West Virginia Department of Environmental Protection

Earl Ray Tomblin Governor

Division of Air Quality

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# Application Instructions and Forms for General Permit G40-C



for the
Prevention and Control of Air Pollution in regard to the
Construction, Modification, Relocation, Administrative Update and
Operation of Nonmetallic Mineral Processing Plants

THIS REFERENCE DOCUMENT PROVIDES DEFINITIONS, INFORMATION, FORMS AND INSTRUCTIONS TO BE USED WHEN PREPARING A REGISTRATION APPLICATION FOR CLASS II GENERAL PERMIT NUMBER G40-C. THE INFORMATION PROVIDED IN THIS DOCUMENT ADDRESSES THE REQUIRED COMPONENTS OF AN ADMINISTRATIVELY COMPLETE REGISTRATION APPLICATION.

Revised: May 6, 2011

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#### 1.0. Definitions

Terms used throughout the General Permit are defined in this section. Unless otherwise indicated, other words and phrases used in this General Permit shall have the meaning ascribed to them in 45CSR7, 45CSR13, 45CSR16, 45CSR22, 45CSR30; W.Va. Code §§22-5-1 et seq., as amended, and 40CFR60.

#### AFFECTED FACILITY

means, for purposes of this General Permit, each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, or enclosed truck or railcar loading stations subject to NSPS as defined in 40 C.F.R. 60, Subpart OOO.

#### AIR POLLUTANT

means any solid, liquid or gas which if discharged into the air, may result in statutory air pollution.

#### AIR POLLUTION OR STATUTORY AIR POLLUTION

means and is limited to the discharge into the air by an act of man substances (liquid, solid, gaseous, organic or inorganic) in a locality, manner and amount as to be injurious to human health or welfare, animal or plant life or property, or which would interfere with the enjoyment of life or property.

#### AIR POLLUTION CONTROL DEVICE or APCD

means any equipment, auxiliary air pollution control device, system or element of design which controls or reduces the emission of substances from an emissions unit or stationary source.

#### AUTHORIZED REPRESENTATIVE

means a person certified by a Responsible Official who shall represent and have the authority to legally bind the business. An Authorized Representative may be certified through a certification statement submitted with the General Permit Registration Application. Such certification is subject to approval by the Director.

#### **BAGGING OPERATION**

means the mechanical process by which bags are filled with nonmetallic minerals.

#### BELT CONVEYOR

means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

#### BUCKET ELEVATOR

means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports a drives an endless single or double strand chain or belt to which buckets are attached.

#### CABINET SECRETARY

means the Cabinet Secretary of the West Virginia Department of Environmental Protection.

#### **CAPACITY**

means the cumulative rated capacity of all initial crushers that are part of the plant.

#### CAPTURE SYSTEM

means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

#### CERTIFIED EMISSION STATEMENT OR CES

means an annual submitted statement, certified by a Responsible Official, required of Tier III registration category registrants (area sources subject to NSPS) by 45CSR30 containing accurate accounting of the actual emissions of all regulated pollutants from a source.

#### C.F.R.

means the United States Code of Federal Regulations.

#### C.S.R.

means the West Virginia Code of State Rules.

#### CONSTRUCTION

means any physical change or change in the method of operation (including fabrication, erection, installation, demolition or modification of an emissions unit or affected facility) which would result in an increase in the potential to emit or an increase in actual emissions of any regulated air pollutant.

#### CONTROL DEVICE

means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic minerals processing plant.

#### CONVEYING SYSTEM

means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators, and pneumatic systems.

#### CRUSH OR CRUSHING

means to reduce the size of nonmetallic mineral by means of physical impaction of the crusher or grinding mill upon the material.

#### CRUSHER

means a machine used to size any nonmetallic minerals, and includes but is not limited to the following types: jaw, gyratory, cone, roll, rod mill, hammer mill, and impactor.

#### DAQ

means the Division of Air Quality of the WV Department of Environmental Protection.

#### **DEP**

means the Department of Environmental Protection of the West Virginia Bureau of the Environment.

#### DIRECTOR OF AIR QUALITY OR DIRECTOR

means the Director of the Division of Air Quality or a designated representative appointed by the Cabinet Secretary of the Department of Environmental Protection pursuant to the provisions of W.Va. Code §§22-1-1 et seq.

#### **EMISSION**

means the release, escape or discharge of air pollutants into the air.

#### **EMISSION INVENTORY**

means an annual submittal, due on or before July 1 of each calendar year for the previous calendar year, containing the speciated pollutants and the corresponding emission poundage or tonnage for each (W.Va. Code §22-5-4(a)(14)).

#### **EMISSIONS UNIT**

means any affected facility, part or activity of a stationary source which emits or has the potential to emit any regulated pollutant.

#### ENCLOSED TRUCK OR RAILCAR LOADING SYSTEM

means that portion of a nonmetallic minerals processing plant where materials are loaded by an enclosed conveying system into enclosed trucks or railcars.

#### EPA OR USEPA

means the United States Environmental Protection Agency.

#### FIXED PLANT

means any nonmetallic minerals processing plant at which the processing equipment specified in 40C.F.R.60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

#### FUGITIVE DUST

means for purposes of this General Permit, any and all particulate matter generated, which if not confined or suppressed by water or an environmentally accepted dust control additive (solution), would be emitted directly into the open air from points other than a stack outlet.

#### FUGITIVE DUST CONTROL SYSTEM

means for purposes of this General Permit, any equipment or method used to confine, collect and dispose of fugitive dust, including but not limited to: hoods, bins, ductwork, fans, air pollution control equipment and equipment used to prevent or minimize the emission of fugitive dust by application of water or a mixture of water and an environmentally acceptable dust control additive (solution).

#### FUGITIVE EMISSION

means particulate matter that is not collected by a capture system and it released to the atmosphere at the point of generation.

#### GRINDING MILL

means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include but are not limited to the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

#### INITIAL CRUSHER

means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

#### MAINTENANCE OPERATION

means any adjustment, repair, removal, disassembly, cleaning or replacement of components or systems of emission units or air pollution control devices required to be performed on a periodic basis to prevent part failure or malfunction, or those actions anticipated as necessary to correct an overt indication of malfunction or failure for which maintenance is not appropriate.

#### MAJOR STATIONARY SOURCE OR MAJOR SOURCE

means, for purposes of this General Permit, any stationary source which emits or has the potential to emit two hundred fifty (250) tons per year or more of any regulated air pollutant as defined in 45CSR14 or directly emits or has the potential to emit one hundred (100) tons per year or more of any air pollutant as defined in 45CSR30.

#### MODIFICATION

means, for purposes of this General Permit, any proposed physical change or change in the method of operation of an affected facility that would require an individual permit pursuant to 45CSR13. Any person operating an existing affected facility who desires to modify and/or increase throughput may complete a General Permit Registration Application and if eligible, receive General Permit registration in lieu of individual permit coverage pursuant to 45CSR13.

#### NEW SOURCE PERFORMANCE STANDARDS OR NSPS

means the standards set forth for affected facilities as promulgated under 40CFR60.

#### NONMETALLIC MINERAL

means any of the following minerals or any mixture of which the majority is any of the following minerals:

- 1. Crushed and broken stone, including Limestone, Dolomite, Granite, Taprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.
- 2. Sand and Gravel.
- 3. Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.
- 4. Rock Salt.
- 5. Gypsum (natural or synthetic).
- 6. Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.
- 7. Pumice.
- 8. Gilsonite.
- 9. Talc and Pyrophyllite.
- 10. Boron, including Borax, Kernite, and Colemanite.
- 11. Barite.
- 12. Fluorospar.
- 13. Feldspar.
- 14. Diatomite.
- 15. Perlite.
- 16. Vermiculite.
- 17. Mica.
- 18. Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

#### NONMETALLIC MINERAL PROCESSING PLANT

means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

#### **OPACITY**

means the degree to which particulate emissions reduce the transmission of light and obscure the view of an object in the background.

