MICHIGAN

ENVIRONMENTAL COMPLIANCE GUIDE FOR NONMETALLIC MINERAL CRUSHING FACILITIES

Michigan Department of Environmental Quality
www.michigan.gov/deq • 800-662-9278

Revised 4/2016

MICHIGAN

ENVIRONMENTAL COMPLIANCE GUIDE FOR NONMETALLIC MINERAL CRUSHING FACILITIES

This guide has been designed to help you determine environmental compliance with the following areas of your nonmetallic mineral crushing facility:

- Air Quality Requirements ..... Part 1
- Water Quality and Withdrawal Requirements ..... Part 2
- Waste Management Requirements..... Part 3
- Product Storage and Emergency Planning Requirements ..... Part 4
- Land Development and Lake/Pond Creation Requirements ..... Part 5
- Completing the Air Quality General Permit to Install Application..... Appendix A
- Completing the Relocation Notice Form..... Appendix B
- Sample Site/Plan Layout Map ..... Appendix C
- Sample Flow Chart..... Appendix D
- District Map ..... Appendix E
- Emission Calculation Fact Sheet for Mineral Product Processes..... Appendix F

*The **Michigan Environmental Compliance Guide for Nonmetallic Mineral Crushing Facilities** is intended for guidance only and may be impacted by changes in legislation, rules, and regulations adopted after the date of publication. Although the guide makes every effort to teach users how to meet applicable compliance obligations, use of this guide does not constitute the rendering of legal advice.*

PART 1

Air Quality Requirements

In This Part:

- **Why are Air Emissions from Crushing Facilities Regulated**
- **Overview of the Federal and State Air Quality Regulations**
- **New Installation of a Crushing Facility**
- **An Overview of the General Permit to Install Forms**
- **General Permit to Install Initial Performance Test Requirements**
- **Relocating your Crushing Facility**
- **Making Changes to your Crushing Facility**
- **The Michigan Air Emissions Reporting System (MAERS)**
- **Why Should I Comply?**
- **Available Resources**

PART 1: Air Quality Requirements

Why Are Air Emissions from Crushing Facilities Regulated?

Environmental regulations exist to protect our land, air, and water from absorbing an excessive amount of pollution. Air pollution that comes in the form of fine dust, smoke, or soot particles, also known as particulate matter (PM), is just one of six major pollutants regulated by the U.S. Environmental Protection Agency (U.S. EPA) and the Air Quality Division (AQD) of the Michigan Department of Environmental Quality (DEQ). The other criteria air pollutants are ground-level ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead.

The U.S. EPA sets the National Ambient Air Quality Standards (NAAQS) for the six criteria air pollutants. These standards protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly, and the public welfare, including protection against decreased visibility and damage to crops, vegetation, and buildings. The unit of measure for the PM standard is micrograms per cubic meter of air.

The U.S. EPA classifies and regulates dust, smoke, and soot by particle size. The particle size is measured in microns. Dust or PM less than or equal to 10 microns in diameter is commonly referred to as PM_{10}. Most dust associated with crushing facilities falls into this category. Finer sources of PM equal to or smaller than 2.5 microns ($PM_{2.5}$) are typically a result of photochemical reactions.

Research has shown that inhaling too much dust lowers the body's natural defenses because dust builds up in our respiratory system and irritates the sensitive tissues in our lungs. Therefore, breathing a lot of dust over a long period of time can cause chronic breathing and lung problems. Another consequence of dust generation is reduced visibility (also known as haze).; Haze can contribute to excessive soiling, discoloration, and damage to personal property. Fine particles can remain suspended in the air and travel long distances. For example, emissions from a factory in Gary, Indiana, can end up in Grand Rapids, Michigan.

The crushing of nonmetallic minerals is just one of a number of dust-generating activities regulated by the U.S. EPA and DEQ. Other industries where dust is controlled by similar federal and state regulations include asphalt and concrete batch plants.

Overview of the Federal and State Air Quality Regulations

Dust and fine particulate are measured by opacity. Opacity is a measurement of how light is obscured by the density of the dust particles in the air. Opacity is measured in percentages from 0 to 100 percent and measurement is performed by visible observation. When there is no visible dust, the opacity is zero percent, meaning light around a crushing facility is not obscured. Therefore, when the statement is made that an activity is operating at a "25 percent opacity" level, it means the PM in the air is blocking 25 percent of the visual background light, leaving 75 percent of the background light clearly visible. An example of standard opacity levels is illustrated by Figure 1-1. The more dust or PM generated, the more difficult it is to see the landscape background.

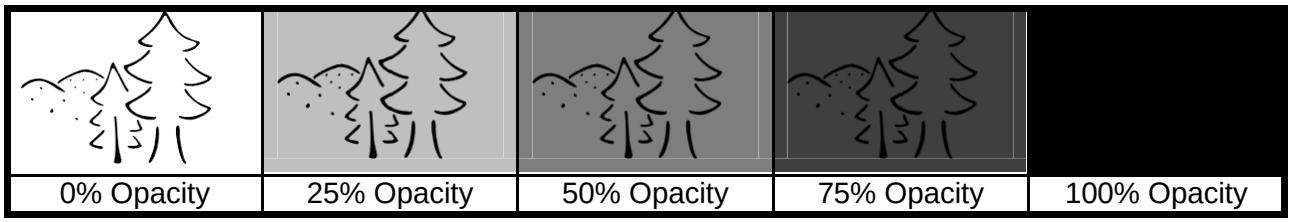


Figure 1-1: Opacity Levels

The U.S. EPA regulates the emissions of particulate matter from nonmetallic mineral crushing facilities through the New Source Performance Standards (NSPS), Subpart OOO. 40 CFR 60.670(a), which defines, in part, an affected facility in fixed or portable nonmetallic mineral processing plants as each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station that commences construction, reconstruction or modification after August 31, 1983. Based on this definition, the requirements of Subpart OOO apply to individual pieces of equipment and include, but are not limited to, equipment specific opacity limits, notification of equipment startup, as well as reporting and recordkeeping provisions. Subpart OOO also requires an initial performance test for most subject equipment.

There are some exceptions. Facilities at the following plants are **not** subject to Subpart OOO:

a) Fixed sand and gravel plants and crushed stone plants with capacities of 25 tons per hour or less.
b) Portable sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less.

The DEQ enforces the *Michigan Air Pollution Control Rules*, which restrict the level of dust or PM that can be emitted into the air. The *Michigan Air Pollution Control Rules* require owners/operators of crushing facilities to obtain a pre-construction air pollution control permit, which is known as a Permit to Install. This permit contains a set of general and special conditions for the operation of your crushing facility and incorporates the testing, monitoring, and recordkeeping requirements from Subpart OOO. Together, both the state and federal regulations set the maximum levels of dust which can be emitted from your crushing facility. If you want to operate a crusher of any size in Michigan, you must first apply for and receive a Permit to Install. The permit must be issued *prior* to commencement of crushing activities at your first job site.

Types of Permits to Install

There are two types of Permits to Install that crushing facilities can apply for in Michigan. One is a Permit to Install and the other is a General Permit to Install. What is the difference between the two permits? Both the Permit to Install and General Permit to Install can be used by companies that crush and process nonmetallic minerals, but the General Permit to Install can only be used by companies that:

- ☑ Crush no more than 2 million tons per year at any one site.
- ☑ Locate and operate their crusher a minimum of 500 feet from any residential or commercial establishment or place of public assembly.
- ☑ Have established and implemented a fugitive dust control program.
- ☑ Do not have any unresolved air quality enforcement violations with the U.S. EPA or the DEQ.
- ☑ Have an operation not currently covered under another company's Permit to Install.

Benefits of Using the General Permit to Install

The General Permit to Install is intended for crushing facilities that move from site to site during the year. The General Permit to Install is designed to be more flexible than a regular Permit to Install as well as easier to apply for and complete. In general, an administratively complete General Permit to Install application can be issued within 30 days or less. The biggest benefit of the General Permit to Install is that it is not linked to one specific job site because the permit is issued for the crusher and its associated equipment. Once you are issued a General Permit to Install, it is very easy for you to move your process and equipment from site to site as long as you submit the proper notification forms. This allows the owner and/or operator more flexibility in meeting the needs of their customers.

Who Must Comply With The Permit To Install Requirements?

