the exemption described in 40 CFR 60.675 and 60.676(b). If the Permittee fails to conduct or record these daily inspections, the exemption is void and a repeat performance test must be conducted as required.

3.4.16 The Permittee shall conduct an initial visual determination of fugitive emissions

at the property boundary line using 40 CFR Part 60 Appendix A, Method 22 (Method 22) no later than sixty (60) days after startup of the crushing operation. Subsequent visual determinations for fugitive emissions shall be conducted at least monthly and whenever deemed necessary by the Agency. All visual determinations for fugitive emissions shall be conducted during operation at ninety percent (90%) of full load or greater. No visible emissions shall be observed at the property boundary at any time.

3.4.17 If visible emissions are observed at the property boundary, the Permittee shall immediately suspend the Operation and take corrective actions per the O&M plan until compliance with no visible emissions at the property boundary requirement is restored.

3.4.18 For any equipment listed in Table 1 where the serial number is listed as "Unknown," the Permittee shall provide the manufacturer's serial number to YRCAA within thirty (30) days from issuance of this Order or prior to the start of operation, whichever occurs first. If a manufacturer's serial number is not present on the unit, the Permittee shall permanently affix a unique, company-assigned identification number and provide this identifier to YRCAA. A copy of the correspondence submitting these identifiers shall be kept on-site with this Order at all times.

4.0 GENERAL APPROVAL CONDITIONS

4.1 This Operation, including the equipment and activities listed in Table 1 must comply with all applicable federal, state and local air pollution laws and regulations, including but not limited to RCW 70A.15.2210, Chapter 173-400 WAC, Chapter 173-460 WAC, and YRCAA Regulation 1.

4.2 All plans, specifications, and other information submitted to YRCAA, and any further authorizations, approvals, or denials issued by it in relation to this operation shall be incorporated herein and made a part of the YRCAA file and this Order.

4.3 Except as specified in this Order, any new construction, installation of equipment, change to the limits set forth in Appendix A, modifications to the operation or equipment not covered in this Order that results in air emissions from any equipment at this Facility are subject to a New Source Review (NSR) before construction begins. These changes shall also comply with the BACT and t-BACT requirements, pursuant to RCW 70A.15.2210, WAC 173-400-110, WAC 173-460-040 and YRCAA Regulation 1.

4.4 The Permittee shall develop and submit the O&M plan to YRCAA for review and approval no later than ninety (90) days after issuance of this Order. The Permittee shall operate in accordance with the approved O&M plan at all times.

4.5 The O&M plan shall be reviewed by the Facility at least annually and updated as needed

to reflect any modification to the operating procedures, equipment or monitoring methods.

4.6 All air emissions from this Facility shall be in compliance with air emission standards at all times. It is the responsibility of the owner to make sure that air emissions are within all known rules and regulations.

4.7 There must be no fallout of particulate matter from this Facility beyond the property boundary in a quantity that interferes unreasonably with the use and enjoyment of the property owner upon which the material is deposited, or is detrimental to the health, safety or welfare of any person, or causes damage to any property or business.

4.8 The Air Pollution Control Officer (APCO) of the YRCAA or authorized staff shall be allowed to enter the Facility at reasonable times, without notice, to inspect equipment and records specific to the control, recovery, or release of contaminants into the atmosphere for compliance with applicable laws, regulations and the conditions on this Order, pursuant to RCW 70A.15.2500 and YRCAA Regulation 1.

4.9 Nothing in this Order shall be construed as preventing or circumventing compliance with any other requirement(s) of law including those imposed pursuant to the Federal and State Clean Air Acts and the rules and regulations thereunder. Any violation(s) of such rules and regulations are subject to enforcement and penalty action in accordance with RCW 70A.15.3150 and 3160, WAC 173-400-230 and YRCAA Regulation 1, Article 5.

4.10 This Order may be modified, suspended or revoked in whole or part for cause including, but not limited to, the following:

4.10.1 Violation of any terms or conditions of this authorization; or

4.10.2 If this authorization has been obtained by misrepresentation or failure to fully disclose all relevant facts.

4.11 The provisions of this authorization are severable and, if any provision or application of any provision of this authorization to any circumstance is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.

4.12 Deviations from these conditions are violations subject to penalties pursuant to RCW 70A.15.3150 and 3160, WAC 173-400-230 and YRCAA Regulation 1, Article 5.

4.13 The requirements of this Order apply to the Facility owner and/or operator(s) and any contractor or subcontractor performing any activity authorized under this Permit. Any person(s), including contractor(s) and/or subcontractor(s), not in compliance with the applicable requirements in this Permit are in violation of state and local laws and subject to appropriate civil and criminal penalties. The Facility owner and/or operator, and all

contractor(s) or subcontractor(s) are liable for the actions and violations of their employee(s). Any violation committed by a contractor or subcontractor shall be considered a violation by the Facility owner and/or operator, and is also a violation by the contractor and/or any subcontractor(s).

4.14 It is the Permittee's responsibility to stay current, and comply, with all applicable laws, rules and regulations governing their business.

4.15 This Order and its conditions shall remain in effect in the event of any change in control or ownership of the Facility. In the event of any such change in control or ownership of the subject Facility, the Permittee shall notify the succeeding owner of this Order and conditions and shall notify the YRCAA of the change in control or ownership by filing an "Ownership or Name Change" form within thirty (30) days of that change. The form may be requested from the Agency or downloaded from its web site.

