



west virginia department of environmental protection

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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

General Permit No.: G40-C (Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Nonmetallic Mineral Processing Plants)

Eligible Standard Industrial Classification (SIC) codes: 1422, 1423, 1429, 1442, 1446, 1481, or 1499 (including area sources)

Eligible North American Industry Classification System (NAICS) codes: 212312, 212313, 212319, 212321, 212322, 213115, 238910, 541360, 212319, 212399 (including area sources)

Engineer Assigned: Jerry Williams II, P.E.

G40-C Registration Fee Amount: \$500.00

Applicable NSPS Fee Amount: \$1,000.00

Description: General Permit G40-C is for facilities designed and operated for the purpose of handling and processing nonmetallic minerals. Activities include grinding, breaking, crushing, screening, conveying, stockpiling and wet wash (heavy media wash). General Permit G40-C language will be the same for all facilities that want to use General Permit G40-C. The Registration forms will be different for each facility. The Registration form shall list all emission sources and sections of the general permit, which are applicable to the particular facility.

All General Permit Registrations issued under G40-A and G40-B are subject to this permit upon issuance. This Class II General Permit is being updated to reflect rule changes to 40CFR60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), and for the inclusion of reciprocating internal combustion engines that are used in conjunction with nonmetallic mineral processing plants. New Source Performance Standards (40CFR60 Subpart IIII and 40CFR60 Subpart JJJJ) for applicable engines will also be added to this General Permit.

WVDEP DAQ did not determine whether a registrant is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart ZZZZ.

EMISSION SOURCES AND ELIGIBILITY

For the purposes of General Permit G40-C, *nonmetallic mineral processing plant* means any combination of equipment that is used to crush or grind any nonmetallic minerals and includes, but shall not be limited to all grinding, crushing, picking, screening, conveying, storing and stockpiling operations.

Sources of emissions at eligible nonmetallic mineral processing plants include crushers, screens, transfer points (loading, unloading, etc.), open storage piles, bins, haulroads, reciprocating internal combustion engine driven compressors, emergency standby generators, and tanks.

All nonmetallic mineral processing plants having a Standard Industrial Classification (SIC) code of 1422, 1423, 1429, 1442, 1446, 1481, or 1499 (including area sources) or a North American Industry Classification System (NAICS) code of 212312, 212313, 212319, 212321, 212322, 213115, 238910, 541360, 212319, 212399 (including area sources) are eligible for this Class II General Permit registration except for:

1. Any nonmetallic minerals processing plant with a raw material process design capacity (input) of more than 1,200 tons per hour or more than 8,760,000 tons per year (Class II General Permit Throughput Eligibility Limit).
2. Any nonmetallic minerals processing plant which is a major source as defined in 45CSR14 or 45CSR30 (Class II General Permit Emission Eligibility Limit).
3. Any nonmetallic minerals processing plant, facility or equipment that is subject to the requirements of 45CSR3, 45CSR5, 45CSR14 or 45CSR19.
4. Any nonmetallic mineral processing plant which will require an individual permit review process and/or individual permit provisions to address regulatory requirements other than those established by General Permit G40-C.
5. Any nonmetallic mineral processing plant located in an underground mine.
6. Any nonmetallic minerals processing plant located in or which may significantly impact the area of Brooke County west of State Route 2, north of an extension of the southern boundary of Steubenville Township in Jefferson County, Ohio and south of the Market Street Bridge.
7. Any nonmetallic minerals processing plant located within the boundaries of or which may significantly impact the Weirton PM₁₀ nonattainment area.
8. Any nonmetallic minerals processing plant that will interfere with attainment or maintenance of applicable air quality standard, or cause or contribute to a violation of an applicable air quality increment.

SITE INSPECTION

All persons submitting a Class II General Permit Registration Application to construct, modify or relocate a nonmetallic mineral processing plant shall be subject to the following siting criteria:

- a. No person shall construct, locate or relocate any facility, affected facility or emission unit within three hundred (300) feet of any occupied dwelling, business, public building, school, church, community, institutional building or public park. An owner of an occupied dwelling or business may elect to waive the three hundred (300) foot siting criteria.
- b. Any person proposing to construct, modify or relocate a nonmetallic mineral processing plant within three (300) feet of any occupied dwelling, business, public building, school, church, community, institutional building or public park may elect to obtain an individual permit pursuant to 45CSR13.