Anyone who owns or operates a crusher, and its associated equipment, for the purpose of processing nonmetallic rocks, stone, sand, gravel, concrete or recycled asphalt must comply with the Permit to Install requirements and can be held liable for state and federal air quality rules.

Leased Equipment

A Permit to Install is required for all crushing facilities, whether the equipment is leased from a second party on a temporary basis or owned outright. Companies that lease their equipment should ask the leasing company the following questions:

- **Has a Permit to Install has been applied for by the leasing company (i.e., the owner of the equipment)?** As an operator of the crushing equipment, it is important to verify that a valid Permit to Install exists for the equipment you wish to lease. If not, you will need to apply for an air quality permit in order to use the equipment. If there is a permit already assigned to this equipment, the leasing company may allow you to operate under the Permit to Install for that equipment. In this case, ask for a copy of the Permit to Install for your records because one of the requirements is to post a copy of the Permit to Install at your job site. You must understand and comply with all of the permit conditions. The DEQ will issue a Permit to Install to either the owner of the equipment or the operator of the equipment. The *General Permit for Nonmetallic Mineral Crushing Facilities* currently lists both the owner and operator as viable entities.

- **Has the necessary initial performance test has been completed for the equipment?** Ask the leasing company for a copy of the test documentation to demonstrate that the equipment has passed the necessary initial performance test. Keep a copy of this test documentation for your records. The DEQ will hold the permittee responsible for complying with all of the Permit to Install's requirements. If no permit has been obtained, the DEQ may take action against the lessee and/or lessor for failing to obtain the Permit to Install and failure to conduct performance testing. According to the Permit to Install, both the owner and operator are liable for violations. It is important to remember that violations can be enforced by either the DEQ or the U.S. EPA depending on what air quality requirements were violated.

Relocation Requirements

Once you have checked on the status of these items and a permit has been issued for the equipment, all you need to do as an operator is file a *Relocation Notice Form (EQP5757),* the permit application forms (EQP5756) Process *Information Forms and any Additional Information Forms (EQP5729)* for changes made to the plant to the AQD district office where the crusher is

relocating to. The Relocation Notice notifies the AQD district office staff that the equipment is being transferred to a new work site from a previous work site. No matter who applied for and holds the permit, as an owner and/or operator of the crushing equipment you are responsible for knowing the contents of the permit. This is important because the general and special conditions of the permit outline your responsibilities to operate the crusher and related equipment in compliance with the federal and state air quality regulations.

Grandfathered Sources of Air Pollution

Not all crushing equipment requires a Permit to Install. If you own equipment that was installed **but never modified, or reconstructed** since August 15, 1967 (i.e., the date the *Michigan Air Pollution Control Rules* became effective), your equipment would be considered “grandfathered” and would not require a Permit to Install.

It is important to note there are very few sources of air pollution still in operation that would meet these criteria. Most pre-1967 constructed crushing equipment has been modified or reconstructed over the years and is now required to have an air quality permit. To learn more about what it means to modify or reconstruct your equipment, please see pages 1-16 and 1-17.

Activities Exempt from Air Pollution Requirements

All nonmetallic mineral crushing facilities must obtain a Permit to Install, but there are some related activities that are exempt from the Permit to Install requirements. For example, equipment for the mining and screening of uncrushed native sand and gravel is exempt, but only if it is standalone equipment and not associated with a crushing operation. Although this equipment is exempt from the permitting requirement, any visible emissions resulting from that equipment must be at or below 20% opacity, unless it is part of a permit with lower opacity limits. If you would like to discuss your specific circumstance, or if you have questions regarding the exemption status of other potential sources of air pollution, contact the DEQ’s Office of Environmental Assistance at 800-662-9278.

There are also some nonmetallic mineral crushing activities that require a Permit to Install, but are not required to comply with the performance testing, recordkeeping, and reporting requirements found in NSPS Subpart OOO. These operations include:

- Fixed sand and gravel plants, and crushed stone plants with capacities of 25 tons per hour or less.
- Portable sand and gravel plants, and crushed stone plants with a capacity of 150 tons per hour or less.
- Common clay and pumice plants with capacities of 10 tons per hour or less.
- Underground mines.
- Stand-alone screening operations NOT attached to a crusher.

New Installation of a Crushing Facility

According to Rule 201 of the *Michigan Air Pollution Control Rules*, you must not start construction of a source of air pollution without first obtaining an approved Permit to Install. Submitting a General Permit to Install application for a new installation involves filling out each of the following permit forms and providing additional documentation to the AQD so they can begin processing your application.

- One General Information form (EQP5727)
- One or more Process Information forms (EQP5756)
- One or more Additional Information forms (EQP5729)

If you installed your crushing facility without a Permit to Install, you will need to address this deficiency by submitting a Permit to Install application. You will NOT be able to use the *General Permit to Install Application for Nonmetallic Mineral Crushing Facilities.*

Examples of these three forms can be found in Appendix A.

An Overview of the General Permit to Install Forms

Since most crushing facilities can meet the applicability requirements for a General Permit to Install, the discussion on air permitting will focus on this type of permit and not the Permit to Install. See "Available Resources" on page 1-20 if you need assistance on completing a Permit to Install application or have questions on which Permit to Install application to use.

Where to Get a General Permit to Install Application

You can obtain a hard copy of the *General Permit to Install Application for Nonmetallic Mineral Crushing Facilities* by visiting **www.michigan.gov/air**. Select "*Permits,"* then "Permits to Install/New Source Review" then *"General Permits – Applications Forms and Instructions"* and then scroll down to "*General Permit to Install Application for Nonmetallic Mineral Crushing Facilities."*

The Permit Application Forms

The General Permit to Install application consists of three primary forms: the **General Information**, (EQP5727) the **Process Information** (EQP5756) and the **Additional Information** (EQP5729) forms. You will use these three forms to apply for a new, or modify an existing, nonmetallic crushing facility. You can find the form number in the lower right-hand corner of the form. A step-by-step guide on how to properly fill out the permit application forms is available in Appendix A of this document.

- **The General Information Form (EQP5727)**
  The General Information form is used to gather contact and physical company location information from the permit applicant. It is also used to track any additional forms or documentation the permit applicant submits as part of the overall permit application. This is a standard form that is used in each of the other seven types of General Permit to Install applications the AQD offers.
- **The Process Information Form (EQP5756)**
  The Process Information form collects specific information about each component of your crushing facility. It has dual purposes. Use the form to list all of the process equipment you will in installing under the initial permit. Use the form to identify equipment that has been added, removed or modified since the initial permit was issued.
- **The Additional Information Form (EQP5729)**
  The Additional Information form is used to indicate you are attaching supplemental information along with your permit application. The types of supplemental information you can attach include plant set up diagrams, local area maps, drawings, charts, equipment documentation, or other information you believe is important to expedite the processing of your permit application request.

Submitting Your Permit Application Package

Once the General Information form, pages 1 and 2 of the Process Information form, and one or more Additional Information forms are completed, you are ready to submit your application package to the AQD. Make two copies of the entire General Permit to Install application, including any attachments or other documentation that will be included with the application, and mail both copies, including the **original copy,** directly to:

Michigan Department of Environmental Quality Air Quality Division
Permit Section
P.O. Box 30260
Lansing, MI 48909

What Happens After I Submit My Permit Application?

The Permit Section of the AQD receives, reviews, and issues all General Permit to Install applications. Each application is date stamped and then screened to ensure the application form and its attachments have been filled out correctly, and that it contains all of the information that the AQD requires in order to consider the application is administratively complete. If any information is missing or unclear, the application will be sent back with a letter explaining what information is needed for the application to be administratively complete.

The AQD assigns each permit a unique number. The permit number consists of two number fields separated by a dash (NNN-XX). The first number represents the chronological number of receipt. The second number represents the year of receipt. A permit identified as 100-07 was the 100th permit application received during 2007. If the permit application is for a modification, the AQD uses the original permit number and adds a letter suffix. For example, the first modification of Permit to Install 100-07 would be 100-07A.

The AQD also determines whether or not the company has a state registration number (SRN). If not, one will be assigned. The permit review process concludes with approval and issuance of the company's permit.

How Long Will it Take to Process the Permit Application?

General Permit to Install applications are typically processed in 30 days or less, depending on the workload of the AQD. You will know your permit is approved once the AQD sends a copy to your company with a letter acknowledging the AQD is aware your company intends to install and operate a crushing facility in accordance with the terms and conditions of the General Permit to Install. It is important to remember that the AQD is obligated to maintain and make available to the public, upon request, a copy of your General Permit to Install.