#### PARTICULATE MATTER OR PM

means any material except uncombined water that exists in a finely divided form as a liquid or solid.

#### PARTICULATE MATTER CAPTURE SYSTEM

means any equipment or method used to confine, collect, and transport particulate matter from elevators, screens, mixers, weighing equipment, bins and other plant components to air pollution control equipment. Particulate matter capture systems shall include, but not be limited to, hoods, bins, ductwork, enclosures and fans.

#### $PM_{10}$

means any particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers.

#### PERSON

means any and all persons, natural or artificial, including the State of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country and any firm, partnership or association of whatever nature.

#### **PLANT**

means and includes all facilities, equipment and grounds utilized in an integral complex for nonmetallic minerals.

#### PORTABLE PLANT

means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

#### POTENTIAL TO EMIT

means the maximum capacity of an affected facility to emit any pollutant under its existing or proposed physical and operational design.

#### PRODUCTION LINE

means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

#### RAW MATERIAL

means nonmetallic minerals of any quality and/or size consist delivered to (input) a nonmetallic minerals processing plant for processing and/or loading into barge, railcar or truck for delivery to another site.

#### REGISTRANT

means a person who has submitted a General Permit Registration Application and has been granted General Permit registration by the Director.

#### REGISTRATION

means the process where the owner or operator of an eligible affected facility submits a complete General Permit Registration Application and is granted General Permit registration.

#### REGISTRATION MODIFICATION

means the General Permit provision for any proposed physical change or change in the method of operation of a registered affected facility.

#### RELOCATION

means the physical movement of a source outside its existing plant boundaries.

#### RESPONSIBLE OFFICIAL

means a person who shall represent the business and is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors or Owner, depending on business structure. Any submitted Registration Application, report, Emission Inventory, Certified Emission Statement, compliance certification record or Certification of Data Accuracy shall be signed by a Responsible Official or an Authorized Representative. A Responsible Official or an Authorized Representative shall have the authority to legally bind the business. An Authorized Representative may be certified by a Responsible Official through a certification statement submitted with the General Permit Registration Application. Such certification is subject to approval by the Director.

#### SATURATED MATERIAL

means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be "saturated" for purposes of this definition.

#### SCREENING OPERATION

means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

#### SEASONAL SHUT DOWN

means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

#### SIZE

means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

#### SOURCE OR STATIONARY SOURCE

means, for purposes of this General Permit, any building, structure, affected facility, installation or emission unit or combination thereof which emits or may emit any regulated air pollutant.

#### STACK

means, but shall not be limited to, any duct, control equipment exhaust or similar apparatus which vents gases containing any regulated pollutant into the open air.

#### STACK EMISSION

means the particulate matter that is released to the atmosphere from a capture system.

#### STORAGE BIN

means a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.

#### TRANSFER POINT

means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

#### TRUCK DUMPING

means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

#### VENT

means and opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

#### WET MATERIAL PROCESSING OPERATION(S)

means any of the following:

- (1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or
- (2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

#### WET MINING OPERATION

means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

#### WET SCREENING OPERATION

means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

#### 2.0. Class II General Permit Registration Application Requirements

The Registration Application requires the following information. Failure to submit this information may result in the Registration Application being deemed incomplete.

#### **Section I. General Information**

Complete Section 1 of the Application for General Permit Registration. Use the following guidelines to ensure a complete application:

- 1. Name of Applicant as registered with the WV Secretary of State's Office.
- 2. Federal Employer ID Number (FEIN)
- 3. Applicant's Mailing Address
- 4. If applicant is a subsidiary company please provide the name of the parent company
- 5. Provide as Attachment A a copy of the current WV Business Registration.

#### **Section II. Facility Information**

Complete Section 2 of the Application for General Permit Registration. Use the following guidelines to ensure a complete application:

- 7. Type of Plant or Facility (Nonmetallic Mineral Processing Plant)
- 8. Standard Industrial Classification (SIC) Code for the Affected facility (1422, 1423, 1429, 1442, 1446, 1481, or 1499)
- 9. Division of Air Quality Facility ID Number (for existing affected facilities). ID# -
- 10. List all current DAQ permit numbers associated with this affected facility, include any Rule 13 and Title V permits.

#### **Operating Site Information**

Complete Section 3 of the Application for General Permit Registration. Use the following guidelines to ensure a complete application:

- 11. Name of Primary Operating Site
- 12. Operating Site's Mailing Address
- 13. Does the Applicant own, lease, have an option to buy, or otherwise have control of the proposed site? Yes Please Explain. No You are not eligible for a permit for this source.
- 14. Directions to Operating Site
- 15. Nearest City or Town
- 16. County
- 17. UTM Northing (km)
- 18. UTM Easting (km)
- 19. UTM Zone

The Universal Transverse Mercator (UTM) coordinate system is a grid-based method of specifying locations on the surface of the Earth. It is used to identify locations on the earth, but differs from the traditional method of latitude and longitude in several respects. The UTM system is not a single map

projection. The system instead employs a series of sixty zones, each of which is based on a specifically defined secant Transverse Mercator projection. However, if you know your latitude and longitude our website offers the capability of converting these to UTM coordinates.

- 20. Anticipated installation or change date
- 21. Anticipated startup date
- 22. Operating Schedule including hours of operation per day, days of operation per week, and weeks of operation per year.

#### Section III. Attachments and Supporting Documents

#### **Attachment A - Current Business Certificate**

If the registrant is a resident of the State of West Virginia the registrant should provide a copy of the registrant's current Business Registration Certificate issued to them from the West Virginia State Tax Department. If the registrant is not a resident of the State of West Virginia, the registrant should provide a copy of the Certificate of Authority/Authority of LLC/Registration.

#### **Attachment B - Process Description**

Provide a detailed written description of the operation, plant and/or affected facilities. The Process Description is used in conjunction with the Process Flow Diagram to provide the reviewing engineer a complete understanding of the activity at the operation or plant. Describe in detail and order the complete process.

Use the following guidelines to ensure a complete Process Description:

- 1. The Process Flow Diagram should be prepared first and used as a guide when preparing the Process Description. The written description shall follow the logical order of the Process Flow Diagram.
- 2. All sources, affected facilities, and air pollution control devices must be included in the Process Description.
- 3. When modifications are proposed, describe the modifications and the effect the changes will have on affected facilities, equipment or operation.
- 4. Proper Source Identification Numbers are used consistently in the Process Description.
- 5. Additional information that may facilitate the reviewer's understanding of the Process Flow Diagram and/or Process Description is included.

#### **Attachment C – Description of Fugitive Emissions**

Provide a detailed written description of all potential sources of fugitive particulate emissions such as stockpiles, haulroads, and vehicle traffic from work areas. Describe methods and fugitive dust control equipment which will be utilized for each potential source of fugitive emissions. The description of fugitive emissions shall also outline fugitive dust control measures or best management practices to be employed on haulroads, stockpiles, and work areas. Use the following guidelines to ensure a complete Description of Fugitive Emissions:

- 1. Describe all sources and potential sources of fugitive particulate emissions.
- 2. Describe all fugitive dust control equipment.
- 3. Provide the application rate of water, or if using solution, mix ratio and type used at sprays.
- 4. Provide the application frequency of water or solution to haulroads and work areas during dry periods.
- 5. Describe methods employed to winterize sprays.
- 6. Indicate type of haulroad surface(s) that will be maintained such as asphalt pavement, concrete, dirt, coarse gravel, etc.
- 7. Describe fugitive dust control methods and related equipment for any highwall truck or conveyor
- 8. Describe any other method or practice implemented to minimize fugitive particulate emissions.