4.16 This Order shall be voided without full payment of all applicable fees in accordance with the YRCAA fee schedule.

5.0 EMISSION LIMITS

5.1 Air emissions from this Operation shall not exceed any specified allowable limit in Appendix A of this Order. The allowable air emissions are based on assuming a production rate for the crusher of 100 tons per hour, operating a maximum of 3.5 hours per day and 490 hours per year, with a maximum production of 49,000 tons per year of crushed concrete and asphalt.

5.2 Visible emissions from any source listed in Table 2, as determined by a certified reader using EPA Method 9 and its specific procedures in 40 CFR 60.675(c)(1), shall not exceed the opacity limits specified for that source:

Table 2 – Opacity limits.

Source	Opacity limit	Averaging time
Diesel Engines [1]	10%	6 consecutive minutes
Crusher	12%	30 consecutive minutes
Roads, working areas, stockpiles	10%	6 consecutive minutes
Screen unit, transfer points and any other source from this Operation not otherwised mentioned [2]	7%	30 consecutive minutes

[1] The opacity limit for the diesel engines does not apply during periods of startup and shutdown. For the purpose of this Order, "startup" means the period from initial ignition until the engine reaches normal operating temperature, not to exceed thirty (30) minutes. "Shutdown" means the period from load reduction until complete cessation of operation, not to exceed thirty (30) minutes.
[2] Excluding truck dumping into any part of this Operation.

5.3 There shall be no visible emissions at the property boundary line at any time.

5.4 In addition to the limits imposed in this Order, the Permittee shall comply with all other applicable general and specific standards pursuant to WAC 173-400-040, 173-400-075, 173-400-110, and Chapter 173-460 WAC.

6.0 MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

6.1 The Permittee shall maintain copies of the following documents on site at all times: this Order of Approval, the most current approved O&M plan, and the manufacturer's operation and maintenance manuals for all permitted equipment. These documents must be readily available, organized and accessible for review by YRCAA authorized staff during inspections or upon request, pursuant to RCW 70A.15.2500 and YRCAA Regulation 1.

6.2 The Permittee shall maintain all records required by this Order for a minimum of five (5) years from the date of generation. Records must be readily available, organized and accessible for review by YRCAA authorized staff during inspections or upon request.

6.3 Recordkeeping forms must be designed by the Permittee and include at a minimum: the date, time, and name of the person performing the activity or observation. The forms shall be designed to capture all applicable information required herein and may be electronic or hardcopy.

6.4 Any application, form, report, or certification submitted to YRCAA pursuant to this Order must be signed by the responsible official.

6.5 The Permittee shall submit a written notification to YRCAA of the actual date of startup of the crushing and screening operation. The notification shall be postmarked no later than fifteen (15) days after the startup date and must include the information required by 40 CFR 60.676(i).

6.6 The Permittee shall provide YRCAA with written notification of the planned date for the initial performance test specified in this Order and 40 CFR Part 60 Subpart OOO at least thirty (30) days in advance of the test date.

6.7 The Permittee shall submit to YRCAA a formal written report of the results of the initial performance test (for the crusher and screen) and the initial opacity evaluation (for engines, roads and stockpiles) no later than sixty (60) days after the tests are completed.

6.8 The Permittee shall submit to YRCAA the results from the initial Method 22 visual determination of fugitive emissions at the property boundary no later than sixty (60) days after the determination has been conducted.

6.9 The initial hour-meter readings must be submitted in writing to YRCAA within thirty (30) days from issuance of this Order or prior to the start of operation, whichever occurs

first, and must be verified by YRCAA staff.

6.10 The Permittee shall, at minimum, maintain the following records on site:

a. A log of the daily and monthly hours of operation for the crusher engine and the screen generator.

i. For any day for any day when crushing activities are conducted, the log shall state the hours operated for each engine.

ii. For any day the facility is open for business but crushing activities are not conducted, the log shall contain an entry affirmatively stating that no crushing operations occurred (e.g. "No Operations" or "0 hours").

iii. If the generator is replaced, the log must include the date of the replacement, the final hour reading of the outgoing unit, the initial hour reading of the incoming unit, and the cumulative annual total for all generators used.

b. A log of the daily and monthly amount (in tons) and type of material fed to the crusher, for any day when crushing activities are conducted;

c. A log of all materials received for processing, including the date, source, confirmation of inspection per the O&M plan, and documentation of any rejected loads;

d. A daily log of visual inspections of the water sprays system. Inspections are required on days when crushing activities are conducted, noting their operational status or the use of an alternative control like rain;

i. At a minimum, the log must document the pre-operation inspection performed each day, including the time of the inspection and confirmation that the system is functioning properly.

ii. The log must also include entries for any adjustment taken during the operating day in response to changing dust condition.

e. A log of all suppressant applicants, including the date, location, and type of suppressant used;

f. A log of the monthly Method 22 visual determinations for fugitive emissions conducted at the property boundary;

g. Records of the results from all annual Method 9 opacity evaluations;

h. Records of all calibration and maintenance activities performed on the material

weighing equipment;

i. A copy of the EPA emission certificate for any generator used on-site;

j. A log of all deviations and the corrective actions taken, as required by the O&M plan;

k. Records of all maintenance, repair and replacement activities, including the date, description of work performed, and name of the individual;

l. Copies of all notifications submitted to YRCAA regarding excess emissions, malfunctions, or other permit-required events; and

m. Records of operator training, including the date of training and names of certified individuals.