Complying with the Conditions of the General Permit to Install

The compliance requirements of the General Permit to Install are a combination of federal and state regulations. It is important that, upon receiving your permit, you become very familiar with all of the general and special conditions of the permit because it is your responsibility to operate the equipment according to the conditions or face possible fines and penalties. The following is a short description of each requirement and tips on how to comply. For a listing of all the general and special conditions, follow the instructions under "Available Resources" on page 1-20.

Controls

- Install water sprays or bag house on each crusher and screen and make sure they are fully operational.
- Review, maintain, and implement a fugitive dust plan as specified in Appendix A of the General Permit to Install.
- If using a baghouse collector to control particulate emissions, remove collected air contaminants and dispose of them properly and frequently to minimize the amount of dust released to the air.

Labeling

Label all crushing equipment within 45 days of the crushing facility's start up. Equipment labels should be placed in an easy-to-see location on the equipment and should be the same as the Device IDs as indicated on the permit application's Process Information form (EQP5756).

Local Permitting Requirements

The General Permit to Install does not absolve you from having to obtain other permits and approvals from other governmental agencies. For example, a *Soil Erosion and Sedimentation Control Permit* may be required before you begin preparing your site. See page 2-6 for more information.

Maintenance

Ensure the proper operating efficiency of all water sprays for all crushers and screens associated with the process, as well as any baghouse dust collector or wet scrubber controlling emissions from crushers and/or screens.

Material Specifications

- Verify the material you are to crush is not contaminated with asbestos tailings or other asbestos waste material.
- Any material processing change at your plant (e.g., a move from crushing concrete to crushing asphalt) requires that you complete and submit a new Process Information Form (EQP5756) to the AQD.

Monitoring

If you are using a wet scrubber to control dust, it must be equipped with a continuous monitoring device that measures the pressure drop across the scrubber and measures the liquid flow rate. These devices must be calibrated annually. If the change in pressure and liquid flow rate readings varies +/- 30 percent from the values recorded during the most recent initial performance test, you are required to submit a semiannual report to the AQD within 30 days of the second and fourth calendar quarters.

Notifications to the DEQ

- Notify the AQD of the start-up date of your crushing facility within 15 days after the start up begins.
- If moving from a wet operation (i.e., saturated materials from a wet screening or wet mining operation) to a dry operation (and vice-versa), you must notify the AQD within 30 days following this change in material handling and adhere to the respective opacity limits as stated in Table 1-1.
- Notifications pertaining to performance testing:

- Fourteen days prior to the performance test, have the AQD district supervisor approve your test procedures.
- Seven days prior to the performance test, notify the AQD district supervisor of the performance test date.
- If the performance test is delayed, notify the AQD of the new test date at least three days before the test is scheduled to be performed.

- If there is a problem with any component of your crushing facility where excessive amounts of dust are generated for more than two hours, you are required to notify the AQD of this abnormal condition or equipment malfunction within two business days of discovery of the occurrence. Notification is made to the appropriate AQD district office (see Appendix E). If the AQD requires a written report, that report must be submitted within 10 days after the abnormal condition or equipment malfunction has been corrected or within 30 days of discovery, whichever is first.
- Notify the AQD of the start-up date of any replacement or additional equipment.

Opacity or Visible Emissions Standards

- The opacity of PM leaving the various pieces of equipment from your crushing facility shall not exceed the limits contained in Table 1-1.
- Maintain an opacity level of under 20 percent for all diesel-fueled stationary and portable on-site generators.

Table 1-1: Monitoring Equipment Opacity Limits During Operation

Equipment	Opacity Limit (%)
Any equipment enclosed within a building	No visible emissions
All crushers	15
Screens	10
Rock drills	5
Conveyors/Transfer points	10
Wash screens and all subsequent equipment downstream up to the next crusher or storage bin	No visible emissions
All equipment controlled by a baghouse dust collector	7
Wheel loaders and truck traffic	5
Material storage piles	5
Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes	10

Performance Testing

Within 60 days of achieving the maximum production rate but no later than 180 days after you initially start up the crusher and its associated equipment, conduct the required visible emission performance test (see Figure 1-2).

- The performance test must be conducted by a person certified to evaluate visible emissions in accordance with U.S. EPA Reference Method 9. See page 1-13 for more information about this U.S. EPA test method.
- Complete the performance test demonstrating that the crushing facility meets the opacity

limits stated in Table 1-1, Figure 1-3, and in the Special Conditions portion of the General Permit to Install, Section 1.2.

- Submit a copy of the completed opacity observations report to the AQD district office within 30 days of the test date (see Appendix E).
- If a baghouse collector or wet scrubber is installed in lieu of a water spray, conduct a performance test to verify compliance with the PM emission rate of 0.05 grams per dry standard cubic meter of exhaust gas.

For more information regarding performance testing, see page 1-12.

Posting

Clearly post or keep on file a copy of the General Permit and associated application forms at the site.

Processing Limitation

The General Permit to Install will not allow you to process more than 2 million tons of crushed material per year at one location. If you exceed this amount, you will need to apply for a Permit to Install.

Recordkeeping

- Monitor and keep ***daily*** and ***annual*** records of the amount of material processed for each job site. Records must be kept for at least five years and made available to the AQD upon request. The General Permit to Install will not allow you to process more than 2 million tons of crushed material per year at one location.
- Keep accurate and complete records of all replacements, reconstructions, and modifications made to equipment at your crushing facility. This includes documentation such as:
  - Purchase orders.
  - Manufacturers' equipment manuals (equipment descriptions) and specifications.
- Record the maximum rated capacities of existing and replacement crushers, bucket elevators, bagging operations, or enclosed trucks, including:
  - The total surface areas of the top screen of existing and replacement screening operations.
  - The width of the existing and replacement conveyor belt. The rated capacities (in tons) of existing and replacement storage bins.
  - The date the equipment was installed, developed, and made operational.

Siting

Your crushing facility must be at least 500 feet from any residential or commercial establishment, or place of public assembly and be clearly identified on a site drawing.

Applying for a Site Specific Permit to Install

If your proposed location does not meet the 500 foot set back requirements, what can you do? You can apply for a site specific permit to install. It is recommended that you utilize the existing crusher General Permit application forms, and in addition use the Permit to Install form (EQP5615E) as a cover sheet. On the PTI form, you can explain why you don't meet the 500 foot setback requirement and how you plan to ensure you minimize dust and comply with the requirements for opacity. It would also be a good idea to address how you plan to contain

nuisance dust to your site. This may mean that the operator will utilize water spray at sufficient quantities to ensure that any residential, commercial or place of public assembly is not affected by dust generated at your operation. If you plan to be crushing building demolition material, like concrete from an old stamping plant, you MUST identify whether or not you will be crushing contaminated material. That way, the AQD permit staff can evaluate whether or not crushing is appropriate at that location.