#### Attachment D – Process Flow Diagram

Provide a diagram or schematic that supplements the Process Description of the operation or plant. The Process Flow Diagram shall show all sources, components or facets of the operation or plant in an understandable line sequence of operation. Appropriate sizing and specifications of equipment should also be shown on the Process Flow Diagram. For a proposed modification, clearly identify the process areas, affected facilities and equipment that will be modified or added, and specify the nature and extent of the modification.

Use the following guidelines to ensure a complete Process Flow Diagram:

- 1. The Process Flow Diagram shall logically follow the entire process from beginning to end.
- 2. Identify each source, air pollution control device and transfer point with proper and consistent Source Identification Numbers, Control Device Identification Numbers and Transfer Point Identification Numbers.
- 3. Include material handling rates for all lines of the Process Flow Diagram. If applicable, include preand post-modification material handling rates and identify accordingly.
- 4. Transfer Point Identification Numbers, consistent with assignments in any emission calculation sheet, should be shown at each transfer point.
- 5. The process flow lines may appear different for clarity. For example, dot-dash-dot for raw material, and a solid line for finished product. Refuse flow may be identified by a dotted line
- 6. The process flow lines may be color coded. For example, new or modified equipment may be red, old or existing equipment may be blue; different stages of preparation such as raw material may be green and finished product or refuse another color.

#### Attachment E – Plot Plan

Provide an accurately scaled and detailed Plot Plan showing the locations of all process equipment and/or affected facilities and air pollution control devices. Show all equipment, affected facilities, enclosures, buildings and plant entrances and exits from the nearest public road(s) as appropriate. Note height, width and length of proposed or existing buildings and structures.

A scale between 1"=10' and 1"=200' should be used with the determining factor being the level of detail necessary to show operation or plant areas, affected facilities, sources, transfer points, etc. An overall small scale plot plan (e.g., 1"=300') should be submitted in addition to larger scale plot plans for process or activity areas (e.g., 1"=50') if the plant is too large to allow adequate detail on a single plot plan. Process or activity areas may be grouped for the enlargements as long as sufficient detail is shown.

Use the following guidelines to ensure a complete Plot Plan:

- 1. Operation, plant or facility name
- 2. Company name
- 3. Company ID number
- 4. Plot scale, north arrow, date drawn, and submittal date.
- 5. Fence lines
- 6. Property lines
- 7. Base elevation
- 8. UTM reference coordinates from the Area Map and corresponding reference point elevation
- 9. Location of all sources labeled with proper and consistent Source Identification numbers

This information is required for all sources regardless of whether it is a construction, modification, or administrative update.

## Attachment F - Area Map

Provide a USGS 7.5 minute topographic Area Map showing the current or proposed location of the operation or plant. On this map, identify plant or operation property lines, access roads and any adjacent dwelling, business, public building, school, church, cemetery, community or institutional building or public park.

Mark and reference UTM coordinates (not latitude and longitude) and the corresponding elevation above mean sea level for the operation or plant. UTM coordinates may be acquired from the USGS 7.5" topographical map. UTM coordinates are marked as blue tick marks along the outside edges of the map. These coordinates must be provided for a point inside the plant boundary near the center of the property and be accurate to within fifty meters.

This information is required for all sources regardless of whether it is a construction, modification, or administrative update.

#### **Attachment G – Affected Source Sheets (Section Applicability Form)**

Provide the appropriate Equipment Data Sheets and Affected Source Sheets (crushing and screening, conveying, storage activity, baghouse). These forms can be found beginning on page 23. Proper Source Identification Numbers must be used consistently throughout the Registration Application. Refer to Table A – Control Device Listing for guidance on assigning control device identification numbers. Proper source and control device identification numbers must be used consistently throughout the Registration Application. Transfer points are considered emission points, not sources, and should not appear on the Conveying Affected Source Sheet. Transfer point identification number shall be assigned to transfer points in the Emission Calculation Sheet.

Use the following guidelines to ensure complete Affected Source Sheets:

- 1. Proper Control Device Identification Numbers are assigned to all emission control devices.
- 2. Proper Source Identification Numbers are assigned to all crushing and screening equipment, transfer and conveying equipment, stockpiles and storage areas.

#### Attachment H - Air Pollution Control Device Data Sheet

If air pollution control devices are utilized (baghouse or wet scrubber), complete and attach to the Class II General Permit Registration Application the applicable Air Pollution Control Device Sheet for each unit.

#### **Attachment I - Emissions Calculations**

Provide detailed emission calculations which lists the plant or operation's potential to emit (PTE) for criteria and hazardous/toxic pollutants.

Use the following guidelines to ensure complete emission calculations

- 1. All emission sources (including transfer points) are included in the emission calculations, as well as all methods used in the emissions calculations.
- 2. Proper Source Identification Numbers and Control Device Identification Numbers are used consistently in the Emission Calculations.
- 3. A printout of the Emission Summary Sheets is attached to the Registration Application.
- 4. A printout of the Input Form is attached to the Registration Application.

#### Attachment J – Class I Legal Advertisement

Publication of a proper Class I legal advertisement is a requirement of the application process. In the event the applicant's legal advertisement fails to follow the requirements of 45CSR 13 (45-13-8) or the requirements of Chapter 59, Article 3, of the West Virginia Code, the application will be considered incomplete.

The applicant, utilizing the format for the Class I legal advertisement appearing below, shall cause such legal advertisement to appear a minimum of one (1) day in the newspaper most commonly read in the area where the affected facility exists or will be constructed. The notice must be published no earlier than five (5) working days of receipt by this office of your application. If this happens, the applicant may be required to republish the notice. The original affidavit of publication must be received by this office no later than the last day of the public comment period.

The advertisement shall contain, at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

The location of the source should be as specific as possible starting with: 1.) the street address of the source (If no street address is available, provide location relative to the closest intersection or mile marker); 2.) the nearest street or road; 3.) the nearest town or unincorporated area, and 4.) the county.

# If the location description is not sufficiently detailed, the DAQ may require the applicant to republish the Class I legal advertisement.

Types and amounts of pollutants discharged must include all regulated pollutants (PM, PM<sub>10</sub>, VOC, SO<sub>2</sub>, NOx, formaldehyde, benzene, toluene, ethylbenzene, xylene, and n-hexane) and their potential to emit or the permit level being sought in units of tons per year.

In the event the 30th day is a Saturday, Sunday, or legal holiday, the comment period will be extended until 5:00 p.m. on the following regularly scheduled business day.

An example Class I legal advertisement is included below:

#### EXAMPLE LEGAL ADVERTISEMENT

# AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that <u>(Applicant's Legal Name)</u> has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a <u>(General Permit Registration, Class II Administrative Update,)</u> for a <u>(Type of Operation)</u> located on <u>(Street Name, Road Number, etc.)</u>, <u>(in/near City or Town)</u>, in <u>(County Name)</u> County, West Virginia.

The applicant estimates the (<u>Increased</u>, <u>if modification application</u>) potential to discharge the following Regulated Air Pollutants will be: (<u>Pollutants and associated amounts in tons per year</u>).