6.11 The Permittee shall verify and document the accuracy of each hour meter at least once every calendar year after the issuance of this Order, using manufacturer-recommended procedures.

6.12 The Facility shall submit its annual registration report to YRCAA on or before the date specified in the annual registration form. This report shall detail the operational data for the previous calendar year, including total hours of operation, amount and type of material crushed, total fuel used in the engines, and estimated air emissions. Along with this data, the Permittee shall include a copy of the full report for the annual opacity evaluation (Method 9) and a summary log of all monthly visual determinations (Method 22). All required annual registration fees must be paid in full at the time of this submittal.

6.13 In the event YRCAA deems additional opacity evaluations or visual determinations of fugitive emissions to be necessary, the Permittee shall submit to YRCAA the results of such evaluations and determinations within thirty (30) days of completion, or as otherwise specified by the Agency.

6.14 The Permittee shall notify YRCAA within twenty-four (24) hours after discovery of upset conditions via phone call followed by a written report (email or letter). Upset conditions include, but are not limited to, the event that water flow is inadequate or the system is not function properly to control dust emissions.

6.15 The Permittee shall notify YRCAA of any excess emissions, including exceedances in opacity or visible emissions, from this Operation following the procedures established in WAC 173-400-108.

6.16 Deviations from permit conditions must be reported no later than thirty (30) days after the end of the month during which the deviation is discovered.

6.17 Major repairs or replacements shall be logged and reported to YRCAA within fourteen

(14) business days.

6.18 The Permittee shall notify YRCAA in writing within fifteen (15) days of replacing the stationary rental generator. The notification must include all documentation necessary to demonstrate compliance with the replacement criteria in this Oder, including the EPA emission certificate for the new unit.

The issuance of this Order of Approval may be appealed to the Pollution Control Hearings Board (PCHB) within 30 days of the Date of Receipt of this Order. The appeal process and applicable requirements are governed by Chapter 43.21B RCW. "Date of Receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB, P.O. Box 40903, Olympia, WA, 98504-0903**.** Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order to YRCAA in paper form by mail or in person. E-mail is not accepted.

DATED this day of , 2025.

PREPARED BY:

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Scout Environmental, Inc.

CRUSHING ACTIVITIES

Table A: Operating hours				
	hours/day	days/week	weeks/yr	hours/year
Actual [1]	8	5	12	480
Allowable/Potential [2]	3.5	5	28	490

[1] Per Notice of Construction (NoC) application.
[2] More stringent daily hours of operation based on emission calculations are enforceable operational limitation. Therefore, allowable hours of operation are considered potential (PTE) hours of operation, pursuant to WAC 173-400-030(76).

Table B: Crusher		
Allowable rate capacity	100	ton/hour
Actual output per year	48,000	ton/year
Allowable/PTE output per year [1]	49,000	ton/year

[1] Allowable amount of concrete and asphalt crushed per year.

Particulate Matter (PM) Emissions

Crushing and screening activities

Table 1: Emission factors for crushing and screening activities.

Emission factors (lb/ton)	Uncontrolled [1]			Controlled [2]		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Crushing [3] (1x Cedar Rapids 5064 HSI)	0.0054	0.0024	0.0024	0.0012	0.00054	0.0001
Fines screening [3] (1x CEC Road Runner Screen-It 512	0.3	0.072	0.072	0.0036	0.0022	0.0001
Product transfer points [3, 4] (3x transfer points)	0.003	0.0011	0.0011	0.00014	0.000046	0.000013
Truck unloading [5, 6]	0.000016	0.000016	0.000016	0.000016	0.000016	0.000016
Truck loading [5, 6]	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

[1] Emission factors obtained from AP-42 Section 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing - Table 11.19.2-2 (English Units). Emission Factors for Crushed Stone Processing Operations (lb/ton).
[2] Emission factors obtained from "Technical Support Document for Stationary and Portable Rock Crushing Operations - General Order of Approval No. 11AQ-GO-01" - Table 1. Emission Factors Comparison; Emission Factor Selected controlled (lb/ton). https://ecology.wa.gov/getattachment/eae40431-844e-4d78-95c0-c8a36a2f56a9/20111206RockCrushersTechSupport.pdf unless otherwise noted.
[3] Uncontrolled emission factor for PM_{10}, assumed to be the same for $PM_{2.5}$.
[4] One transfer point from crusher to screen plant, plus two transfer points on screen plant, per Permittee's NoC application.
[5] Emission factor for uncontrolled PM_{10}, assumed to be the same for uncontrolled and controlled PM and $PM_{2.5}$.
[6] Uncontrolled emission factors used as controlled emission factors for conservative purposes.

Table 2: Emissions from crushing and screening activities.

Actual emission rate (ton/year)	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Crushing	0.1296	0.0576	0.0576	0.0288	0.0130	0.0024
Screening	7.2000	1.7280	1.7280	0.0864	0.0528	0.0024
Product transfer points (3x)	0.2160	0.0792	0.0792	0.0101	0.0033	0.0009
Truck unloading	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Truck loading hopper	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024

Table 3: Total emissions from crushing and screening activities.