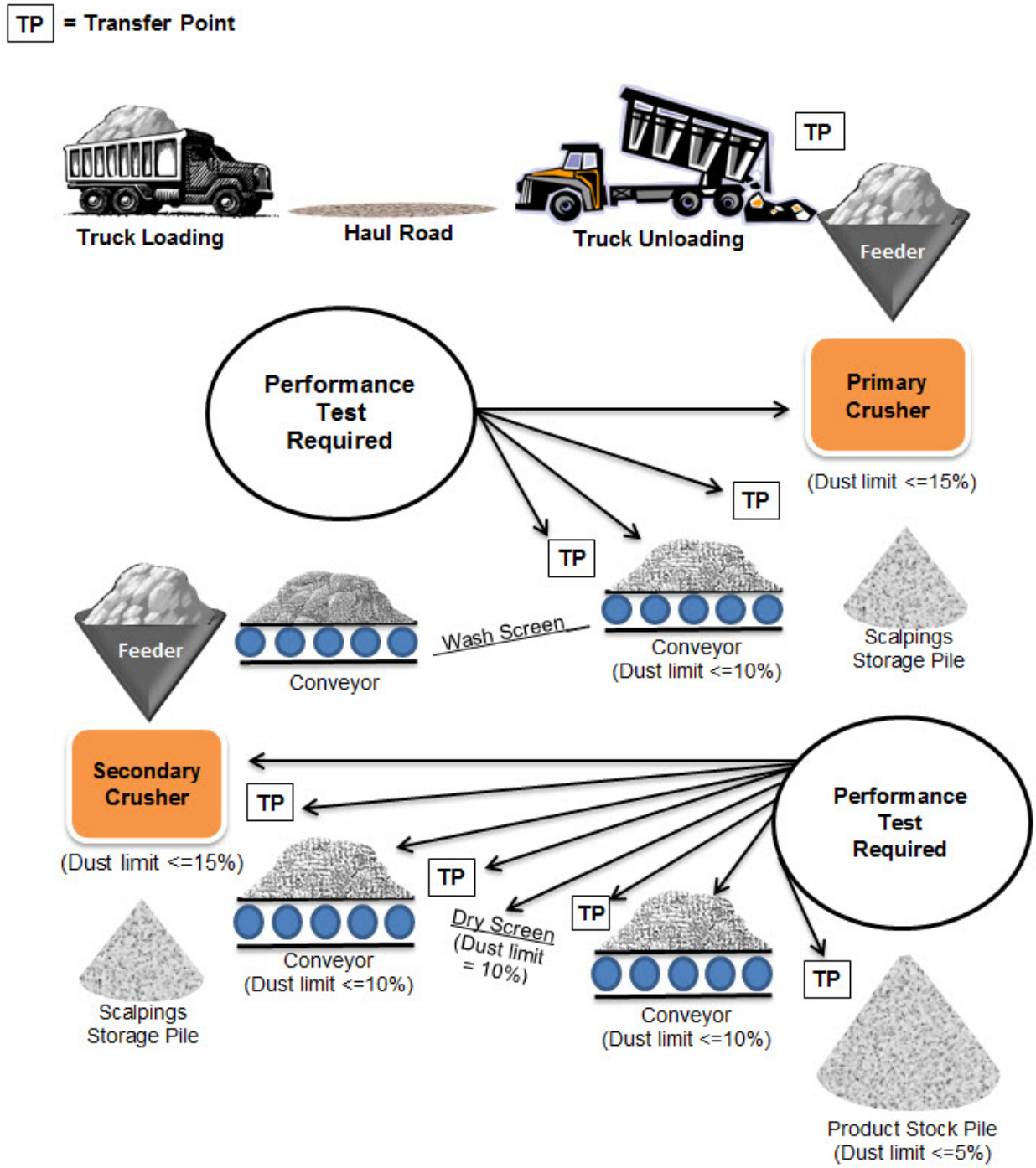


Figure 1-2: Determining What Equipment in a Fixed or Portable Crushing Facility Requires a Performance Test – Affected Facilities 8/31/1983 – April 22, 2003

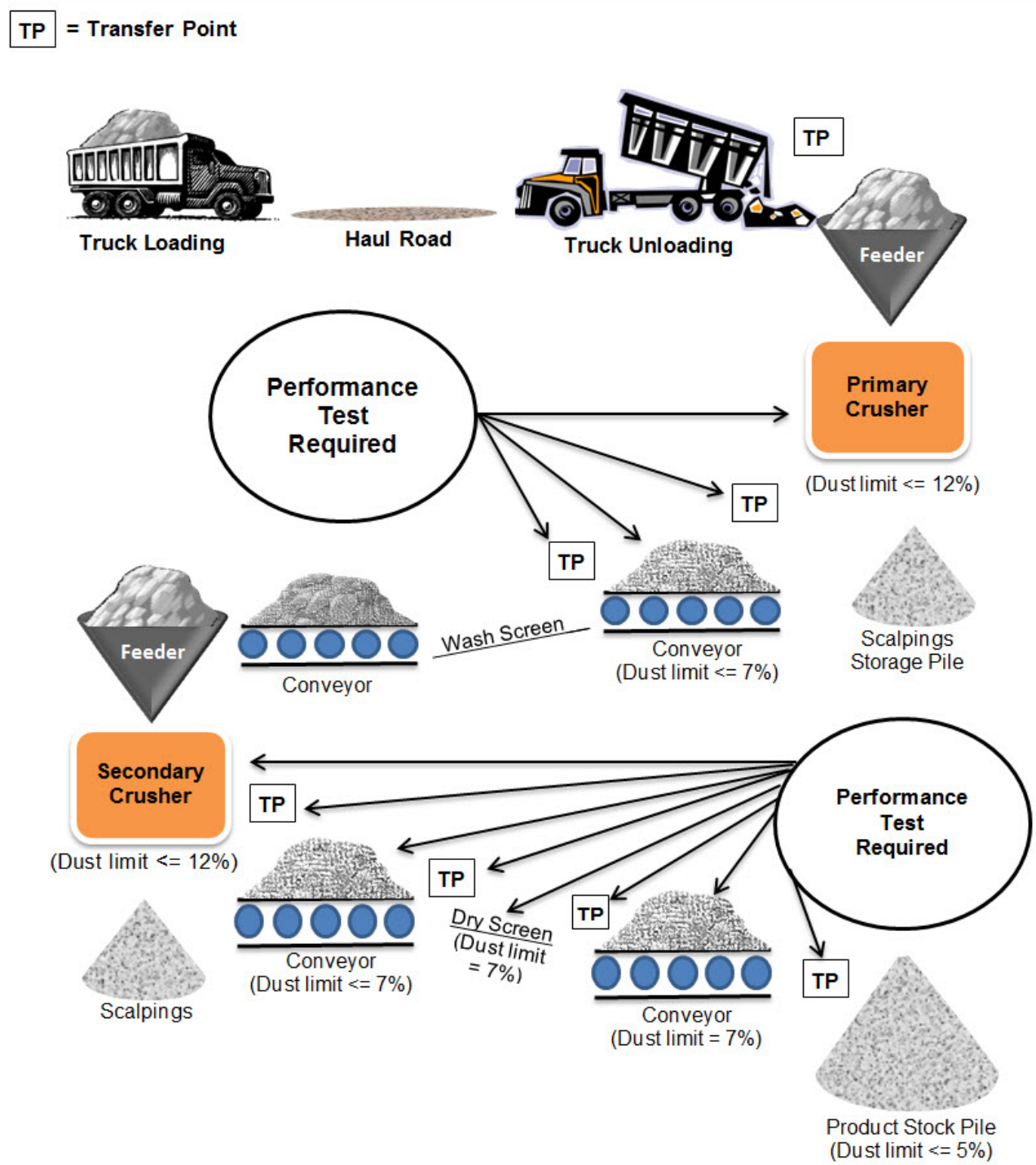


Figure 1-3: Determining What Equipment in a Fixed or Portable Crushing Facility Requires a Performance Test – Affected Facilities 4/23/03 - Present