Startup of operation is planned to begin on or about the (Day) day of (Month), (Year). Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the (Day) day of (Month), (Year).

By: (Applicant's Legal Name)

(Name of Responsible Official)

(Title of Responsible Official)

(Mailing Address)

(City, State and Zip Code)

#### **Attachment K - Electronic Submittal (Optional)**

Provide an Electronic Submittal Diskette(s) for all files that are available electronically. The Electronic Submittal Diskette should have the following files in their respective formats (if available):

- 1. Registration Application file (Microsoft Word or Word Perfect format)
- 2. Affected Source Sheets (Microsoft Word or Word Perfect format)
- 3. Process Flow Diagram file
- 4. Process Description file (Microsoft Word or Word Perfect format)
- 5. Area Map file
- 6. Plot Plan file
- 7. Emission Calculations Spreadsheet (Microsoft Excel format)
- 8. Air Pollution Control Device Sheet, if required (Microsoft Word or Word Perfect format)

#### **Section IV. Certification of Information**

Any General Permit Registration Application shall be signed and certified by a Responsible Official or Authorized Representative as set forth in the General Permit G40-C. Such signature shall constitute an agreement that the applicant will assume responsibility for the construction, modification, relocation, administrative update and/or operation of the stationary source in accordance with the Registration Application, the requirements, provisions, standards or conditions of the General Permit, any other permit or applicable statutory or regulatory requirement (45CSR13). Certify whether or not the registrant is a Corporation, Partnership, Limited Liability Company, Association, Joint Venture, or a Sole Proprietorship.

If the General Permit Registration Application is not signed, it will be returned to the applicant.

#### **Attachment L - General Permit Registration Application Fee**

A person submitting a Class II General Permit Registration Application to construct, modify, relocate or administratively update a nonmetallic minerals processing plant shall pay a Class II General Permit registration fee pursuant to 45CSR13. The registration fee shall be paid by a negotiable instrument (check, draft, warrant or money order) to DEP - Division of Air Quality. The fees associated with General Permit G40-B include:

- 1. \$500.00 for Class II General Permit Registrations (Construction/Modification)
- 2. \$300.00 for Class II administrative updates
- 3. \$1000.00 for applicable NSPS (40CFR60 Subpart OOO, 40CFR Subpart IIII, or 40CFR60 Subpart JJJJ)

Any submitted Registration Application shall not be deemed to have been received nor administratively complete unless payment of the proper Class II General Permit registration fee(s) is (are) included (45CSR22);

Any General Permit registration fee paid hereunder is not refundable (45CSR22).

# Attachment M - Siting Criteria Waiver

If registrant is seeking a waiver from the siting criteria in G40-C, please complete the siting criteria waiver. This waiver needs to be completed by the registrant and person(s) granting the waiver, and notarized by an authorized West Virginia Notary Public. The waiver is only good for the submitted registration application. Therefore, any further modification or administrative update requiring public notice will require a new waiver.

# Siting Criteria Waiver

# Division of Air Quality 300' Waiver

IPrint Nam	hereby
ealmosyladge and agree that	will
acknowledge and agree thatGeneral Permit Applicant's	s Name WIII
construct a nonmetallic mineral processing	g plant
that will be located within 300' of my dv	velling.
I hereby offer this waiver of siting criteria to the West Virginia Department of Air Quality as permission to construct, install and open	
Signed:	
Signature Date	
Signature Date	
Taken, subscribed and sworn before me this	day of
, 20_	·
My commission expires:	
SEALNotary Public	

#### 3.0 Control Device Identification Number Instructions

For sources which use an emission control device, appropriate control efficiency corrections must be made. Where control efficiencies are known from source tests or control equipment vendor guarantee, such efficiency should be used. Otherwise the values for the control efficiency of various control methods are listed in Table A of this Reference Document. For clarity, the identification of control systems should adhere to the following nomenclature:

For consistency, all Control Devices referenced in the Registration Application should appear in the following Control Device Identification Number format:

#### **XX - YY#**

Where: XX = two letter abbreviation indicating the type of operation

 $\mathbf{Y}\mathbf{Y}$  = two letter abbreviation indicating the type of control device

# = number assigned to specific operation/device combination starting with 1,2,3

Combinations of these abbreviations for specific types of operations and corresponding control alternatives appear in Table A. These operation/device combinations should be used.

NOTE: If a single control device is used to control multiple operations, the abbreviation for the primary operation should be used for the Control Device Identification Number. Each individual control device should have only one Control Device Identification Number (refer to Example 2).

#### EXAMPLE 1:

A facility has a total of five pressurized spray bar water sprays employed to control fugitive emissions from open conveyor transfer points. From Table A - Control Device Listing, under the Transfer and Conveying section, water sprays at such transfer points are abbreviated as TC-WS. Therefore, in this example, the assigned Control Device Identification numbers for these five water sprays would be TC-WS1, TC-WS2, TC-WS3, TC-WS4 and TC-WS5. These Control Device Identification numbers should be used throughout the Registration Application to reference the respective water sprays.

#### EXAMPLE 2:

A facility's water truck is primarily used for controlling haulroad emissions, but also utilizes a fire hose type spray to wet open stockpiles to control wind erosion. In this case, a control device is used for multiple operations. From Table A for Haulroads, a water truck is abbreviated as HR-WS. However, stockpile watering to control wind erosion is abbreviated as SW-WS. In this case the water truck should be labeled as HR-WS1 for both haulroad control and stockpile wind erosion control since haulroads are the primary purpose. This single Control Device ID# should be used throughout the application when referencing the water truck.

# TABLE A - CONTROL DEVICE LISTING

Fugitive Dust Sources	Control Device*	Control Device Prefix	Control Efficiency (%)
	UNLOADIN	I G	_
From Railcar or Truck	Full Enclosure Vented to Baghouse	UL-BH	99
From Railcar or Truck	Full Enclosure	UL-FE	70
From Railcar or Truck	Wet Suppression with Chemical Solution	UL-CS	80
From Railcar or Truck	Water Spray	UL-WS	50
Dump Bins	Full Enclosure	UD-FE	80
Dump Bins	Partial Enclosure with water sprays	UD-PW	85
	CRUSHING AND S	CREENING	
Crushing or Screening	Full Enclosure Vented to Baghouse	CS-BH	99
Crushing or Screening	Wet Suppression with Chemicals	CS-CS	90
Crushing or Screening	Full Enclosure with Water Spray	CS-FW	90
Crushing or Screening	Partial Enclosure with Water Spray	CS-PW	80
Crushing or Screening	Full enclosure	CS-FE	80
	TRANSFER AND C	ONVEYING	
Conveyor Transfer Point	Full Enclosure Vented to Baghouse	TC-BH	99
Conveyor Transfer Point	Full Enclosure with Water Spray	TC-FW	90
Conveyor Transfer Point	Water Spray with Chemical Solution	TC-CS	90
Conveyor Transfer Point	Partial Enclosure with Water Spray	TC-PW	80
Conveyor Transfer Point	Full enclosure	TC-FE	80
Conveyor Transfer Point	Water spray	TC-WS	70
Conveyor Transfer Point	Partial Enclosure	TC-PE	50
	CLEANIN	G	
Wet Wash Operations	Full Enclosure	WW-FE	100
	STORAGI	Ε	
Loading onto Piles	Full Enclosure	SL-FE	80
Loading onto Piles	Telescopic Chute	SL-TC	75
Loading onto Piles	Wet Suppression with Chemical Solution	SL-CS	75
Loading onto Piles	Wind Guard	SL-WG	50
Wind Erosion	Full Enclosure	SW-FE	100
Wind Erosion	Wet Suppression with Chemical Solution	SW-CS	99
Wind Erosion	Water Spray	SW-WS	75
	LOADING	UT	
From Stockpiles	Wet Suppression with Chemical Solution	LO-CS	95
From Stockpiles	Under-pile Conveyor	LO-UC	80
From Stockpiles	Bucket Wheel Reclaimer	LO-RC	80
	LOADINO		
To Railcar, Barge or Truck	Wet Suppression with Chemical Solution	LR-CS	80
To Railcar, Barge or Truck	Telescopic Chute	LR-TC	75
	HAULROA	D S	
Unpaved	Water Truck with Chemical Solution	HR-CS	85
Unpaved	Water Truck with Water Spray	HR-WS	70

#### 4.0 Instructions for Emissions Calculations

#### 4.1 Crushing and Screening

#### Primary Crushers, Secondary & Tertiary Crushers, and Screens

Enter the ID number and description of each primary crusher, secondary & tertiary crusher and screen utilized in the process.