Crushing and screening activities [1]	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Actual emission rate (tons/year)	9.06	2.24	2.24	0.15	0.09	0.01
Allowable emission rate (tons/year)	9.25	2.29	2.29	0.16	0.09	0.01

[1] A safety factor of 1.2 was applied to address the potential for crushing concrete and asphalt to have higher emission factors than mineral rock during crushing operations. Used in a previous Order of Approval issued by Yakima Regional Clean Air Agency (YRCAA) for a similar type of process.

Aggregate handling and storage piles

Table 4: Constanst and emission factor calculation for aggregate handling and storage piles.

Parameter	PM	PM_{10}	$PM_{2.5}$
k [1]	0.74	0.35	0.053
Material moisture content, % (M) [2]	2.2		
Average wind speed, mph (U) [3]	7.8		
Control efficiency, % [4]	80%		
Uncontrolled emission factor (lb/tons) [5]	0.003694	0.001747	0.000265

$$E = k(0.0032)\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (pound[lb]/ton)}$$

[1] Taken from AP-42 Section 13.2.4 Aggregate Handling And Storage Piles - Aerodynamic Particle Size Multiplier (k) for Equation 1.

[2] Moisture content taken from Sample #4 in the Permittee's "Material Testing Services; TTC Construction Road and Work Area Dust Sampling and Testing; Yakima County, Washington".

[3] Used in a previous Order of Approval issued by YRCAA for a similar type of process around the same area where this facility is located.

[4] Control efficieny based on the use of water spray systems on stockpiles.

[5] Ecuation taken from AP-42 Section 13.2.4 Aggregate Handling And Storage Piles - Equation 1(b) (lb/ton).

Table 5: Total emissions from aggregate handling and storage piles.

Aggregate handling and storage piles [1]	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Actual emission rate (tons/year)	0.1064	0.0503	0.0076	0.0213	0.0101	0.0015
Allowable emission rate (tons/year)	0.1086	0.0514	0.0078	0.0217	0.0103	0.0016

[1] A safety factor of 1.2 was applied to address the potential for crushing concrete and asphalt to have higher emission factors than mineral rock during crushing operations. Used in a previous Order of Approval issued by Yakima Regional Clean Air Agency (YRCAA) for a similar type of process.

Work area

Loader

Table 6: Constanst and emission factor calculation for loader use in work area.

Parameter	PM	PM_{10}	$PM_{2.5}$
k, lb/VMT [1]	4.9	1.5	0.15
a [1]	0.7	0.9	0.9
b [1]	0.45	0.45	0.45
Surface silt content, % (s) [2]	3.9		
Loader weight, tons [3]	17.3		
Loader capacity, tons [3]	4.8		
Mean loader weight, tons (W)	19.7		
Mean loader speed, mph [3]	5		
Actual operation hours, hours/year	480		
Vehicle miles traveled, VMT/year	2,400		
Natural mitigation, % [4]	80.82%		
Control efficiency, % [5]	80%		
E, Uncontrolled emission factor, lb/VMT [6]	5.20	1.27	0.13
Eext, lb/VMT [4]	4.21	1.03	0.10

$$E = k(s/12)^a(W/3)^b \text{ (lb/VMT)}$$

$$E_{ext} = E[(365 - P)/365]$$

[1] Taken from AP-42 Section 13.2.2 Unpaved roads - Table 13.2.2-2 Constants for Equations 1a and 1b; Industrial Roads (Equation 1a).

[2] Taken from AP-42 Section 13.2.4 Aggregate Handling and Storage Piles - Table 13.2.4-1 Stone quarrying and processing.

[3] Based on Permittee's NoC application and equipment information (loader model CAT 950F).

[4] Taken from AP-42 Section 13.2.2 Unpaved roads - Equation 2 for natural mitigation. P is equal to the number of days with rainfall greater than 0.01 inches per day; P=70 days at site.

[5] Control efficieny based on the use of water spray systems on work areas.

[6] Taken from AP-42 Section 13.2.2 Unpaved roads - Equation 1(a) (lb/VMT).

Table 7: Total emissions from loader in work area.

Work area - Loader	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Actual emission rate (tons/year)	5.05	1.23	0.12	1.01	0.25	0.02
Allowable emission rate (tons/year)	5.15	1.26	0.13	1.03	0.25	0.03

Excavator

Table 8: Constanst and emission factor calculation for excavators use in work area.

Parameter	PM	PM_{10}	$PM_{2.5}$
k, lb/VMT [1]	4.9	1.5	0.15
a [1]	0.7	0.9	0.9
b [1]	0.45	0.45	0.45
Surface silt content, % (s) [2]	3.9		
Loader weight, tons [3]	37.1		
Loader capacity, tons [3]	5		
Mean loader weight, tons (W)	39.6		
Mean loader speed, mph [3]	5		
Actual operation hours, hours/year	480		
Vehicle miles traveled, VMT/year	2,400		
Natural mitigation, % [4]	80.82%		
Control efficiency, % [5]	80%		
E, Uncontrolled emission factor, lb/VMT [6]	7.12	1.74	0.17
Eext, lb/VMT [4]	5.76	1.41	0.14

$E = k(s/12)^a(W/3)^b$ (lb/VMT)

$E_{ext} = E[(365 - P)/365]$

[1] Taken from AP-42 Section 13.2.2 Unpaved roads - Table 13.2.2-2 Constants for Equations 1a and 1b; Industrial Roads (Equation 1a).

[2] Taken from AP-42 Section 13.2.4 Aggregate Handling and Storage Piles - Table 13.2.4-1 Stone quarrying and processing.