The registrant shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times enter upon the registrant's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Class II General Permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under this Class II General Permit.
- d. Sample or monitor at reasonable times, substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Sources of emissions at eligible nonmetallic mineral processing plants include crushers, screens, transfer points (loading, unloading, etc.), open storage piles, bins, haulroads, reciprocating internal combustion engine driven compressors, emergency standby generators, and tanks. An estimate of criteria and hazardous/toxic pollutant emissions shall be submitted with each Class II General Permit Registration Application on an Emission Summary Sheet.

G40-C applicants are required to submit emission estimates and supporting calculations for each affected source located at the facility. The DAQ has provided an emissions calculations spreadsheet available on our website to assist registrants with this requirement. These emissions will be reviewed by the DAQ to determine that the registrant meets the requirements of General Permit G40-C.

The following emissions control equipment represents the minimum level of controls required of Class II General Permit registrants.

1. **Fugitive Dust Control of Premises:** The registrant shall adequately maintain and operate on-site: (1) a water truck, or (2) a fixed system of water sprays, or (3) a combination of a water truck and a fixed system of water sprays to minimize the emission of particulate matter generated from access roads, haulroads, open storage piles and work areas. Any fixed water spray system shall be no less effective than a water truck in minimizing fugitive particulate emissions from the area under control. The water truck and/or fixed water spray system shall be operated at all times when fugitive particulate emissions from access roads, haulroads, open storage piles and work areas are generated as a result of vehicular traffic, operational activity or wind. All water trucks and fixed water sprays shall be equipped with a pump and spraybars to apply water or a mixture of water and an environmentally acceptable dust control additive (solution) to access roads, haulroads, open storage piles and work areas where mobile equipment is used. Spraybars shall be equipped with commercially available spray nozzles of sufficient size and number so as to provide adequate coverage to the area being treated. The pump and piping system used to deliver the water or solution shall be of sufficient size and capacity to deliver an adequate quantity of water or solution to the spray nozzles at a sufficient pressure to provide an effective spray.
2. **Haulroad Maintenance:** All haulroads, access roads, open storage piles and work areas shall be kept clean and in good condition by replacing base material and/or grading as required.
3. **Vehicular Tracking:** If tracking of solids by vehicular traffic from access and/or haulroads onto any public road or highway occurs and generates or has the potential to generate fugitive particulate emissions, the registrant shall properly operate and maintain an underbody truck wash, rumble strips or employ other suitable measures to maintain effective fugitive dust control of the premises and minimize the emission of particulate matter;
4. **Transfer Points:** All transfer points shall at least be partially enclosed so as to effectively minimize the emission of particulate matter;
5. **Crushers and Breakers:** All crushers and rotary breakers shall be either: (1) fully enclosed; or (2) partially enclosed and fitted with effective water sprays to minimize the emission of particulate matter. Water sprays are not required to operate when the moisture content of processed material is adequate to ensure minimization of fugitive particulate emissions;
6. **Screens:** All screens shall be either: (1) fully enclosed; or (2) partially enclosed and fitted with effective water sprays to minimize the emission of particulate matter. Water sprays

are not required to operate when the moisture content of processed material is adequate to ensure minimization of fugitive particulate emissions;

7. Load-outs: All railcar, barge and truck load-outs shall be equipped with a device and/or employ a specific operating method which minimizes drop height during load-out in order to minimize the emission of particulate matter;
8. Open Storage Pile Loading: All loading of open storage piles shall: (1) be accomplished with a device and/or employ a specific operating method which minimizes drop height during load-in; or (2) utilize a stacking tube to effectively minimize the emission of particulate matter. All ports shall remain covered at all times with the exception of the discharging port to ensure minimization of fugitive particulate emissions;
9. Dump Bins: All dump bins which are fed by conveyor, end-loader, truck or other transport device shall be fitted with a three-sided roofed enclosure and effective water sprays. Any dump bin which is fed from the top shall be fitted with a four sided enclosure, effective water sprays and shall not be required to have a roof. Water sprays are not required to operate when the moisture content of processed material is adequate to ensure minimization of fugitive particulate emissions;
10. High-wall Truck and Conveyor Dumps: All high-wall truck and conveyor dumps with a maximum vertical elevation differential between the discharge of the dump bin and the top of the collected material below (process drop height) greater than 20 feet shall incorporate a stacking tube or full enclosure. The stacking tube or full enclosure shall be properly designed, functional and operated in such a manner to minimize drop height while in operation. All ports shall remain covered at all times with the exception of the discharging port to ensure minimization of fugitive particulate emissions; and
11. The registrant shall properly install, operate and maintain designed winterization systems for all water trucks and/or water sprays in a manner that all such fugitive dust control systems remain effective and functional, to the maximum extent practicable, during winter months and cold weather. At all times, including periods of cold weather, the registrant shall comply with the requirements, provisions, standards and conditions of this Class II General Permit, any other permit or applicable statutory or regulatory requirement.