#### Maximum Material Processing

#### TPH - Tons per Hour (Maximum Raw Nonmetallic Minerals Process Design Capacity)

Enter the maximum raw nonmetallic minerals input in tons per hour in the appropriate box for each primary crusher, secondary & tertiary crusher and screen.

#### TPY - Tons per Year (Maximum Raw Nonmetallic Minerals Yearly Throughput)

Enter the maximum raw Nonmetallic Minerals input in tons per year in the appropriate box for each primary crusher, secondary & tertiary crusher and screen.

#### Control Device ID Number

Enter the Control Device ID Number used for each crusher and screen listed. The Control Device ID Number should be the same as listed in the Crushing and Screening Affected Source Sheet. Also, refer to Table A - Control Device Listing.

#### Control Efficiency %

Enter the appropriate control efficiency (in percent) for each control device used. Refer to Table A - Control Device Listing, for appropriate efficiencies of various control methods.

#### **4.2 Transfer Points**

#### k - Particle Size Multiplier

The particle size multiplier for PM (particles less than or equal to 30 micrometers) is 0.74. The particle size multiplier for  $PM_{10}$  (particles less than or equal to 10 micrometers) is 0.35. (AP42, 01/95, 13.2.4-3)

#### U - Mean Wind Speed

Enter the mean wind speed at the facility in miles per hour in the appropriate box. This can be obtained from local meteorological data. It is assumed that U will be the same for all storage piles at the facility. Unless mean wind speed data is available, an estimate of 7 mph should be used.

#### Transfer Point ID No.

Each transfer point must be assigned a Transfer Point Identification Number. All Transfer Point ID Numbers should be prefixed by the letters TP and numbered in the order which they exist in the process. (TP-1, TP-2, TP-3...etc.)

#### Transfer Point Description

The transfer point description should include information to clearly identify from and to where the material is being transferred. Use the assigned Source Identification Numbers for equipment, stockpiles, conveyors, etc. to clarify the function of each transfer point.

#### Material Moisture Content %

Enter the moisture content, in percent, for the material being handled at each transfer point listed.

#### Maximum Transfer Rate

Enter the maximum transfer rate of material, in tons per hour and tons per year, for each transfer point listed.

#### Control Device ID Number

Enter the Control Device ID Number used for each transfer point listed. Refer to Table A - Control Device Listing.

#### Control Efficiency %

Enter the appropriate control efficiency (in percent) for each control device used. Refer to Table A - Control Device Listing, for appropriate efficiencies of various control methods.

#### 4.3 Wind Erosion of Stockpiles

#### *p* - number of days per year with precipitation >0.01 inch

Enter the number of days with 0.01 inches or more of precipitation per year. Approximate values are listed in Table B - Precipitation Zones in West Virginia. Determine the zone in which the county is located and identify the appropriate value.

#### f - percentage of time that wind speed exceeds 12 mph

Enter the percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height. This can be determined from local meteorological data. It can be assumed that f will be the same for all storage piles at the facility. For West Virginia this should be approximately 20%.

#### Source ID No.

Enter the Source ID Number for each stockpile as assigned in the Storage Activity Affected Source Sheet.

#### Stockpile Description

Enter a brief description of each listed stockpile including the type of material stored.

#### Silt Content of Material %

Enter the silt content (percent of material passing through a 200 mesh sieve) of the material to be stored in each individual stockpile.

#### Stockpile base area

Enter the maximum stockpile base area (square feet) for each stockpile.

#### Control Device ID Number

Enter the Control Device ID Number used to control wind erosion from stockpiles listed. The Control Device ID number should be the same as listed in the Storage Activity Affected Source Sheet. Also, refer to Table A - Control Device Listing.

#### Control Efficiency %

Enter the appropriate Control Efficiency (in percent) for each control device used. Refer to Table A - Control Device Listing, for appropriate efficiencies of various control methods.

#### 4.4 Unpaved Haulroads

#### s - silt content of road surface material (%)

Enter the silt content, in percent, of the road surface material. Unless site specific data is available, a typical value of 10% should be used. (AP-42,10/98, Section 13.2.2 Unpaved Roads.

#### *p* - number of days per year with precipitation >0.01 inch

Enter the number of days with 0.01 inches or more of precipitation per year. Approximate values are listed in Table B - Precipitation Zones in West Virginia. Determine the zone in which the county is located and identify the appropriate value.

#### Item number

Under each item number, account for similar vehicles which perform the same function (for example, Item #1 - coal refuse trucks, Item #2 -clean coal trucks).

#### Description

For each item number, clearly describe the vehicle type and function.

#### Number of wheels

For each vehicle type, enter the number of wheels.

#### Mean Vehicle Weight

Enter the mean vehicle weight, in tons, for each vehicle type. The mean is the average of the loaded weight and the unloaded weight.

#### Mean Vehicle Speed

Enter the mean vehicle speed, in miles per hour, for each vehicle type. The mean is the estimated average vehicle speed over the haul route.

#### Miles per Trip

Enter the total number of miles per trip that each vehicle type travels to complete its function and return. (portion within facility boundaries)

#### Maximum Trips per Hour

Enter the maximum trips per hour to be made by all vehicles under the same item number. For example, if there are three refuse trucks and each truck makes a maximum of four trips per hour, then the maximum trips per hour for refuse trucks would be:

3 trucks X 4 trips/hr = 12 trips per hour

#### Maximum Trips per Year

Enter the maximum trips per year to be made by all vehicles under the same item number. For example, with a maximum of twelve trips per hour for refuse trucks, and a facility which operates for a maximum of 10 hours per day, 260 days per year, the maximum trips per year for refuse trucks would be:

12 trips/hr X 10 hr/day X 260 day/yr = 31,200 trips per year

#### Control Device ID Number

Enter the Control Device ID Number used for control of unpaved haulroad emissions. Refer to Table A - Control Device Listing, for instructions.

#### Control Efficiency %

Enter the appropriate Control Efficiency (in percent) for each control device used. Refer to Table A - Control Device Listing, for appropriate efficiencies of various control methods.

#### 4.5 Industrial Paved Haulroads

#### sL - road surface silt loading

Enter the road surface silt loading for paved roads at industrial facilities, a typical value of 70 should be used unless site specific data is available (AP-42, 10/97, Table 13.2.1-3 Typical Silt Content and Loading Values for Paved Roads at Industrial Facilities).

#### p - number of days per year with precipitation >0.01 inch

Enter the number of days with 0.01 inches or more of precipitation per year. Approximate values are listed in Table B - Precipitation Zones in West Virginia. Determine the zone in which the county is located and identify the appropriate value.