[3] Based on Permittee's NoC application and equipment information (excavators model CAT 336EL and 336FL).

[4] Taken from AP-42 Section 13.2.2 Unpaved roads - Equation 2 for natural mitigation. P is equal to the number of days with rainfall greater than 0.01 inches per day; P=70 days at site.

[5] Control efficieny based on the use of water spray systems on work areas.

[6] Taken from AP-42 Section 13.2.2 Unpaved roads - Equation 1(a) (lb/VMT).

Table 9: Total emissions from excavators in work area.

Work area - Excavator	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Actual emission rate (tons/year)	6.91	1.69	0.17	1.38	0.34	0.03
Allowable emission rate (tons/year)	7.05	1.72	0.17	1.41	0.34	0.03

Unpaved roads

Dump trucks [1]

[1] Calculations based on output per year, that is imported and exported by dump trucks.

Table 10: Constanst and emission factor calculation for dump trucks in unpaved roads.

Parameters	PM	PM_{10}	$PM_{2.5}$
k, lb/VMT [1]	4.9	1.5	0.15
a [1]	0.7	0.9	0.9
b [1]	0.45	0.45	0.45
Surface silt content, % (s) [2]	3.90		
Haul truck weight, tons [3]	22.20		
Haul truck capacity, tons [3]	28.3		
Mean haul truck weight, tons (W)	36.35		
Unpaved road and work area length, miles [4]	0.65		
Actual trips required, trips/year	1,696		
Vehicle miles traveled, VMT/year	1,102		
Natural mitigation, % [5]	80.82%		
Control efficiency, % [6]	80%		
E, Uncontrolled emission factor, lb/VMT [7]	6.86	1.68	0.17
Eext, lb/VMT [5]	5.54	1.35	0.14

$E = k(s/12)^a(W/3)^b$ (lb/VMT)

$E_{ext} = E[(365 - P)/365]$

[1] AP-42 Section 13.2.2 Unpaved roads - Table 13.2.2-2 Constants for Equations 1a and 1b; Industrial Roads (Equation 1a).

[2] AP-42 Section 13.2.4 Aggregate Handling and Storage Piles - Table 13.2.4-1 Stone quarrying and processing.

[3] Based on Permittee's NoC application and equipment information (dump trucks model D250E)

[4] Average distance dump trucks have to travel to import and export asphalt and concrete. Based on Permittee's site plan submitted with the NoC application.

[5] Taken from AP-42 Section 13.2.2 Unpaved roads - Equation 2 for natural mitigation. P is equal to the number of days with rainfall greater than 0.01 inches per day; P=70 days at site.

[6] Control efficieny based on the use of water spray systems on work areas.

[7] Taken from AP-42 Section 13.2.2 Unpaved roads - Equation 1(a) (lb/VMT).

Table 11: Total emissions from dump trucks in unpaved roads.

Unpaved roads - Dump trucks (gravel road and work area)	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Actual emission rate (tons/year)	3.05	0.75	0.07	0.61	0.15	0.01
Allowable emission rate (tons/year)	3.12	0.76	0.08	0.62	0.15	0.02

Table 12: Total particulate matter (PM) emissions from crushing, screening, stockpiles, work area and unpaved roads.

Total PM Emissions	Uncontrolled			Controlled		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Total actual emission rate (tons/year)	24.18	5.96	2.62	3.18	0.83	0.09
Total allowable emission rate (tons/year)	24.68	6.09	2.67	3.24	0.85	0.09

Table 13: New source review (NSR) requirements.

	PM	PM_{10}	$PM_{2.5}$
Total PTE uncontrolled emission rate (tons/year	24.68	6.09	2.67
Exemption thresholds (tons/year) [2]	1.25	0.75	0.5
NSR required?	Yes	Yes	Yes

[1] Allowable hours of operation will be considered potential (PTE) hours of operation, as per WAC 173-400-030(76).

[2] Permitting is required if the total PTE uncontrolled emission rate exceeds the corresponding NSR threshold stablished in WAC 173-400-100(5)(b).

Table 14: AERMOD modeling results for PM.

Pollutant	Total PTE controlled rate (lb/hr)	NAAQS	Averaging time	Modeled concentration ($\mu g/m^3$)	Background concentration ($\mu g/m^3$)	Below NAAQS?
PM_{10}	0.505	150	24-hr	80.73	64.11	Yes
$PM_{2.5}$	0.052	35	24-hr	8.28	18.89	Yes
	0.020	9	Annual	1.18	5.19	Yes

AERMOD results as Volume Source at 1 lb/hr		
Crushing activities PM emissions, 24-hr	160.00	$\mu g/m^3$
Crushing activities PM emissions, year	59.30	$\mu g/m^3$

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Hazardous Air Pollutants (HAPs) and Toxic Air Pollutants (TAPs) Emissions [1]

[1] HAPs and TAPs are emitted only during crushing, screening, aggregate handling and storage piles.

[2] Calculations for crushed concrete and asphalt are performed under a 'worst-case scenario,' assuming that 100% of each material is crushed and then compared to their respective thresholds established in WAC 173-460-150.

Table 15: Silica, crystalline (respirable) [1] emission from crushed concrete and asphalt.