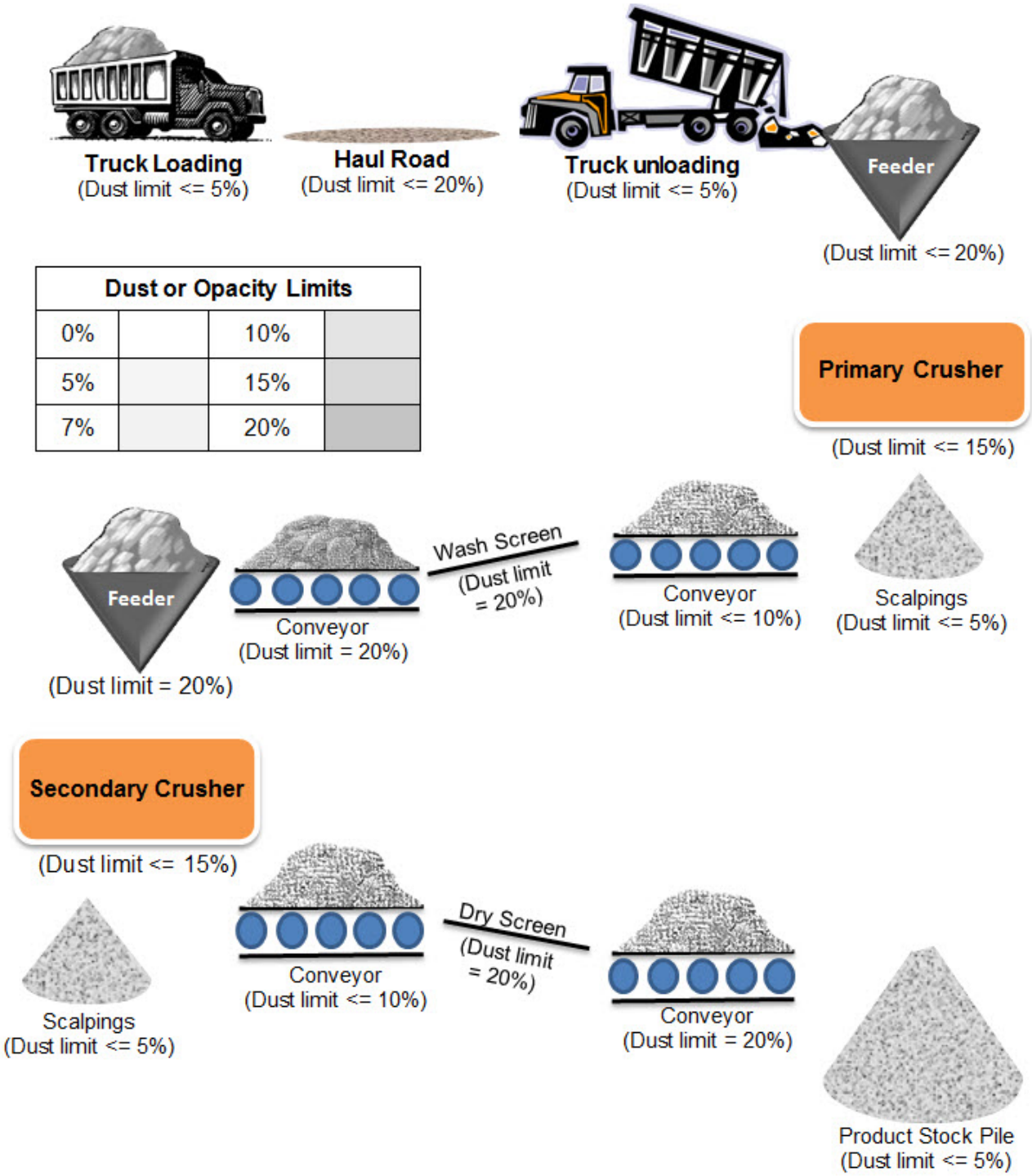


Figure 1-4: Complying with the Dust or Opacity Limits in the Nonmetallic Mineral Crushing General Air Permit

General Permit to Install Initial Performance Test Requirements

An initial performance test is required in order to determine if the opacity of the dust or particulate matter emitted from the components of a crushing facility stay at or below the established limits. The following components of a crushing facility subject to NSPS Subpart OOO must undergo an initial performance test:

- Crushers
- Grinding mills
- Screens
- Bucket elevators
- Belt conveyors/transfer points
- Baghouse dust collectors
- Storage bins/piles
- Wheel loaders and truck loading stations

The following components of the crushing facility do not have to undergo an initial performance test:

- Wet screens and associated bucket elevators and belt conveyors that lead up to the next crusher, grinding mill, or storage bin.
- Screens and associated bucket elevators and belt conveyors that are downstream of a wet mining operation and lead up to the first crusher, grinding mill, or storage bin.

Equipment Rentals

If you are renting any type of crusher and associated equipment, you must verify that an initial performance test has been performed on that equipment. If not, as the operator of the equipment, you will be responsible for conducting an initial performance test to verify compliance with opacity limits.

The initial performance test requires the use of an established U.S. EPA protocol or method in order to accurately complete the test and comply with the General Permit to Install requirements. The most common protocol or method used today for performance testing is U.S. EPA Test Method 9, also known as the "Visible Determination of Opacity of Emissions from Stationary Sources." The initial performance test must be completed by a visible emissions reader who is certified in the
U.S. EPA Test Method 9 performance test method. During a performance test, the certified visible emissions reader records the level of dust that comes off various parts of the crushing facility. The levels of dust are measured as percentages of opacity. The initial performance test is completed over a specified period of time, and the visible emissions reader determines whether the crusher's components emit dust within the acceptable opacity limits (as specified in Table 1-1 on page 1-8).

Where Do I Find a Certified U.S. EPA Test Method 9 Visible Emissions Reader?

As the owner/operator of a crushing facility, you have two options when it comes to conducting the initial performance test:

1. Hire an environmental consultant who is certified to conduct the U.S. EPA Test Method 9 visible emissions test.
2. Have someone from your company become certified.

Most environmental consultants have at least one person on staff who is certified to evaluate visible emissions in accordance with U.S. EPA Test Method 9. The DEQ's Environmental Assistance Program publishes a list of statewide air quality consultants in *The Michigan Clean Air Consultant Directory*. This directory is available on the DEQ web site at **www.michigan.gov/deqair**. Hover over the "Compliance" tab, click on the "Compliance Assistance Resources" button," then select "Environmental Consultant Assistance."

If you chose to have an employee from your company certified in the U.S. EPA Test Method 9 protocol, you may send that employee to Michigan's Smoke School. Twice a year, the AQD partners with a private training company to certify opacity readers in the state. Smoke School is generally offered spring (April) and fall (October) of each year in both the Detroit, Grand Rapids and Gaylord metro areas. Information about registering for the bi-annual smoke school can be found on the AQD Web site at **www.michigan.gov/deqair**.

What are the Benefits of Having a Certified U.S. EPA Test Method 9 Visible Emissions Reader on Staff?

The benefits are two-fold:

1. The employee who is certified in a test protocol can accurately document the opacity levels of your crushing equipment as it operates at each job site. This provides the AQD with strong documentation of your operating opacity levels and demonstrates your commitment to be a good environmental steward.

2. The up-front costs associated with training an employee may be the most economical option for your company if your company has an ongoing replacement schedule for its equipment. New, modified, or reconstructed equipment may need to have additional performance tests conducted.

Maintaining Certification

Those who are certified in U.S. EPA Test Method 9 protocol must renew and maintain their certifications every six months in order to remain up-to-date.

Conducting Visible Emission Observations

When using U.S. EPA Test Method 9 to conduct an initial performance test for each component of a crushing facility, the observer must:

- Be a minimum of 15 feet away from the dust source.
- Select an observation position that minimizes the interference from other dust sources at the job site (i.e., road dust).
- Where a water spray mist is used, take readings at the point in a crushing process where the mist is no longer visible in the observation.

U.S. EPA Test Method 9 requires that readings be taken every 15 seconds, averaging 24 consecutive readings over a 6-minute averaging period. During the observation for dust generation of the various components of a crushing facility, a certified U.S. EPA Test Method 9 reader can reduce the observation time from 3 hours to 1 hour (ten, 6-minute averages) in the following situations:

- Where baghouses are attached to an individually enclosed storage bin.
- If no individual opacity readings are greater than 10 percent for any crusher component, and there are no more than three recorded opacity readings of 10 percent in a one-hour period.
- If no individual opacity readings are greater than 15 percent for a crusher without a capture system, and there are no more than three recorded opacity readings of 15 percent in a one-hour period.

U.S. EPA Test Method 22 is used to determine the level of dust that might escape a building from equipment that is housed within. The performance test protocol for this method requires that the test last 75 minutes and that each side of the building and roof is observed for escaping dust over a period of 15 minutes.

Relocating Your Crushing Facility

Once you have been issued a General Permit to Install for your first location of operation there may be need to move to a new location to continue operations at a new job site. A relocation means moving all or a part of the crushing facility to a new job site. In order to continue to operate the crusher, a *Relocation Notice Form (EQP5757)* must be filled out and submitted to the appropriate AQD district office.

To relocate your equipment, your company must first be in compliance with all of the applicable requirements of the General Permit to Install (i.e., no outstanding or unresolved violations). In addition, the General Permit to Install requires you to keep records of how much material is crushed at any one site in order not to exceed the 2 million tons per year condition in the General Permit.

Filling out and submitting a *Relocation Notice Form (EQP5757)* is important because no two job sites are the same. There may be different products crushed, the crusher may be located in a different jurisdiction, or the crushing facility may impact the surrounding people or the environment differently. It is also important to remember that the General Permit to Install's conditions for operation continue to be applicable at your new job site. If you are changing the type of equipment to be used in your next crushing facility, you will need to modify your General Permit to Install by submitting a new *Process Information Form (EQP5756)* to identify existing and new equipment. This is especially important when utilizing rented or leased equipment. By filling out and filing the *Relocation Notice Form* and the *Process Information Form*, you are letting the AQD know your crushing facility will be moving to a different location and whether there will be any significant change in your process since your last job.