#### Item Number

Under each item number, account for similar vehicles which perform the same function (for example, Item #1 - coal refuse trucks, Item #2 - clean coal trucks)

#### Description

For each item number, clearly describe the vehicle type and function.

#### Mean Vehicle Weight

Enter the mean vehicle weight, in tons, for each vehicle type. The mean is the average of the loaded weight and the unloaded weight.

#### Miles per Trip

Enter the total number of miles per trip that each vehicle type travels to complete its function and return.

#### Maximum Trips per Hour

Enter the maximum trips per hour to be made by all vehicles under the same item number. For example, if there are three refuse trucks and each truck makes a maximum of four trips per hour, then the maximum trips per hour for refuse trucks would be:

3 trucks X 4 trips/hr = 12 trips per hour

#### Maximum Trips per Year

Enter the maximum trips per year to be made by all vehicles under the same item number. For example, with a maximum of twelve trips per hour for refuse trucks, and a facility which operates for a maximum of 10 hours per day, 260 days per year, the maximum trips per year for refuse trucks would be:

12 trips/hr X 10 hr/day X 260 day/yr = 31,200 trips per year

#### Control Device ID Number

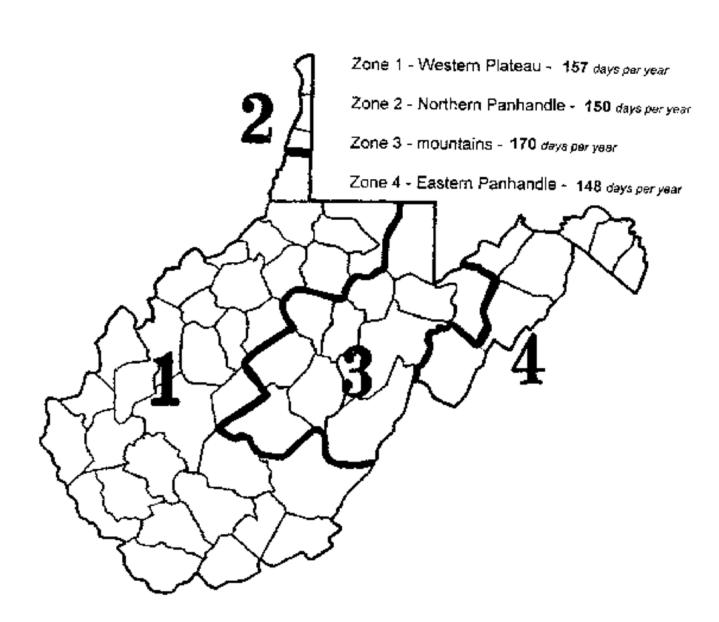
Enter the Control Device ID Number used for control of paved haulroad emissions. Refer to Table A - Control Device Listing for instructions.

#### Control Efficiency %

Enter the appropriate Control Efficiency (in percent) for each control device used. Refer to Table A - Control Device Listing, for appropriate efficiencies of various control methods.

## TABLE B - PRECIPITATION ZONES IN WEST VIRGINIA

with Mean number of days with > 0.01 inch or more of precipitation per year



Source: West Virginia Median Rainfall Per Year data and AP-42, 05/83 Figure 11 2.1-1 (Mean number of days with 0.01 inch or more of precipitation in United States)

# **G40-C REGISTRATION APPLICATION FORMS**

# General Permit G40-C Registration Section Applicability Form

General Permit G40-C allows qualified registrants to seek registration for a variety of sources. These sources include nonmetallic mineral processing plants which include crushers, screens, transfer points (loading, unloading, etc.), open stockpiles, bins, haulroads, reciprocating internal combustion engine driven compressors, emergency standby generators, and tanks. All registered facilities will be subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

General Permit G40-C allows the registrant to choose which sections of the permit that they wish to seek registration under. Therefore, please mark which sections that you are applying for registration under. Please keep in mind, that if this registration is approved, the issued registration will state which sections will apply to your affected facility.

Section 5 <sup>1</sup>	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 8 <sup>2</sup>	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)	

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.

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.

#### CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Iden	tification Number <sup>1</sup>			
Type of Crusher or Screen <sup>2</sup>				
Make, Mod	el No., Serial No. <sup>3</sup>			
Date of Constru or Modifica	action, Reconstruction, tion (Month/Year) <sup>4</sup>			
Maximum	tons/hour			
Throughput <sup>5</sup>	tons/year			
Material	sized from/to:6			
Average Mo	isture Content (%) <sup>7</sup>			
Control De	evice ID Number <sup>8</sup>			
	height (ft)			
Baghouse	diameter (ft)			
Stack	volume (ACFM)			
Parameters <sup>9</sup>	exit temp (F)			
	UTM Coordinates			
Maximum	hours/day			
Operating Schedule 10	days/year			 
Schedule <sup>10</sup>	hours/year			

1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.

2. Describe types of crushers and screens using the following codes:

HM	Hammermill	SS	Stationary Screen	DR	Double Roll Crusher
SD	Single Deck Screen	BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen	JC	Jaw Crusher
GC	Gyratory Crusher	OT	Other		

- 3. Enter the make, model number, and serial number of the crusher/screen.
- 4. Enter the date that each crusher and screen was constructed, reconstructed, or modified.
- 5. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
- 6. Describe the nominal material size reduction (e.g. +2"/ -3/8").
- 7. Enter the average percent moisture content of the material processed.
- 8. Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A Control Device Listing and Control Device Identification Number Instructions in the Reference Document for Control Device ID prefixes and numbering.
- 9. Enter the appropriate stack parameters if a baghouse control device is used.
- 10. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.

#### CONVEYING AFFECTED SOURCE SHEET

Source Identification	Date of Construction, Reconstruction,	Type of Material	Size of Material	Maximun Transfe	n Material er Rate <sup>5</sup>	Average Moisture	Control
Number <sup>1</sup>	or Modification (Month/Year) <sup>2</sup>	Handled <sup>3</sup>	Handled <sup>4</sup>	tons/hour	tons/year	Content (%) <sup>6</sup>	Device <sup>7</sup>

1. Enter the appropriate Source Identification Number for each conveyor using the following codes. For example, multiple belt conveyors should be designated BC-1, BC-2, BC-3 etc. Transfer points are considered emission points, not sources, and should not be included in the *Conveying Affected Source Sheet*. Transfer Point Identification Numbers shall be assigned in the *Emission Calculation Sheet*.

BC Belt Conveyor BE Bucket Elevator DL Drag-link Conveyor PS Pneumatic System SC Screw Conveyor VC Vibrating Conveyor OT Other

- Enter the date that each crusher and screen was constructed, reconstructed, or modified.
- 3. Enter the type of material being handled Raw Material (RM) Sized Material (SM) Refuse (R) Other (O)
- 4. Enter the nominal size of the material being conveyed (e.g. sized material- <sup>3</sup>/<sub>4</sub>" x 0). If more than one material is handled by the listed conveyor, list each material and enter the appropriate data for each material.
- 5. Enter the maximum material transfer rate for each conveyor in tons per hour and tons per year.
- 6. Enter the average percent moisture content of the conveyed material.
- 7. Enter the control device for the conveyor. PE Partial Enclosure (example 3/4 hoop), FE Full Enclosure, N None

### STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>			
Type of Material Stored <sup>2</sup>			
Average Moisture Content (%) <sup>3</sup>			
Maximum Yearly Storage Throughput (tons) <sup>4</sup>			
Maximum Storage Capacity (tons) <sup>5</sup>			
Maximum Base Area (ft <sup>2</sup> ) <sup>6</sup>			
Maximum Pile Height (ft) <sup>7</sup>			
Method of Material Load-in <sup>8</sup>			
Load-in Control Device Identification Number <sup>9</sup>			
Storage Control Device Identification Number <sup>9</sup>			
Method of Material Load-out <sup>8</sup>			
Load-out Control Device Identification Number <sup>9</sup>			

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.