Recyclable material	% material crushed	Composition	Actual respirable fraction of crystalline silica emissions uncontrolled (tons/year)	Actual respirable silica emission rate uncontrolled (ton/year)	Actual respirable silica emission rate uncontrolled (lb/day)	De Minimis (lb/day) [3]	Permitting required?	PTE respirable fraction of crystalline silica emissions controlled (tons/year) [4]	PTE respirable silica emission rate controlled (ton/year)	PTE Respirable silica emission rate controlled (lb/day)	SQER (lb/day) [3]	Modeling required?
Crushed Concrete	100%	1%	4.54	0.05	1.51	0.011	Yes	0.11	0.0011	0.02	0.22	No
Crushed Asphalt	100%	1%	4.54	0.05	1.51		Yes	0.11	0.0011	0.02		No

[1] Crushed concrete and crushed asphalt are composed of Quartz (silica, crystalline), CAS No. 14808-60-7; Quartz is composed of silica. The respirable fraction of crystalline silica are particles under 10 microns in diameter; i.e. <PM_{10}. For conservative purposes, PM_{10} and $PM_{2.5}$ were considered as respirable fraction of crystalline silica, which is listed as a TAP in WAC 173-460-150 with CAS No. 7631-86-9. https://safesilica.eu/wp-content/uploads/2019/09/Safe-Silica-Whitepaper-Feb-2019.pdf

[2] Taken from Safety Data Sheets (SDSs) for reclaimed asphalt and concrete.

[3] Taken from WAC 173-460-150. Updated and effective 12/23/19.

[4] Allowable emission rate will be considered PTE emission rate, by using a non-resettable hour meter in the crusher generator, as per WAC 173-400-030(76).

Table 16: AERMOD modeling results for HAPs and TAPs.

Hazardous/Toxic Air Pollutant	Averaging Period	ASIL ($\mu g/m^3$)	Total PTE pollutant emission rate controlled (lb/day)	Total PTE pollutant emission rate controlled (lb/hr)	Modeled concentration ($\mu g/m^3$)	% ASIL	Exceeds ASIL?
Silica, crystalline (respirable) - Crushed concret	24-hr	3.0	0.02	0.0007	0.11	3.6%	No
Silica, crystalline (respirable) - Crushed asphalt	24-hr	3.0	0.02	0.0007	0.11	3.6%	No

AERMOD results as Volume Source at 1 lb/hr.		
Crushing activities emissions, 24-hr	165.00	$\mu g/m^3$
Crushing activities emissions, year	51.80	$\mu g/m^3$

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DIESEL ENGINE FOR SCREEN UNIT

Table C: Operating hours (engine)			
Actual [1]	480	hours/year	(8hours/day)*(5day/week)*(12weeks/year)
Allowable/Potential [2]	490	hours/year	(3.5hours/day)*(5day/week)*(28weeks/year)

[1] Per Notice of Construction (NoC) application.

[2] More stringent daily hours of operation based on emission calculations are enforceable operational limitation. Therefore, allowable hours of operation are considered potential (PTE) hours of operation, pursuant to WAC 173-400-030(76).

Table D: Engine								
Engine	**Name**	**Brand**	**EPA Tier**	**Fuel**	**Rate (hp)**	**Rate (kW)**	**Rate (MMBtu/hr)**	**rpm**
Cat C7.1 ACERT	Cat XQ230	Caterpillar	Tier 4	Diesel	277	182	0.71	2800

Table 17: AERMOD modeling results for engine.

AERMOD results as 1 Point Source (1 diesel engine) at 1 lb/hr		
1-hr	125.00	$\mu g/m^3$
3-hr	98.24	$\mu g/m^3$
8-hr	64.10	ug/m^3
24-hr	34.30	$\mu g/m^3$
Year	3.57	$\mu g/m^3$

Table 18: Criteria air pollutants (CAPs) emissions from engine.

Pollutant	Emission Factor (g/kW-hr) [1]	Emission rate (lb/hr)	Actual emission rate (lb/year)	Allowable emission rate (lb/year)	Actual emission rate (tpy)	Allowable emission rate (tpy)	Exemption thresholds (tons/year)	NSR required?	NAAQS ($\mu g/m^3$)	Averaging period	Modeled concentration ($\mu g/m^3$)
NOx as NO_2	0.27	0.11	52.00	53.08	0.03	0.0265	2.0	No	188	1-hr	13.5
									100	year	0.4
VOC [2]	0.01	0.00	1.93	1.97	0.00	0.0010	2.0	No	NA	NA	NA
CO	1.3	0.52	250.37	255.59	0.13	0.1278	5.0	No	10,307	8-hr	33.4
									40,082	1-hr	65.2
SOx as SO_2 [3]	0.00205	0.57	272.91	278.59	0.14	0.1393	2.0	No	196	1-hr	71.1
									1,309	3-hr	55.9
PM_{10}	0.002	0.0008	0.39	0.39	0.00	0.0002	0.75	No	150	24-hr	0.03
$PM_{2.5}$	0.002	0.0008	0.39	0.39	0.00	0.0002	0.50	No	35	24-hr	0.03
									9	year	0.00

[1] Certification levels for engine family NPKXL07.0BN1, unless otherwised noted.

[2] Expressed as Non Methane Hydrocarbons (NMHC).

[3] Taken from AP-42 Section 3.3 Gasoline and diesel industrial engines, Table 3.3-1. Expressed in lb/hp-hr.

Table 19: HAPs and TAPs emissions from engine.