The Relocation Notice Form (EQP 5757)

Whether you rent or own the crushing equipment, a *Relocation Notice Form* must be filed at least 10 days prior to the scheduled relocation to your next job site. Figure 1-4 provides a list of information which should be included in the notification sent to the AQD district office for the new job site location. For help in filling out the *Relocation Notice Form*, see Appendix B of this guide.

RELOCATION NOTICE SUBMITTAL CHECKLIST

Include:

- ☐ A completed, original copy of the **Relocation Notice** form (EQP5757).
- ☐ A copy of the original General Permit application forms. Include copies of the General Information form (EQP5727), a copy of the original Process Information form (EQP 5756), and a copy of the original Additional Information form(s) (EQP 5729). If the plant has been modified since the original submittal, attach copies of all Process Information forms (EQP5756) submitted for each modification.
- ☐ A site plan for the proposed new location, identifying all residential or commercial establishments and places of public assembly within 1,000 feet of the proposed plant site.

Attach a copy of any new information for:

- ☐ Plant/building layouts or changes to process flow (i.e. plat maps, diagrams, etc.)
- ☐ Documentation from the equipment operator's manual or specification that states maximum rated capacity.
- ☐ Design parameters or descriptions of equipment.
- ☐ Mail original copies of the paperwork to your AQD district office for your next job site ***and*** the AQD Permit Section in Lansing, Michigan. See Appendix E for the district office mailing addresses.

Figure 1-5: Relocation Checklist

Making Changes to Your Crushing Facility

Changes to your facility set up may require some additional actions on your part to stay in compliance with the General Permit to Install. In order to understand what steps need to be taken by your company, it is important that you become familiar with certain key terms and definitions.

Definitions

- **Equipment:** Any crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck, or railcar loading station.
  - **Existing Equipment:** Any equipment that was manufactured prior to August 31, 1983, and was never modified or reconstructed on or after that date.
  - **New Equipment:** Any equipment that was manufactured, modified, or reconstructed on or after August 31, 1983.

- **Production Line:** All equipment which is directly connected or connected together by a conveying system.

- **Reconstruction** means the replacement of components of a piece of equipment to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost required to construct a comparable, entirely new piece of equipment. The cost of replacement of surfaces which come in direct contact with the nonmetallic mineral (i.e., crushing surfaces, screen meshes, bars and plates, conveyor belts, and elevator buckets) should not be considered in calculating either the fixed capital cost of the new components or the fixed capital cost required to construct a comparable new piece of equipment. The AQD considers reconstructed equipment to be new equipment.

- **Size** means:
  - Maximum rated capacity in tons per hour for a crusher, grinding mill, bucket elevator, bagging operation, enclosed truck, or railcar loading station.
  - Total surface area of the top screen for a screening operation.
  - Width for a conveyor belt.
  - Rated capacity in tons for a storage bin.

Equipment Changes to Crushing Operations

For all equipment changes, the following actions are required before operation begins:

- Ten days before the equipment is installed, submit a new *Process Information Form (EQP5756)* for all equipment to be added to production.
- Send copies to both the AQD district office and the AQD Permit Section.
- Notify the AQD district Office within 15 days of the equipment's actual date of startup.

Actions to be taken during operations after equipment changes are summarized in Table 1-2 below.

Table 1-2 Required Actions During Operations as a Result of Changes to a Crushing Facility

<table>
<tr><th rowspan="2">Equipment Change</th><th colspan="3">Required Actions During Operations</th></tr>
<tr><th>Testing</th><th>Monitoring</th><th>Recordkeeping</th></tr>
<tr><td>Replacement of equipment with new equipment that is LARGER in size.</td><td rowspan="4">Conduct a performance test within 60-180 days after equipment startup.

14 days prior to test, have AQD District Supervisor approve test procedures.

7 days prior to test, notify AQD District Supervisor of test date.

If delayed, notify AQD District Supervisor of the delay at least 3 days before test is scheduled.

Submit a copy of completed opacity observations report to the AQD within 30 days of the test date. Submit reports to your AQD district office (see Appendix E.)</td><td rowspan="5">Monitor the opacity of all equipment to ensure it is within the acceptable levels specified in Table 1-1 of this document.</td><td rowspan="5">Keep accurate records of the amount of material processed and the date of manufacture, installation date, and description of each piece of equipment.</td></tr>
<tr><td>Addition of new equipment.</td></tr>
<tr><td>Equipment modification</td></tr>
<tr><td>Equipment reconstruction</td></tr>
<tr><td>Replace equipment on the production line (on a one-for-one basis) with new equipment that is EQUAL or SMALLER in size.</td><td>Since this is a one-for-one replacement, no performance testing is required until all equipment in the production line is replaced. At that point, testing is required of all components within the production line.</td></tr>
<tr><td>Replace equipment on production line (on a one-for-one basis) with existing equipment.</td><td colspan="3" rowspan="2">The equipment is not subject to the NSPS Subpart OOO standards.</td></tr>
<tr><td>Add existing equipment.</td></tr>
</table>

Non-Equipment Changes to Crushing Operations

If you are not making equipment changes but are increasing your production rates or hours of operation, please be aware: *If you increase your production to a level greater than 2 million tons per year at a single site, you are no longer eligible for the General Permit to Install. Apply for a Permit to Install.*

The Michigan Air Emission Reporting System (MAERS)

The federal Clean Air Act requires each state to maintain an inventory of air pollution emissions for specific industry types and update this inventory every year. The AQD gathers this information and compiles it in the Michigan Air Emissions Reporting System (MAERS). MAERS contains emission data for commercial, industrial, and governmental sources of air pollution in Michigan. This information is submitted to the U.S. EPA and added to the national data bank to:

- Track air pollution trends.
- Determine the effectiveness of current air pollution control programs in each state.
- Serve as a basis for future year projections of air quality.
- Track a company's compliance and provide information for permit review.
- Calculate the emissions portion of the air quality fee.

Companies are sent a MAERS email in mid-January. The completed MAERS forms must be submitted to the AQD by March 15 of each year. You can access the MAERS web site at **www.michigan.gov/deqair** and hover over the "Emissions" tab. This page offers both a workbook and a series of annual workshops for first-time submitters of the MAERS report. For help in completing the MAERS forms or for more information on this reporting program, call the Office of Environmental Assistance at (800) 662-9278. See Appendix F for guidance on how to calculate emissions from your crushing facility.

Air Quality Fees

Approximately 2,000 Michigan companies are required to pay air quality fees to the AQD each year. The following formula is used to calculate the fee for each fee-subject company:

Annual Fee = Facility Charge + Emissions Charge

The facility charge used in the fee formula is based on the classification or category of a company. There are three different category schedules for fees: Category I, II, and III. Facilities that are major under Title I of the Clean Air Act (have the potential to emit 100 tons or more per year of any pollutant) are classified as Category I facilities. Companies that are major under Title III of the Clean Air Act (have the potential to emit 10 tons of any one hazardous air pollutant or 25 tons of any combination of hazardous air pollutants) are classified as Category II facilities. Category II also includes any company with operations subject to a federal NSPS regulation such as nonmetallic mineral processing facilities. The current facility charge for Category II facilities is $1,795.

In addition to the category fee, there is also an emissions charge. The emissions charge is currently $51.15 per ton of billable emissions. Billable emissions are actual emissions of fee-subject air contaminants (e.g., particulate matter). Any air contaminant regulated under federal NSPS or Title III (Hazardous Air Pollutants) of the Clean Air Act is subject to the emissions charge.

Example of a Fee Calculation for a Typical Crushing Operation Subject to NSPS

ABC Aggregates of southeast Michigan is a Category II facility that has a crusher capacity of 155 tons per hour and processed 600 tons of material in 2007.

PM_{10} /Year = (Tons processed/ Year) x (Emission factor)* x (1 Ton/ 2000 Pounds) x (80% Control Efficiency)**

PM_{10} /Year = [600,000 Tons of Product/Year] x [0.05 Pound PM_{10}/Ton Product] x [0.0005 Ton/Pound] x [(100 - 80) / 100]

PM_{10}/Year = 3 tons

** This emission factor comes from the U.S. EPA's AP-42 for plant-wide processes. The source classification code is 3-05-025-01 for a typical plant-wide sand and gravel operation.*

***Assume an 80% control efficiency for properly installed and operating water sprays.*

Billable Emissions under MAERS are rounded to the nearest whole number.