BS Bin or Storage Silo (full enclosure)
OS Open Stockpile

E3 Enclosure (three sided enclosure)
SB Storage Building (full enclosure)

SF Stockpiles with wind fences OT Other

- 2. Describe the type of material stored or stockpiled. (e.g. sized material, raw material, refuse, etc).
- 3. Enter the average percent moisture content of the stored material.
- 4. Enter the maximum yearly storage throughput for each storage activity.
- 5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
- 6. For stockpiles, enter the maximum stockpile base area.
- For stockpiles, enter the maximum stockpile height.
- Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:

  CS Clamshell SS Stationary Conveyor/Stacker

FC Fixed Height Chute from Bins ST Stacking Tube

FE Front Endloader TC Telescoping Chute from Bins MC Mobile Conveyor/Stacker TD Truck Dump

UC Under-pile or Under-Bin Reclaim Conveyor

PC Pneumatic Conveyor/Stacker

RC Rake or Bucket Reclaim Conveyor OT Other

9. Enter the appropriate Control Device Identification Number for each storage activity. Refer to Table A - Control Device Listing and Control Device Identification Number Instructions in the Reference Document for Control Device ID prefixes and numbering.

# **HAULROAD EMISSIONS**

Include G40-C Emission Calculation Spreadsheet indicating haulroad emissions, or submit calculations indicating assumptions made to substantiate emission values.

Emission Source	Uncontrolled	Emissions	Controlled Emissions		
	Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)	
			_		

#### BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET

Complete a Baghouse Air Pollution Control Device Sheet for each baghouse control device. Baghouse Control Device Identification Number: Manufacturer's name and model identification: Number of compartments in baghouse: 3. Number of compartments online during normal operation and conditions: Gas flow rate into baghouse: \_\_\_\_\_ ACFM @ \_\_\_\_\_ °F and \_\_\_\_\_ PSIA 5. Total cloth area: \_\_\_\_\_ ft<sup>2</sup> Operating air to cloth ratio: \_\_\_\_\_ ft/min Filter media type: Stabilized static pressure drop across baghouse: \_\_\_\_\_ inches H<sub>2</sub>O 10. Baghouse operation is: □ Continuous □ Automatic □ Intermittent 11. Method used to clean bags: □ Shaker □ Pulse jet □ Reverse jet □ Other 12. Emission rate of particulate matter entering and exiting baghouse at maximum design operating conditions: Entering baghouse: \_\_\_\_\_ lb/hr and \_\_\_\_\_ grains/ACF Exiting baghouse: \_\_\_\_\_ lb/hr and \_\_\_\_\_ grains/ACF 13. Guaranteed minimum baghouse collection efficiency: \_\_\_\_\_\_ % 14. Provide a written description of the capture system (e.g. hooding and ductwork arrangement), size of ductwork and hoods and air volume, capacity and operating horsepower of fan:

15. Describe the method of disposal for the collected material:

# **Air Pollution Control Device Sheet**

(WET COLLECTING SYSTEM-SCRUBBER)

Control Device ID No. (must match Emission Units Table):

Eani	pment.	Infor	mation

3. 4. 5.	Manufacturer:  Model No.  Provide diagram(s) of unit describin horsepower of movers. If applicable, Provide a scale diagram of the scrub configurations, baffle plates, and mis What type of liquid entrainment elimmesh, and material of construction.  Describe the scrubber's construction	state hood face vel ober showing internate eliminators.	vith du ocity a	and hood construction.	ollection efficiency.  Please include packing	g type and size, spray
	What will be the power requirements					
7.	•	IP		Inlot ac-	uhhina liquid assas	
8.	What type of fan(s) will be used?	IF		met ser	ubbing liquid pump:	
0.	Type of fan blade:	Number of	blades	:	Diameter of b	olade:
9.	Also supply a fan curve for each fan : Estimated gas pressure drop at maxin				inches H <sub>2</sub> O	
٧.	Estimated gas pressure drop at maxim	Scrubbing Lique	or Cha	racteristic		
10.	Scrubbing Liquor	Serussing Equa			liquor losses (evaporati	on, etc.):
	Composition	Weight %				gal/1000 ACF gas
	1		12.	Liquor pres	ssure to scrubber:	PSIA
	2					
	3		13.	Pressure dr	op through scrubber:	in. H <sub>2</sub> O
	4					
14.	Source of liquor (explain):		15.	D	w rates to scrubber: esign maximum: verage expected:	gal/min gal/min
16.	Describe system to be used to supply	liquor to collector:				

17.	Give the expected solids con	tent of the liquo	or:				
18.	If the liquor is to be recircula	nted, describe ar	ny treatment p	performed	<del>1</del> :		
19.	Data for Venturi Scrubber:			20. Dat	a for Packed Towers	:	
	Throat Dimensions: (Specify Units)				Type of Packin	-	1.0.1
	Throat Velocity:	ft/se	ec		Superficial Gas	s Velocity throu	gn Bea:
		G	Gas Stream C	Characte	ristics		
21.	Gas flow into the collector:			22. Gas	s stream temperature	:	
	ACF @	°F and	PSIA		Inlet:		°F
23.	Gas flow rate:			24. Par	ticulate Grain Loadin	ng in grains/scf:	<u>or</u>
	Design Maximum:	AC	FM		Inlet:		
	Average Expected:	AC			Outlet	:	
25.	Emission rate of each polluta	ant (specify) into	and out of a	allastam.			
	F	ant (specify) mis		conector.	OTT	T	Guaranteed
Po	llutant		IN		OU		Minimum
Po	_	lb/hr			<b>OU</b> lb/hr	T grains/acf	
Po	_		IN				Minimum Collection
Po	llutant		IN				Minimum Collection
Po	<b>llutant</b>		IN				Minimum Collection
Po	<b>llutant</b>		IN				Minimum Collection
Po	llutant A B		IN				Minimum Collection
Po	llutant  A  B  C		IN				Minimum Collection
	Illutant  A B C	lb/hr	IN				Minimum Collection
	Illutant  A B C D	lb/hr	<b>IN</b> grain		lb/hr  □ Odor □ Other:	grains/acf	Minimum Collection
26.	A B C D E Type of pollutant(s) controlle  Particulate (type): By what method were the un	lb/hr ed:	IN grain SO <sub>x</sub>	s/acf	lb/hr	grains/acf	Minimum Collection
26.	A B C D E Type of pollutant(s) controlle	lb/hr	IN grain SO <sub>x</sub>	s/acf	lb/hr  □ Odor □ Other:	grains/acf	Minimum Collection Efficiency
26. 27.	A B C D E Type of pollutant(s) controlle  Particulate (type): By what method were the un	lb/hr ed:	IN grain SO <sub>x</sub>	s/acf	lb/hr  □ Odor □ Other:	grains/acf	Minimum Collection Efficiency

gas humidification):

30.	Supply a curve showing p	roposed collection	efficiency	versus g	as volume	from 25 to	100 percent	of design i	rating o	ıf
	collector.									