In regards to the control devices that are required as part of General Permit G40-C, EPA provided the following response relating to opacity questions during the review of 40CFR60 Subpart 000.

Section 111 of the CAA requires that NSPS reflect the application of the best system of emission reductions which (taking into consideration the cost of achieving such emission reductions, any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. This

level of control is commonly referred to as BDT (Best Demonstrated Technology). Section 111(b)(1)(B) of the CAA requires EPA to periodically review and revise the standards of performance, as necessary, to reflect improvements in methods for reducing emissions. The subpart OOO emission limits were established with the 1983 proposal and 1985 promulgation of subpart OOO, based on review of the performance of technology and emissions data collected in the late 1970s. The emission limits have not been reevaluated based on actual emissions testing in over 20 years because the first action taken with respect to the NMPP NSPS, completed on June 9, 1997 (62 FR 31351), considered provisions other than the emission limits.

For purposes of this (2008–2009) NSPS review, EPA reviewed more recent actual emissions data from hundreds of emissions tests conducted on a variety of subpart OOO affected facilities in many NMPP industries (EPA–HQ–OAR–2007–1018–0085). These data revealed that the vast majority of affected facilities perform substantially better than the current subpart OOO emission limits. Therefore, EPA determined that it was appropriate in this NSPS review to reduce the subpart OOO emission limits for affected facilities commencing construction, modification, or reconstruction on or after April 22, 2008. Further, because the majority of existing affected facilities for which EPA has data meet the revised standards (as discussed below), EPA concludes that all new affected facilities should also be able to achieve them. For affected facilities commencing construction, modification, or reconstruction on or after April 22, 2008, EPA is retaining (as proposed) the stack emission limit of 0.014 gr/dscf and EPA is replacing the associated 7 percent stack opacity limit with a continuous monitoring requirement. For affected facilities commencing construction, modification, or reconstruction on or after April 22, 2008, EPA is promulgating the proposed fugitive emission limits of 12 percent opacity for crushers without capture systems and 7 percent opacity for all other types of affected facilities with fugitive emissions (including fugitive emissions from grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, and any other affected facility). The stack emissions data EPA reviewed to set the revised limits included over 300 PM stack tests from 1990 and later. Ninety-one percent of the PM stack test results achieved 0.014 gr/dscf or lower. The control devices used for the affected facilities tested included primarily baghouses and wet scrubbers. In addition, EPA reviewed more than 700 fugitive emissions tests. For crushers without capture systems, 98 percent of the fugitive emissions test averages were at or below 12 percent opacity and 99 percent of the fugitive emissions test averages for other types of affected facilities were at or below 7 percent opacity. The fugitive emission limits are most commonly met through use of wet suppression (as needed), water carryover, or with a partial enclosure. Affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008, can employ the same control devices or fugitive emission reduction measures for which test data were reviewed to meet the revised emission limits, except that the small fraction of marginally performing controls would no longer be acceptable for new, modified, or reconstructed affected facilities. The small fraction of existing marginally performing controls can be represented by the fraction of test data above the revised emission limits (i.e., less than 10 percent of data, including data from controls that failed to meet the original NSPS limits but were later retested and met the limits). Such controls will no longer be acceptable for new, modified, or reconstructed affected facilities. This is