Emission Charge: 3 x $51.15/ton	$ 153.45
Facility Charge:	+ $1,795.00
TOTAL ANNUAL AIR QUALITY FEE	**= $1948.45**

Who is Responsible for MAERS Reporting and Fees?

The entity issued a Permit to Install for the equipment is responsible for reporting emissions generated by this equipment and any fees associated with those emissions.

Why Should I Comply?

When air pollution interferes with the comfortable enjoyment of the community's life and property, it is usually reported directly to the AQD district offices. When a complaint is lodged to the AQD, an air quality inspector is sent out to the site where the complaint is believed to originate. If an inspector is sent to your job site, he/she may talk with you about the problem in order to substantiate the merits of the complaint. The most common violations cited in regard to crushing operations are:

- Not having an air quality permit.
- Not completing the initial performance test on the equipment.
- Making a change to the equipment and not updating the AQD on the change.
- Excessive dust generation with no ongoing monitoring and implementation of a fugitive

dust plan.

- Failure to submit a complete Relocation Notice on time.
- Failure to label equipment
- Failure to keep records required by the permit.
- Failure to post or have a copy of the permit at the site.

These violations often occur because an owner/operator of a crushing facility is not aware of the compliance requirements (i.e., monitoring opacity levels, implementing a fugitive dust plan, etc.).

The DEQ can issue a Violation Notice (VN) if you are violating any of the air pollution control requirements. If the violation is not corrected, the inspector can escalate it for further enforcement action. The following are some typical actions companies take in order to achieve compliance after a VN has been issued:

- Establish a tree berm.
- Install a truck wheel wash system.
- Keep records of water usage.
- Pave access roads to a job site.
- Submittal of records to demonstrate dust minimization efforts.
- Develop a site or company-specific fugitive dust plan.
- Install additional water sprays at transfer points along the process.

The ultimate goal of AQD inspectors is to help you achieve and maintain compliance with the air quality regulations. This involves working with you and your company to address the reasons behind any issued VN.

Available Resources

There are many resources available to help you stay in compliance with the air regulations mentioned in this Part. The AQD has a Web page containing the General Permit to Install application forms, instructions, and listing of general and special conditions. Go to **www.michigan.gov/air.** Select "*Permits"* then "*Permits to Install/New Source Review*", then *"General Permits – Applications Forms and Instructions"* and then scroll down to "*General Permit to Install Application for Nonmetallic Mineral Crushing Facilities."*

Call the DEQ's Office of Environmental Assistance at 800-662-9278 for assistance on any environmental-related question, including those related to air quality.

The AQD district office staff are available for consultation and advice. Staff from these offices conduct the inspections of your facilities. See Appendix E for a listing of the district offices.

The Office of Environmental Assistance maintains a directory of clean air environmental consultants. This directory is available on the DEQ web site at **www.michigan.gov/deqair**. Hover over the "Compliance" tab, click on the "Compliance Assistance Resources" button", then select "Environmental Consultant Assistance."

PART 2

Water Quality and Water Withdrawal Requirements

In This Part:

- **Overview of the Department of Environmental Quality's (DEQ's) Water Quality Permit Programs**
- **The Groundwater Discharge Program**
- **Surface Water Discharges and the National Pollution Discharge Elimination System (NPDES) Permit**

PART 2: Water Quality and Water Withdrawal Requirements

When properly operated, a crushing facility is a dry operation, and water is only used as a mist for dust suppression. This mist is generally evaporated into the air surrounding the equipment and absorbed by the material before it is conveyed to the screening operation. If there is no release (discharge) from this process to the ground or a water body, water discharge permits are not needed by your facility for this specific activity. However, there are other activities closely associated with the crushing facility that may require wastewater discharge permits. The wastewater discharge permit program may apply to the wastewater generated from:

- Wash screen operations.
- Vehicle wash stations such as truck wheel washes.
- Mining activities where groundwater and storm water are dewatered.
- Storm water that comes in contact with industrial materials at the site.

In addition, water withdrawal permits and reporting requirements may apply to mining operations.

Overview of the Department of Environmental Quality's (DEQ's) Water Quality Permit Programs

There are three water quality operational permit programs that may apply to a crushing facility:

- The Groundwater Discharge Permit Program
- The National Pollutant Discharge Elimination System (NPDES) Permit Program.
- The Industrial Storm Water Program (which is included in the NPDES Program).

Each program is administered through the Water Resources Division and is designed to protect against wastewater pollutants getting into the groundwater or surface water (such as rivers, lakes, and streams) of the state.

To determine which of these water programs applies to your crushing facility, you must first know the discharge destination of the wastewaters that are generated at your site. If all of the waste and/or dewatering water will enter the ground or groundwater, the Groundwater Discharge Permit Program applies. If the wastewater and/or dewatering water has the possibility of entering a surface water (rivers, lakes, and streams) of the state, the NPDES Permit programs apply.

Finally, a construction storm water NPDES Permit-by-Rule would likely apply to the job site during the initial development phase (to control runoff of soil and sediment into water bodies and neighboring properties.)

What permit is required for ponds?

For water quality permitting purposes, if a discharge is made into a pond from the mining of sand and gravel and the pond does not have an outlet to a surface water body, a groundwater discharge permit would likely be required.

Each of these wastewater discharge permit programs protects the waters of the state pursuant to Section 3109 of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), so the state's water can be used for activities such as irrigation; recreation; industry; drinking; and the health of plants, animals, and people. For example, dewatering groundwater often contains high levels of total dissolved solids (it may look like milk) or hydrogen sulfide (it may have a significant "rotten egg" odor). In some cases, discharging water with these characteristics can severely impact the uses of the state's water.

The Groundwater Discharge Permit Program

The Groundwater Discharge Permit Program applies to sites where the wastewater or wash water is directed to and discharged back into the ground or, as mentioned earlier, a pond with no surface water outlet that may have been created as a result of the sand and/or gravel mining activity. The discharge authorizations in the Groundwater Discharge Permit Program Rules (Part 22 Rules, Groundwater Quality, R 323.2201 et seq.) are established in order of relative threat to the environment, and the program's annual fees are set in the same manner. There is an annual fee for groundwater permit coverage. The annual fee can be $200, $1,500 or $3,650, depending on the type of permit appropriate for your company.

Certain activities are exempt from having to obtain a permit. These activities are listed in Michigan Rule 323.2210(a-x) while other types of discharges require prior authorization and are issued under the following rules:

Rule **323.2210(y)**	(site specific discharge)
Rule **323.2211**	(notification only)
Rule **323.2213**	(notification with certification)
Rule **323.2215**	(general permit)
Rule **323.2216**	(permit with specific treatment system requirements)
Rule **323.2218**	(full permit)

Exemptions to the Groundwater Discharge Permit Program (Rule 2210)

Certain discharges to the ground are exempt from needing prior authorization from the DEQ's Water Resources Division. Examples of exempt discharges to the ground include controlled application of certain dust suppressants, domestic equivalent uses, and development water from groundwater monitoring wells. A more complete list of these discharges can be found in the Part 22 Permit Application Instructions. These instructions are available online at **michigan.gov/deqwater.** Select "Groundwater Discharge" from the Quicklinks on the right. You can also get there by looking under "Permits and Fees select "Groundwater Permit Application Forms and Technical Information."

While the law and rules provide that a person does not need a permit to discharge a material that is exempt, the law also does not waive liability for causing injury (i.e., contamination) to the waters of the state. A discharge cannot cause the waters of the state to lose their usefulness for drinking, agriculture, recreation, industry, or other protected uses. Even though these activities do not require a permit, there are certain conditions that must be met according to the law; and the following activities are prohibited:

- Causing physical damage to neighboring properties or creating nuisance conditions (i.e., runoff onto adjacent properties, ponding or flooding of adjacent properties, odors, etc.).
- Creating a site of environmental contamination, which would need to be cleaned up.

Discharges to the ground falling into this category do not have to submit a permit application form. Yet other discharges to the ground or groundwater, which are not specifically listed as exempt activities under Rule 2210(a-x) or elsewhere in the rules, may be authorized on a case-by-case basis by the DEQ's Water Resources Division. If your company demonstrates the discharge will not have a significant potential to be injurious based on volume or content, the Water Resources Division may grant an authorization to discharge to the ground under Rule 2210(y). To request this authorization, you must submit an application form that includes a narrative description justifying the request for the Rule 2210(y) authorization with the permit application form.