# Particulate Distribution 31. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating,

32. Describe the collection material disposal system:	
33. Have you included Wet Collecting (Scrubber) Control	Device in the Emissions Points Data Summary Sheet?
34. <b>Proposed Monitoring, Recordkeeping, Reporting, and</b> Please propose monitoring, recordkeeping, and reporting in parameters. Please propose testing in order to demonstrate	n order to demonstrate compliance with the proposed operating
MONITORING:	RECORDKEEPING:
REPORTING:	TESTING:

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MONITORING: Please list and describe the process parameters and ranges that are proposed to be monitored order to demonstrate compliance with the operation of this process equipment or air contribution.									
RECORDKEEPING: REPORTING:	Please describe the proposed recordkeeping that will accompany the monitoring.  Please describe any proposed emissions testing for this process equipment on air pollution control device.								
TESTING:	Please describe any proposed emissions testing for this process equipment on air pollution control device.								
35. Manufacturer's Guar	anteed Capture Efficiency for each air pollutant.								
36. Manufacturer's Guar	anteed Control Efficiency for each air pollutant.								
37. Describe all operating	g ranges and maintenance procedures required by Manufacturer to maintain warranty.								

# **ENGINE DATA SHEET**

Source Iden							
Engine Manu	facturer and Model						
Manufacture	er's Rated bhp/rpm						
Sour							
Date Installed (Mo	/Modified/Removed nth/Year) <sup>3</sup>						
Engine Manufactu	red/Reconstruction Date <sup>4</sup>						
Ignition Engine acco IIII? (Yes or No) <sup>5</sup>	Stationary Compression rding to 40CFR60 Subpart						
Is this a Certified Engine according to (Yes or No) <sup>6</sup>	Stationary Spark Ignition 40CFR60 Subpart JJJJ?						
	Engine Type <sup>7</sup>						
	APCD Type <sup>8</sup>						
Б	Fuel Type <sup>9</sup>						
Engine, Fuel and	$H_2S$ (gr/100 scf)						
Combustion	Operating bhp/rpm						
Data	BSFC (Btu/bhp-hr)						
	Fuel throughput (ft <sup>3</sup> /hr)						
	Fuel throughput (MMft <sup>3</sup> /yr)						
	Operation (hrs/yr)						
Reference <sup>10</sup>	Potential Emissions <sup>11</sup>	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
	$NO_X$						
	CO						
	VOC						
	$SO_2$						
	$PM_{10}$						
	Formaldehyde						

1. Enter the appropriate Source Identification Number for each reciprocating internal combustion compressor/generator engine located at the facility. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Emergency Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.

<b>~</b>	Dank and	L1	C	Ctataa	:	41	£_11	1	1	
۷.	Enter	ıne	Source	Status	using	ıne	101	iowing.	coa	es:
			~ ~ ~ ~ ~	~						

NSConstruction of New Source (installation)ESExisting SourceMSModification of Existing SourceRSRemoval of Source

- 3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.
- 4. Enter the date that the engine was manufactured, modified or reconstructed.
- 5. Is the engine a certified stationary compression ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

#### Provide a manufacturer's data sheet for all engines being registered.

6. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate.

#### Provide a manufacturer's data sheet for all engines being registered.

7. Enter the Engine Type designation(s) using the following codes:

	8 - 71 8 (-)	8	8	
LB2S	Lean Burn Two Stroke		RB4S	Rich Burn Four Stroke
LB4S	Lean Burn Four Stroke			

8. Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes:

$A/\Gamma$	All/Fuel Ratio	IK	ignition Retard
HEIS	High Energy Ignition System	SIPC	Screw-in Precombustion Chambers
PSC	Prestratified Charge	LEC	Low Emission Combustion
NSCR	Rich Burn & Non-Selective Catalytic Reduction	SCR	Lean Burn & Selective Catalytic Reduction

9. Enter the Fuel Type using the following codes:

Aim/Essal Dadia

PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
	#2 Fuel Oil	LPG	Liquid Propane Gas

10. Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this *Compressor/Generator Data Sheet(s)*.

MD	Manufacturer's Data	AP	AP-42	
GR	GRI-HAPCalc <sup>TM</sup>	OT	Other	(please list)

11. Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

### STORAGE TANK DATA SHEET

Source ID #1	Status <sup>2</sup>	Content <sup>3</sup>	Volume <sup>4</sup>	Dia <sup>5</sup>	Throughput <sup>6</sup>	Orientation <sup>7</sup>	Liquid Height <sup>8</sup>

- 1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the facility. Tanks should be designated T01, T02, T03, etc.
- 2. Enter storage tank Status using the following:

EXIST Existing Equipment

NEW Installation of New Equipment

REM Equipment Removed

- 3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
- 4. Enter storage tank volume in gallons.
- 5. Enter storage tank diameter in feet.
- 6. Enter storage tank throughput in gallons per year.
- 7. Enter storage tank orientation using the following:

VERT Vertical Tank

HORZ Horizontal Tank

8. Enter storage tank average liquid height in feet.

	EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS										
						Registration Number (Agency Use) G40-C					
	Potential Emissions (lbs/hr)						Potent	ial Emissions (	(tons/yr)		
Source ID No.	o. NO <sub>X</sub> CO VOC SO <sub>2</sub> PM <sub>10</sub>				$PM_{10}$	NO <sub>X</sub>	СО	voc	SO <sub>2</sub>	$PM_{10}$	
Total											

	EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS											
							Registration Number (Agency Use) G40-C					
		Po	tential Em	issions (lbs/	/hr)			Pot	ential Emis	ssions (tons	/yr)	
Source ID No.	Benzene	Ethyl- benzene	Toluene	Xylenes	n- Hexane	Formalde- hyde	Benzene	Ethyl- benzene	Toluene	Xylenes	n- Hexane	Formalde- hyde
Total												

# General Permit Levels Construction, Modification, Relocation, Administrative Update

Class II General Permits – G10-D (Coal Preparation and Handling), G20-B (Hot Mix Asphalt), G30-D (Natural Gas Compressor Stations), G35-A (Natural Gas Compressor Stations with Flares/Glycol Dehydration Units), G40-C (Nonmetallic Minerals Processing), G50-B (Concrete Batch Plant), G60-C (Emergency Generators)

Class I General Permit – G33-A (Spark Ignition Internal Combustion Engines 25 HP-500 HP), G65-C (Emergency Generators)

General Permit	Public Notice	Review Period as per	Application Fee	Criteria	Application Type
Class II General Permit (Construction)	30 days (applicant)	45CSR13 45 days	\$500 + applicable NSPS fees	6 lb/hr and 10 tpy of any regulated air pollutant OR 144 lb/day of any regulated air pollutant, OR 2 lb/hr of any hazardous air pollutant OR 5 tpy of aggregated HAP OR 45CSR27 TAP (10% increase if above BAT triggers or increase to BAT triggers) or subject to applicable standard or rule, but subject to specific eligibility requirements	Registration Application
Class II General Permit (Modification)	30 days (applicant)	45 days	\$500 + applicable NSPS fees	Same as Class II General Permit (Construction) but subject to specific eligibility requirements	Registration Application
Administrative Update (Class I)	None	60 days	None	Decrease in emissions or permanent removal of equipment OR more stringent requirements or change in MRR that is equivalent or superior	Registration Application or Written Request
Administrative Update (Class II)	30 days (applicant)	60 days	\$300 + applicable NSPS fees	No change in emissions or an increase less than Class II Modification levels	Registration Application
Relocation	30 days (applicant)	45 days	\$500 + applicable NSPS fees	No emissions increase or change in facility design or equipment	Registration Application
Class I General Permit	None	45 days	\$250	Same as Class II General Permit (Construction) but subject to specific eligibility requirements	Registration Application