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ARA Registration Number	Description	Date of Installation
003-1655-6- 1252	One (1) crushing and screening plant with an average throughput of 200 tons per hour, processing waste concrete, equipped with wet suppression systems and consisting of:	Initial installation 2019
	 One (1) primary jaw crusher (Metso LT106); One (1) secondary cone crusher (Metso LT1213); One (1) Metso, 2-deck, 5'x16' scalping screen; One (1) Metso, 2-deck, 18'x5' screen; Seventeen (17) conveyors; Two (2) Tier III, 100 hp diesel engines One (1) Tier IVi, 252 hp diesel mobile generator; One (1) Tier IIIB/Tier IVi, 415 hp diesel engine One (1) Tier II, 300 hp diesel engine; Three (3) feeders; and One (1) hopper. 	Subsequent equivalent equipment may be installed to replace existing equipment, as needed.

Part A – General Provisions

- (1) The following Air and Radiation Administration (ARA) permit-to-construct applications and supplemental information are incorporated into this permit by reference:
 - (a) Application for Processing or Manufacturing Equipment (Form 5) received at the Department on November 15, 2018.
 - (b) Toxic Air Pollutant (TAP) Emissions Summaries and Compliance Demonstrations (Form 5T) received at the Department on November 15, 2018.

- (c) Four (4) Emission Point Data forms (Form 5EP) received at the Department on November 15, 2018.
- (d) Application for Internal Combustion Engines (Form 44) received at the Department on November 15, 2018.
- (e) Supplemental Information for vendor specifications, emissions calculations, fugitive dust plan, and zoning approval received at the Department on November 15, 2018.

If there are any conflicts between representations in this permit and representations in the applications, the representations in the permit shall govern. Estimates of dimensions, volumes, emissions rates, operating rates, feed rates and hours of operation included in the applications do not constitute enforceable numeric limits beyond the extent necessary for compliance with applicable requirements.

- (2) Upon presentation of credentials, representatives of the Maryland Department of the Environment ("MDE" or the "Department") and the Anne Arundel County Health Department shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee's property and permitted to:
 - (a) inspect any construction authorized by this permit;
 - (b) sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;
 - (c) inspect any monitoring equipment required by this permit;
 - (d) review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit; and
 - (e) obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit.
- (3) The Permittee shall notify the Department prior to increasing quantities and/or changing the types of any materials referenced in the application or limited by this permit. If the Department determines that such increases or changes constitute a modification, the Permittee shall obtain a permit-to-construct prior to implementing the modification.

- (4) Nothing in this permit authorizes the violation of any rule or regulation or the creation of a nuisance or air pollution.
- (5) If any provision of this permit is declared by proper authority to be invalid, the remaining provisions of the permit shall remain in effect.
- (6) Subsequent to issuance of this permit, the Department may impose additional and modified requirements that are incorporated into a State permit-to-operate issued pursuant to COMAR 26.11.02.13.

Part B – Applicable Regulations

- (1) This source is subject to all applicable federal air pollution control requirements including, but not limited to, the following:
 - (a) All applicable terms, provisions, emissions standards, testing, monitoring, record keeping, and reporting requirements included in federal New Source Performance Standards (NSPS) promulgated under 40 CFR 60, Subparts A and OOO for Nonmetallic Mineral Processing Plants.
 - (b) All notifications required under 40 CFR 60, Subparts A and OOO shall be submitted to both of the following:

The Administrator Compliance Program Maryland Department of the Environment Air and Radiation Administration 1800 Washington Boulevard, STE 715 Baltimore MD 21230

and

Director, Air Protection Division U.S. EPA – Region 3 Mail Code 3AP00 1650 Arch Street Philadelphia, PA 19103-2029

(2) This source is subject to all applicable federally enforceable State air pollution control requirements including, but not limited to, the following regulations:

- (a) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.
- (b) COMAR 26.11.02.04B, which states that a permit to construct or an approval expires if, as determined by the Department:
 - (i) Substantial construction or modification is not commenced within 18 months after the date of issuance of the permit or approval, unless the Department specifies a longer period in the permit or approval;
 - (ii) Construction or modification is substantially discontinued for a period of 18 months after the construction or modification has commenced; or
 - (iii) The source for which the permit or approval was issued is not completed within a reasonable period after the date of issuance of the permit or approval.
- (c) COMAR 26.11.02.09A, which requires that the Permittee obtain a permit-to-construct if an installation is to be modified in a manner that would cause changes in the quantity, nature, or characteristics of emissions from the installation as referenced in this permit.
- (d) COMAR 26.11.06.03C and D, which requires that the Permittee take reasonable precautions to prevent particulate matter from unconfined sources and materials handling and construction operations from becoming airborne.
- (e) COMAR 26.11.06.12, which states that a person may not construct, modify, or operate, or cause to be constructed, modified, or operated, a New Source Performance Standard (NSPS) source in a manner which results or will result in violation of the provisions of 40 CFR, Part 60.
- (f) COMAR 26.11.09.05E, which limits visible emissions from the diesel engines to 10% and 40% opacity during idle and operating modes, respectively. Exceptions to these opacity limits are as follows:
 - The 10% opacity limit during idle mode does not apply for a period of 2 consecutive minutes after a period of idling of 15 minutes for the purpose of clearing the exhaust system;