consistent with the goal of NSPS review to reflect improvements in methods for reducing emissions. In short, because the vast majority of existing affected facilities for which EPA has data are achieving these revised standards, EPA has concluded that all new affected facilities should be able to achieve these revised standards as well. EPA has no reason to believe that new affected facilities could not meet the revised standards. EPA disagrees with assertions that the revised limits erase any margin for error or fail to account for variability. To the contrary, significant percentages of the test data achieved substantially lower limits than are being promulgated for subpart OOO. Thus, a workable compliance margin and provision for variability remains. The emission reduction associated with lowering the fugitive emission limits is not quantifiable because no reduction in mass emission rate can be determined from opacity measurements. However, that does not mean that there is no environmental benefit. The environmental benefit is that higher emissions from marginally performing controls (as described above) will no longer be acceptable for fugitive emissions from affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008. Although opacity is read in 5 percent increments, the test average resulting from averaging the opacity observations is not limited to increments of 5 percent opacity. In addition to reducing the fugitive opacity limits, EPA is also specifying in § 60.675(c)(3) that the duration of the Method 9 observations must be 30 minutes (five 6-minute averages) and that compliance with the fugitive emission limits must be based on the average of the five 6-minute averages (which is equivalent to the test average).

The emissions control equipment required in General Permit G40-C reflect a level of control that is equivalent or superior to the test information that was used in setting the opacity and emission limits in 40CFR60 Subpart OOO.

REGULATORY APPLICABILITY

The following rules apply to General Permit G40-C:

45CSR2 To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers

45CSR2 establishes emission limitations for smoke and particulate matter which are discharged from fuel burning units. All fuel burning units will be subject to the weight emission standard for particulate matter set forth in 45CSR2. Each registrant is also subject to all applicable opacity requirements set forth in 45CSR2 Section 3.2.

45CSR7 To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations

45CSR7 applies to the registrant because the facility meets the definition of “Manufacturing Process” found in subsection 45CSR7.2.20. General Permit G40-C requires that the registrant is in compliance with Section 3 (less than 20% opacity), Section 4 (particulate matter weight emission standard) and Section 5 (fugitive dust control system and dust control of the premises and access roads) when the particulate

matter control methods and devices proposed within General Permit G40-C are in operation.

45CSR10 To Prevent and Control Air Pollution from the Emission of Sulfur Oxides

The purpose of this rule is to prevent and control air pollution from the emission of sulfur oxides. All fuel burning units will be subject to the weight emission standard for sulfur dioxide set forth in 45CSR10.

45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

As provided in 45CSR13, the Secretary may issue Class II General Permits involving the same or similar processes or pollutants. For eligible applicants and/or registrants, Class II General Permit registration satisfies the construction, modification, relocation and operating permit requirements of 45CSR13.

45CSR16 Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60

45CSR16 applies to all registrants that are subject to a NSPS by reference of 40CFR60. The registrant is subject to the applicable requirements of the NSPS that applies.

45CSR22 Air Quality Management Fee Program

45CSR22 applies to all registrants which are minor sources and no NSPS applies. The affected registrants will be subject to the fee schedule set forth in 45CSR22. They are also required to keep their Certificate to Operate status current.

45CSR30 Requirements for Operating Permits

45CSR30 applies to those sources for which an NSPS applies. The affected registrants will be subject to the fee schedule set forth in 45CSR30. They are also required to file a Certified Emissions Statement annually.

40CFR60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)

Subpart OOO sets forth opacity limits, particulate matter control methods, and monitoring requirements for all subject nonmetallic mineral processing plants.

The rule does not apply to the following operations:

1. Facilities located in underground mines.
2. Plants with no crusher or grinding mill above ground.
3. Wet material processing operations. Please see the rule text for the definition of a wet material processing operation.
4. Fixed crushing or sand and gravel plants with an initial crushing capacity of 25 tons per hour or less.

5. Portable crushing or sand and gravel plants with an initial crushing capacity of 150 tons per hour or less.
6. Common clay plants and pumice plants with an initial crushing capacity of 10 tons per hour or less.
7. An installation that is subject to 40 CFR Part 60, Subpart F or I.

On October 8, 2009, EPA promulgated amendments to the New Source Performance Standard (NSPS) for Nonmetallic Processing Plants, 40 CFR Part 60 Subpart OOO. This final rule was effective on April 28, 2009, and the final applicable amendments to General Permit G40-C include:

Emission Standards

The emission standards for affected facilities manufactured before April 22, 2008, remain unchanged. The standards are as follows: particulate matter emission limit of 0.022 grains per dry standard cubic foot or gr/dscf, visible emission limit of 7 percent opacity for stack emissions, and a visible emission limit of 10 percent opacity (15 percent for crushers) for fugitive emissions.