Pollutant	CAS No.	Clasiffication	Emission Factor (lb/MMBtu) [1]	Emission rate (lb/hr)	Actual emission rate (lb/year)	Averaging period	Actual emission rate (lb/avg period)	De Minimis (lb/avg period) [2]	NSR required?	Allowable emission rate (lb/year)	Actual emission rate (lb/avg period)	SQER (lb/avg period) [2]	Modeling required?	Modeled concentration ($\mu g/m^3$)	ASIL ($\mu g/m^3$)
DEEP [3]	-	TAP	-	8.0E-04	3.9E-01	year	3.9E-01	2.7E-02	Yes	0.39	3.9E-01	5.40E-01	No	2.86E-03	3.30E-03
Benzene	71-43-2	HAP/TAP	9.33E-04	6.6E-04	3.2E-01	year	3.2E-01	1.0E+00	No	0.32	3.2E-01	2.10E+01	No	NA	NA
Toluene	108-88-3	HAP/TAP	4.09E-04	2.9E-04	1.4E-01	24-hr	3.8E-04	1.9E+01	No	0.14	3.9E-04	3.70E+02	No	NA	NA
Xylenes	1330-20-7	HAP/TAP	2.85E-04	2.0E-04	9.6E-02	24-hr	2.6E-04	8.2E-01	No	0.10	2.7E-04	1.60E+01	No	NA	NA
Propylene	115-07-1	TAP	2.58E-04	1.8E-04	8.7E-02	24-hr	2.4E-04	1.1E+01	No	0.09	2.4E-04	2.20E+02	No	NA	NA
Formaldehyde	50-00-0	HAP/TAP	1.18E-03	8.3E-04	4.0E-01	year	4.0E-01	2.7E+01	No	0.41	4.1E-01	1.40E+00	No	NA	NA
Acetaldehyde	75-07-0	HAP/TAP	7.67E-04	5.4E-04	2.6E-01	year	2.6E-01	3.0E+00	No	0.27	2.7E-01	6.00E+01	No	NA	NA
Acrolein	107-02-8	HAP/TAP	9.25E-05	6.5E-05	3.1E-02	24-hr	8.6E-05	1.3E-03	No	0.03	8.8E-05	2.60E-02	No	NA	NA
Naphthalene	91-20-3	HAP/TAP	8.48E-05	6.0E-05	2.9E-02	year	2.9E-02	2.4E-01	No	0.03	2.9E-02	4.80E+00	No	NA	NA
Acenaphthylene	208-96-8	-	5.06E-06	3.6E-06	1.7E-03	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	-	1.42E-06	1.0E-06	4.8E-04	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA
Fluorene	86-73-7	-	2.92E-05	2.1E-05	9.9E-03	NA	NA	NA	NA	0.01	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	-	2.94E-05	2.1E-05	1.0E-02	NA	NA	NA	NA	0.01	NA	NA	NA	NA	NA
Anthracene	120-12-7	-	1.87E-06	1.3E-06	6.3E-04	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	-	7.61E-06	5.4E-06	2.6E-03	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA
Pyrene	129-00-0	-	4.78E-06	3.4E-06	1.6E-03	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA
Benz(a)anthracene	56-55-3	TAP	1.68E-06	1.2E-06	5.7E-04	year	5.7E-04	4.5E-02	No	0.00	5.8E-04	8.90E-01	No	NA	NA
Chrysene	218-01-9	-	3.53E-07	2.5E-07	1.2E-04	year	1.2E-04	4.5E-01	No	0.00	1.2E-04	8.90E+00	No	NA	NA
Benzo(b)fluoranthene	205-99-2	TAP	9.91E-08	7.0E-08	3.4E-05	year	3.4E-05	4.5E-02	No	0.00	3.4E-05	8.90E-01	No	NA	NA
Benzo(k)fluoranthene	207-08-9	TAP	1.55E-07	1.1E-07	5.2E-05	year	5.2E-05	4.5E-02	No	0.00	5.4E-05	8.90E-01	No	NA	NA
Benzo(a)pyrene	50-32-8	TAP	1.88E-07	1.3E-07	6.4E-05	year	6.4E-05	8.2E-03	No	0.00	6.5E-05	1.60E-01	No	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	TAP	3.75E-07	2.6E-07	1.3E-04	year	1.3E-04	4.5E-02	No	0.00	1.3E-04	8.90E-01	No	NA	NA
Dibenz(a,h)anthracene	53-70-3	TAP	5.83E-07	4.1E-07	2.0E-04	year	2.0E-04	4.1E-03	No	0.00	2.0E-04	8.20E-02	No	NA	NA
Benzo(g,h,i)perylene	191-24-2	-	4.89E-07	3.4E-07	1.7E-04	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA
NOx as NO_2	10102-44-0	CAP/TAP	-	1.1E-01	52.00	1-hr	5.9E-03	4.6E-01	No	53.08	6.1E-03	8.70E-01	No	NA	NA
CO	630-08-0	CAP/TAP	-	5.2E-01	250.37	1-hr	2.9E-02	1.1E+00	No	255.59	2.9E-02	4.30E+01	No	NA	NA
SOx as SO_2	9/5/7446	CAP/TAP	-	5.7E-01	272.91	1-hr	3.1E-02	4.6E-01	No	278.59	3.2E-02	1.20E+00	No	NA	NA

[1] Emission factors from AP-42 Table 3.3-2: Speciated organic compounds emission factors for uncontrolled diesel engines.