- (ii) The 10% opacity limit during idle mode does not apply to emissions resulting directly from a cold engine start-up and warm-up for the following maximum periods:
 - (A) engines that are idling continuously when not in service: 30 minutes; and
 - (B) all other engines: 15 minutes.
- (iii) The 10% and 40% opacity limits do not apply while maintenance, repair, or testing is being performed by qualified mechanics.
- (g) COMAR 26.11.09.07A(2), which limits the sulfur content of distillate fuel oils to not more than 0.3 percent by weight.
- (3) This source is subject to all applicable State-only enforceable air pollution control requirements including, but not limited to, the following regulations:
 - (a) COMAR 26.11.02.13A(16), which requires that the Permittee obtain from the Department, and maintain and renew as required, a valid State permit-to-operate.
 - (b) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in such submittals.
 - (c) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
 - (d) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.
 - (e) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions would unreasonably endanger human health.

Part C – Construction Conditions

- (1) Except as otherwise provided in this part, the crushing and screening plant shall be constructed in accordance with specifications included in the incorporated applications.
- (2) This permit authorizes the installation of a crushing and screening plant and subsequent, equivalent replacement crushing and screening equipment as needed.
- (3) The Permittee shall equip the crushing and screening plant with wet suppression systems to comply with the particulate matter handling requirements of COMAR 26.11.06.03C and D and 40 CFR 60, Subpart OOO.

Part D – Operating Conditions

- (1) Except as otherwise provided in this part, all equipment associated with the crushing and screening plant covered by this permit shall be operated in accordance with specifications included in the application and any operating procedures recommended by equipment vendors unless the Permittee obtains from the Department written authorization for alternative operating procedures.
- (2) Premises wide emissions of oxides of nitrogen (NOx) shall be less than 25 tons in any rolling 12-month period.
- (3) The Permittee shall limit the operation of each engine associated with the crushing and screening plant to no more than 6000 hours per rolling 12-month period unless the Permittee can demonstrate, to the satisfaction of the Department, that premises wide emissions of NOx are less than 25 tons in any rolling 12-month period at other operating conditions.
- (4) Wet suppression systems shall be used as needed to comply with the fugitive particulate matter requirements of COMAR 26.11.06.03C and COMAR 26.11.06.03D and the following opacity limits specified in 40 CFR, Part 60, Subpart OOO for affected facilities at nonmetallic mineral processing plants constructed, modified, or reconstructed on or after April 22, 2008:
 - (a) no more than 12 percent opacity from each crusher; and

(b) no more than 7 percent opacity from all other fugitive sources. [Reference: 40 CFR §60.672(b) and Table 3 to 40 CFR 60 Subpart OOO]

- (5) The Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression systems for affected facilities at nonmetallic mineral processing plants constructed, modified, or reconstructed on or after April 22, 2008. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. **[Reference: 40 CFR §60.674(b)]**
- (6) The engines associated with the crushing and screening operation shall be nonroad engines, as defined in 40 CFR §1068.3, unless the Permittee complies with the stationary engine requirements of 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ, as applicable, for each engine.
- (7) The Permittee may only process waste concrete in the crushing and screening plant unless the Permittee obtains approval to process other materials.
- (8) The Permittee shall comply with the following requirements of the Departmentapproved Fugitive Dust Plan, unless the Permittee obtains an approval from the Department for an alternate plan:
 - (a) The Permittee shall avoid overfilling loader buckets and shall minimize drop heights of material onto stockpiles;
 - (b) The Permittee shall minimize work of stockpiles on windy days;
 - (c) Wet suppression systems shall be used whenever necessary to control fugitive dust from materials handling operations;
 - Fugitive dust from plant roads and stockpiles shall be controlled, as necessary, by using water or approved chemical dust suppressants or a combination, thereof; and
 - (e) The Permittee shall control traffic speeds and flush sweep roadways as necessary.