Emission limits for affected facilities manufactured on or after April 22, 2008, have changed. The emission standards for affected facilities that fall into this category are as follows:

1. For stack emissions the particulate matter emission limit is 0.014 gr/dscf. There is no visible emission limit, it has been replaced with ongoing baghouse monitoring requirements.
2. For fugitive visible emissions the opacity limit is 7 percent (12 percent for crushers). Baghouses that control emissions from a single storage bin are limited to 7 percent opacity. There is no particulate matter emission limit for this exhaust. This does not apply to baghouses controlling multiple storage bins, only a baghouse controlling a single storage bin. There is no emission limit specified in this rule for truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher. 45CSR7 opacity requirements still apply where appropriate.

Compliance Requirements

Initial performance testing is required for affected facilities whether the manufacture date is prior to, or on or after April 22, 2008. This testing must be conducted within 180 days of initial start up of the affected facility.

For those affected facilities that control emissions with a baghouse or any other type of capture and control system, initial performance testing for particulate matter emissions may be conducted using either EPA Method 5 or 17. If required (see emission limits above) opacity of visible emissions from a stack must be determined using EPA Method 9.

For affected facilities that have fugitive emissions, initial performance testing must be conducted using EPA Method 9. The duration of the performance test has been reduced from 60 minutes to 30 minutes in the revised rule, and there is no requirement to test for

three hours in the revised rule. Compliance with the opacity limit is based on the average of the five consecutive six minute averages. This applies to facilities manufactured prior to, or on or after April 22, 2008.

If fugitive emissions are escaping a capture system, those fugitive emissions points are also subject to the initial performance testing requirements mentioned in the previous paragraph. An example of this situation is a capture system not capable of capturing all the emissions from an emission point. Sources should ensure all capture systems, ducting and control devices are working properly prior to any testing.

Baghouses controlling emissions from a single storage bin do not need to test for particulate matter emissions, only the opacity of visible emissions. EPA Method 9 must be used to conduct the initial performance test. The duration of the test must be 60 minutes.

The revised rule requires only a seven day notification prior to testing. In addition, if a performance test date falls during a seasonal shutdown, the test date may be postponed to no later than 60 days after resuming operation. However, prior approval is required.

Ongoing Compliance

Except for the ongoing monitoring requirements for wet scrubbers, most of the monitoring requirements in the revised rule are new, and they generally affect facilities with a manufacture date on or after April 22, 2008. The following is a summary of the monitoring requirements:

1. Baghouses that are used to control emissions from affected facilities manufactured on or after April 22, 2008, must conduct ongoing monitoring of the baghouse. This includes, but is not limited to, conducting quarterly 30 minute visible emissions inspections using EPA Method 22. The specific requirements are outlined in Sections 60.674 – Monitoring of Operations and 60.676 – Reporting and Recordkeeping.
2. If a wet suppression system, or “carryover” from a wet suppression system is used to control fugitive emissions from an affected facility manufactured on or after April 22, 2008, ongoing monitoring of the wet suppression system must be conducted. This includes, but is not limited to, monthly inspections and corrective actions when needed. The specific requirements are outlined in Sections 60.674 – Monitoring of Operations and 60.676 – Reporting and Recordkeeping.
3. If a wet suppression system, or “carryover” from a wet suppression system, to control fugitive emissions from an affected facility manufactured on or after April 22, 2008 is not used, a repeat EPA Method 9 performance test for that affected facility within five years of the previous performance test must be conducted. However, if the affected facility is enclosed in a building, a repeat performance test is not required.

4. If a wet scrubber is used to control emissions from an affected facility, whether they were manufacture before, or on or after, April 22, 2008, ongoing monitoring of the wet scrubber parameters in accordance with Sections 60.674 – Monitoring of Operations and 60.676 – Reporting and Recordkeeping, of the rule must be conducted.

Buildings that Enclose Affected Facilities

The rule contains an optional compliance method that allows emission measurement from any building(s) that enclose any affected facilities, instead of each affected facility within the building. The revised rule limits visible emissions from any building opening, except vents, to 7 percent opacity. To demonstrate initial compliance using this option, EPA Method 9 for the initial performance test must be used, in the same way that it would be used for a fugitive emission point. Vents must meet the stack emission limits and initial performance test requirements mentioned above.