[2] WAC 173-460-150. Updated and effective 12/23/19.

[3] Diesel Engine Exhaust Particulate (DEEP), assumed to be equal to PM_{10} and $PM_{2.5}$.

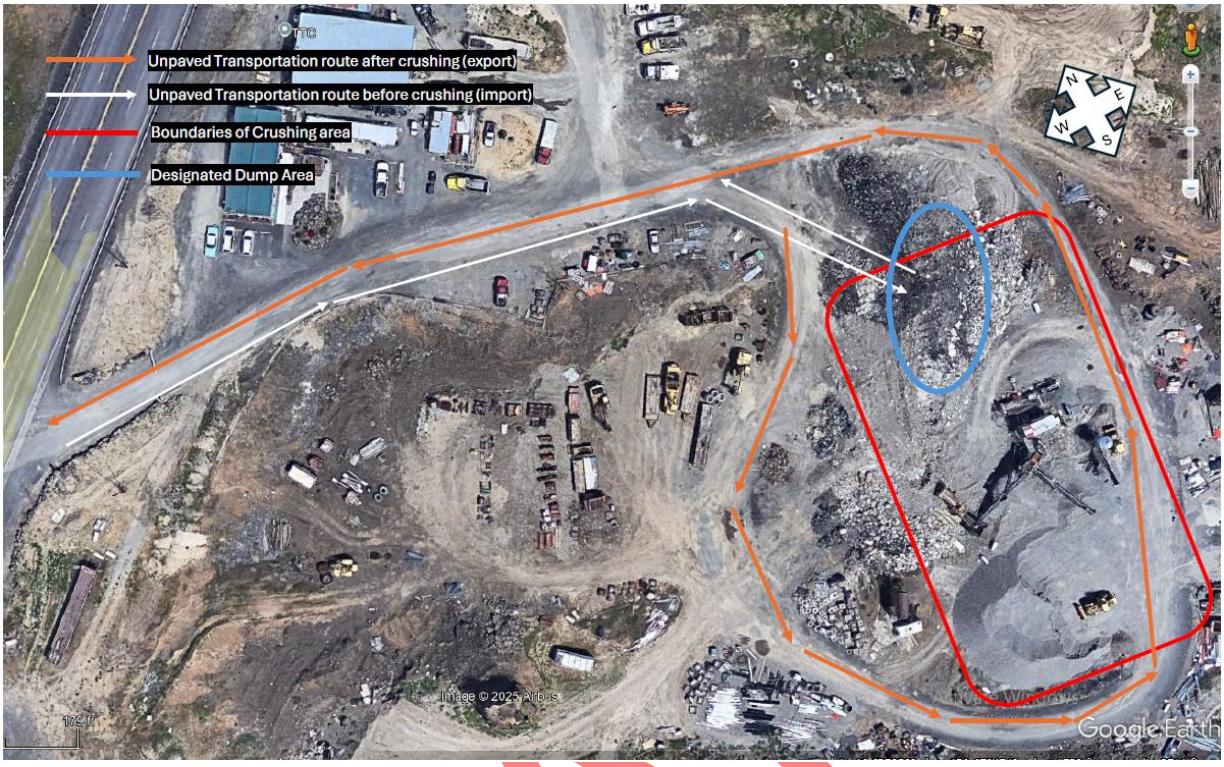

Figure 1: Facility site plan and approximate crushing area.

Figure 2: HSI crusher Cedar Rapids 5064.

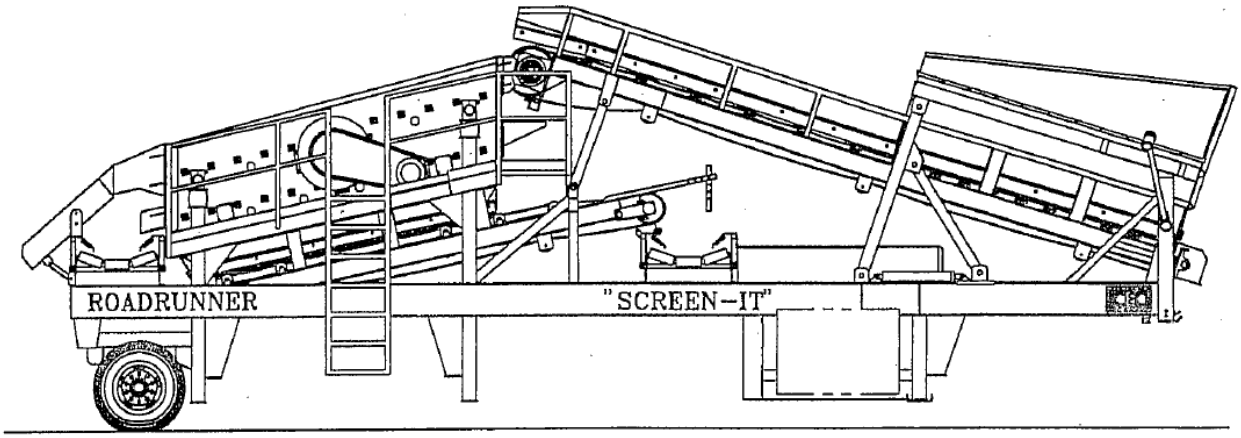

Figure 3: Screen unit CEC Road Runner Screen-It 5121.