Part E – Notifications & Testing

(1) The Permittee shall submit written or electronic notification to the Department of the initial startup date of the portable concrete crushing and screening plant and the initial startup date of each subsequent, equivalent replacement equipment within 15 days after such date. [Reference: 40 CFR §60.7(a)(3) and §60.676(i)]

- (2) Not later than 180 days after initial start up of the portable crushing and screening plant and each subsequent, equivalent replacement equipment (if required), the Permittee shall demonstrate compliance will all applicable opacity standards. [Reference: 40 CFR §60.11(b) and §60.672(b)]
- (3) The Permittee shall use Method 9 of Appendix A-4 to 40 CFR, Part 60 and the procedures in 40 CFR §60.11, with the following additions:
 - (a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - (b) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A–4 of this part, Section 2.1) must be followed.
 - (c) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
 [Reference: 40 CFR §60.675(c)(1)]
- (4) The duration of the Method 9 (40 CFR, Part 60, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable opacity standards must be based on the average of the five 6-minute averages. [Reference: 40 CFR §60.675(c)(3)]
- (5) The Permittee shall submit notification of the intended date of the required Method 9 observations to the Department at least 30 days prior to that date.
- (6) Within 45 days following the required Method 9 observations, the Permittee shall submit the results to the Department.

Part F – Record Keeping & Reporting

- (1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
 - (a) The amount of materials processed in the crushing and screening plant in tons per month;

- (b) The hours of operation of each engine for each operating day;
- (c) The amount of diesel fuel burned in the diesel engines each month;
- (d) All opacity observation test results for the initial plant and each subsequent, equivalent replacement equipment;
- (e) Copies of all notifications of initial start-up of the crushing and screening plant and each subsequent, equivalent replacement equipment;
- (f) Equipment information or vendor literature for all initial equipment associated with the plant and each subsequent, equivalent replacement equipment;
- (g) A copy of the facility's Fugitive Dust Control Plan; and
- (h) A log of each periodic inspection of the wet suppression systems including dates and corrective actions taken.
- (2) The Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, records necessary to support annual certifications of emissions and demonstrations of compliance for toxic air pollutants. Such records shall include, if applicable, the following:
 - Mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each registered source of emissions;
 - (b) Accounts of the methods and assumptions used to quantify emissions;
 - (c) Copies of opacity observation test results for the initial plant and each subsequent, equivalent replacement equipment (if required);
 - (d) All operating data, including operating schedules and production data, that were used in determinations of emissions;
 - (e) The amount of diesel fuel used in each diesel engine each month;
 - (f) Any records, the maintenance of which is required by this permit or by State or federal regulations, that pertain to the operation and maintenance of continuous emissions monitors, including:

- (i) all emissions data generated by such monitors;
- (ii) all monitor calibration data;
- (iii) information regarding the percentage of time each monitor was available for service; and
- (iv) information concerning any equipment malfunctions.
- (g) Information concerning operation, maintenance, and performance of air pollution control equipment and compliance monitoring equipment, including:
 - (i) identifications and descriptions of all such equipment;
 - (ii) operating schedules for each item of such equipment;
 - (iii) accounts of any significant maintenance performed;
 - (iv) accounts of all malfunctions and outages; and
 - (v) accounts of any episodes of reduced efficiency.
- (h) Limitations on source operation or any work practice standards that significantly affect emissions; and
- (i) Other relevant information as required by the Department.
- (3) The Permittee shall submit to the Department by April 1 of each year a certification of emissions for the previous calendar year. The certifications shall be prepared in accordance with requirements, as applicable, adopted under COMAR 26.11.01.05 1 and COMAR 26.11.02.19D.
 - (a) Certifications of emissions shall be submitted on forms obtained from the Department.
 - (b) A certification of emissions shall include mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each of the facility's registered sources of emissions.
 - (c) The person responsible for a certification of emissions shall certify the submittal to the Department in the following manner:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- (4) The Permittee shall submit to the Department by April 1 of each year a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. Such analysis shall include either:
 - (a) A statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
 - (b) A revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.
- (5) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Administration.

Part G – Temporary Permit-to-Operate Conditions

- (1) This permit-to-construct shall also serve as a temporary permit-to-operate that confers upon the Permittee authorization to operate the crushing and screening plant for a period of up to 180 days after initiating operation of the crushing and screening plant.
- (2) The Permittee shall provide the Department with written or electronic notification of the date on which operation of the crushing and screening plant is initiated. Such notification shall be provided within 15 business days of the date to be reported.
- (3) During the effective period of the temporary permit-to-operate the Permittee shall operate the new installation as required by the applicable terms and conditions of

this permit-to-construct, and in accordance with operating procedures and recommendations provided by equipment vendors.

(4) The Permittee shall submit to the Department an application for a State permitto-operate no later than 60 days prior to expiration of the effective period of the temporary permit-to-operate.