40CFR60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines)

Subpart IIII sets forth emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject reciprocating internal combustion engine.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ sets forth emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject reciprocating internal combustion engine.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

Small amounts of non-criteria regulated hazardous or toxic air pollutants such as benzene, ethylbenzene, toluene, xylenes and formaldehyde may be emitted when fuels are combusted in reciprocating internal combustion engines. Total non-criteria regulated hazardous/toxic air pollutant emissions are tabulated for each registered fuel burning unit in the Class II General Permit Registration Application. The Director has previously determined that due to the typically small amounts emitted, these non-criteria regulated hazardous/toxic pollutants should not adversely impact an applicable ambient air quality standard or cause or contribute to degradation of public health and welfare. The changes to this permit do not change that determination. A toxicity analysis will be performed when the Director finds existing circumstances and/or submitted data provide cause for an assessment to be made concerning whether a specific fuel burning unit may interfere with attainment or maintenance of an applicable ambient air quality standard or cause or contribute to degradation of public health and welfare. Any fuel burning unit granted a Class II General Permit registration by the Director shall not have a potential to emit of 10 tons per year of any hazardous/toxic pollutant or 25 tons per year of any combination of hazardous/toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling will be performed when the Director finds existing circumstances and/or submitted data provide cause for an assessment to be made concerning whether a specific nonmetallic mineral processing plant may interfere with attainment or maintenance of an applicable ambient air quality standard or cause or contribute to a violation of an applicable air quality increment from any proposed Class II General Permit registration action. Factors to be considered when determining whether an ambient air assessment would be made include:

- a. Existing air quality of the area
- b. Topographic or meteorological factors
- c. Maximum emissions
- d. Siting criteria

MONITORING OF OPERATIONS

G40-C registrants will be required to perform the following monitoring and recordkeeping:

1. Monitor and record daily and monthly records of the amount of nonmetallic minerals processed.
2. Monitor and record calendar monthly and calendar annual quantity of fuel consumed and hours of operation for all engines and combustion sources.
3. Monitor and record calendar annual quantity of organic liquid throughput in all registered storage tanks.
4. Conduct visual observations of all points listed in the registration that are subject to opacity limits.
5. Conduct annual preventative maintenance/inspection, and all routine maintenance service and repairs as required, to facilitate proper control device performance, for the control devices listed in the registration.
6. Perform any applicable required monitoring, recordkeeping, reporting and testing that is required under 40CFR60 Subparts OOO, IIII, and JJJJ.
7. These records shall be maintained on-site for a minimum of five (5) years from the date of record creation and shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

CHANGES TO GENERAL PERMIT G40-B

General Permit G40-C addresses the amendments to the New Source Performance Standards (NSPS) for 40CFR60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). This language was incorporated into Sections 6 and 7 of General Permit G40-C. In addition, General Permit G40-C will allow the opportunity for registrants to operate reciprocating internal combustion engines (spark or compression ignition), including emergency generators and this language was incorporated into Sections 8 through 11.

All registered facilities under Class II General Permit G40-C are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

Each applicant will then choose which of the following sections that they are seeking registration for, under General Permit G40-C:

- Section 5¹ Nonmetallic Mineral Processing Operations
- Section 6 Standards of Performance for Nonmetallic Mineral Processing Plants that Commenced Construction, Reconstruction or Modification after August 31, 1983 but before April 22, 2008 (40CFR60 Subpart OOO)
- Section 7 Standards of Performance for Nonmetallic Mineral Processing Plants that Commenced Construction, Reconstruction or Modification on or after April 22, 2008. (40CFR60 Subpart OOO)
- Section 8² Reciprocating Internal Combustion Engines (R.I.C.E.)
- Section 9 Tanks
- Section 10 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII)
- Section 11 Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)

1 Affected facilities that are subject to Section 5 may also be subject to Sections 6 and 7. Therefore, if the applicant is seeking registration under multiple sections, they will need to select all applicable sections.

2 Affected facilities that are subject to Section 8 may also be subject to Sections 10 or 11. Therefore, if the applicant is seeking registration under multiple sections, they will need to select all applicable sections.

RECOMMENDATION TO DIRECTOR

General Permit G40-C meets all the requirements of applicable regulations when all of the applicable control devices are functioning properly. Therefore, it is recommended that General Permit G40-C should be issued to supersede and replace General Permit G40-B.

Jerry Williams II, P.E.
Engineer

Date