The Groundwater Discharge General Permit

An authorization for certain classes of discharges can be granted by the Water Resources Division under a general permit. Often this is used for operations where wash water is associated with gravel, sand, limestone, or dolomite mining that contains no additives.

To apply for the general permit, submit a Groundwater Discharge Permit Application to the Water Resources Division with information that characterizes the discharge. The specific General Permit for sand and gravel wash water can be found at **www.michigan.gov/deqwater**. Select "Groundwater Discharge" from the Quicklinks on the right. . Under "Permits and Fees" select "Groundwater Permit Application Forms and Technical Information." From here, select GW154000 – Gravel Mining. A company is authorized to discharge to the ground or to groundwater when it receives a Certificate of Coverage (COC) from the Water Resource Division that verifies the discharge is authorized under this rule. The annual permit fee for this authorization is $1,500.

To submit a Groundwater Discharge Permit Application for a General Permit access **https://miwaters.deq.state.mi.us**. This is the site of the web-based program launched in August 2015. This program introduces online submission of permit applications and schedules of compliance, as well as monitoring data. You can also gain access to this site through **www.michigan.gov/deqwater**. Choose "MiWaters is now online" from the Quicklinks column on the right. Link to MiWaters is in the middle of the page. Near the bottom are links to training videos. All applications must be submitted through the MiWaters site. The Part 22 application instructions, the current General Permit documents, guidance documents, and technical information can still be found at **www.michigan.gov/deqwater**.

All applicants new to the groundwater program and MiWaters must create an account. Those seeking reissuance of a previous permit should have received instructions from us about becoming associated with your existing account; now in MiWaters. If you did not receive the letter, please contact your district office for assistance in completing this part. Creating an account is a two-step process. Upon accessing the site choose "Create an Account" located in the upper-right section of the page. Complete the information requested on the page and download the Certifier Agreement Form you will need for step two. Once you create an account you will receive an emailed acknowledgement with further instructions for logging in. With this access you can view and begin filling out an application. In step two, complete the downloaded Certifier Agreement Form and mail it as instructed. Once the certifier status has been approved your e-mail address will identify your security status, enabling you to submit the application.

Having created an account, you can sign-in to MiWaters. Choose "Apps, requests and reports." Choose the groundwater discharge general permit application Rule 323.2215 and begin submission. This is an interactive form to be completed and submitted online. The application is divided into several sections. The first few sections require the type of information that is general to all applicants. Questions specific to sand and gravel wash water are found beginning in the section "Rule 323.2215 Specific Information". Here you will choose "Gravel, sand, limestone, or dolomite mining" from the list.

From this point you will continue filling in only the information requested for gravel, sand, limestone, or dolomite mining. Finish by submitting the competed form.

For additional information you can call the Groundwater Permit Unit in Lansing at 517-284-5570 or your local district office.

Surface Water Discharges and the National Pollution Discharge Elimination System (NPDES) Permit

NPDES Individual Permits

An individual NPDES permit is site specific. Companies engaged in limestone, sand/silica mining, and other associated processes with a direct discharge into surface waters of the state often need permits from this program. The limitations and requirements in an individual permit are based on the perlite's discharge type, the amount of discharge, company operations (if applicable), and the receiving water body's characteristics. Applications for discharge permits shall be completed using the Water Resource Division's MiWaters system's Web site. You can get help filling out your application by contacting the Water Resource Division Lansing Office, 517- 284-6651 or your local Water Resource Division district office. Additional information is also available on the Web at **www.michigan.gov/deqwater**.

It is suggested that those needing this type of permit seek the assistance of an environmental consultant for assistance in completing the NPDES individual permit application.

NPDES General Permits

A general permit is available to permitees with certain similar operations and/or types of discharges. Coverage under an NPDES general permit will only be granted when the general permit provides the needed level of protection for the water receiving the discharge. Wastewater discharges at certain locations may require an individual permit based upon site-specific concerns. Companies that are eligible for coverage under a general permit receive a Certificate of Coverage (COC) from the Water Resources Division-Resources. Two of the general permits most relevant to crushing facilities include Storm Water from Industrial Activities (discussed below) and Sand, Gravel, and Clay Mining (for process wastewater and pit dewatering water).

Storm Water from Industrial Activities General Permit

If a site has a site-specific individual NPDES permit, industrial storm water permit conditions and requirements will be included within the individual permit (general storm water permit coverage will not be necessary).

Companies with coverage under a general NPDES permit for sand, gravel, and clay mining may need to apply for coverage under a general storm water permit if storm water is separate from other waters at the site (such as dewatering or other wastewater). If all of the storm water at the site is intermingled with the dewatering or process wastewater, the storm water is no longer considered storm water and should be covered accordingly (e.g., by an individual NPDES permit or a general NPDES permit for sand, gravel, and clay mining). Industrial storm water permit coverage may be necessary for companies that:

- Do not have other wastewater requiring an NPDES permit at the site, and the storm water associated with the facility's industrial activity is discharged to a separate storm sewer system or to nearby surface waters of the state (e.g., river, lake, stream); or
- Have wastewater or dewatering water which requires other NPDES coverage, but the storm water is separated from the other wastewaters that are directed to surface waters of the state.

The industrial storm water program applies to industrial sectors identified in the federal storm water regulations. Standard Industrial Classification (SIC) codes, prepared by the federal Office of Management and Budget or narrative descriptions, are used to identify regulated companies. SIC codes describe the primary nature of business in which a facility is engaged. The following industrial categories applicable to sand, gravel, and clay mining are regulated:

- Transportation (SIC 40 – 45, including SIC 41)
- Mining (SIC 10 – 14)

It is likely that crushing facilities fall under one of these SIC codes. You can find your four-digit SIC code, for comparison, in your corporate tax returns under Schedule K listed as either "Business Activity Code" or "Manufacturers Identity Code." You may also call Michigan's Unemployment Insurance Agency at 800-638-3994 and provide your federal identification number to get your official SIC code.

Next, you must identify areas where storm water could come into contact with industrial materials or activities at your site. These are areas where you store or transport materials related to your industrial activity outside without some type of permanent covering such as a storage yard (final products manufactured for use outside are exempt). Upon contact with these areas, the quality of the storm water that runs off from these materials could be altered. The term "exposure" is used in the storm water program to indicate the potential for contact between storm water and your industrial materials. This includes outside storage of raw materials, intermediate products, waste materials, and material handling activities associated with your industrial activity.

If your company falls under one of the regulated SIC codes and you have a discharge of storm water to surface waters of the state from areas associated with your industrial activity, you will likely need a storm water permit. There is a no-exposure exemption for the storm water permit program, but most crushing and associated operations are conducted outside so the no-exposure exemption will probably not apply. However, for guidance on the "no-exposure exemption" go to the industrial storm water program Web site at **www.michigan.gov/deqwater**. Select "Permits" from the left-hand menu, then "Storm Water" from the drop-down menu under "Surface Water." Then select "Industrial Program" under "Information" in the middle of the page and pick the document entitled "No Exposure Certification Guidance."

To begin the process to get a COC, a document that demonstrates coverage under the Storm Water from Industrial Activity General Permit, you first have to submit a Notice of Intent (NOI). To complete the NOI, go to the MiWaters website at **https://miwaters.deq.state.mi.us/**, create an account, submit a Certifier Agreement, and complete the appropriate nForm for the NOI. If your NOI is appropriate and complete, then a COC will be issued by the Water Resources Division-Resources Division. Once the COC is issued, your company can begin its operation. There is an annual permit fee of $260 for storm water discharges associated with industrial activity or from a commercial site that is assessed at the end of each calendar year. Invoices usually are mailed in February of the following year. It is important to note that before a COC is granted, you must have:

- A certified operator who has supervision over the control structures at the company.

- Eliminated any unauthorized non-storm water discharges to the storm sewer system and waters of the state.
- A Storm Water Pollution Prevention Plan (SWPPP) developed and implemented (for existing facilities), and new facilities must have a SWPPP developed and ready for implementation.

How do you know if you need an Industrial Storm Water General Permit?

Answer: If you can answer yes to the following questions, you will need general permit coverage:

- Does the SIC code for my company fall under the categories that are regulated?
- Are there any areas on my job site where storm water is exposed to my industrial activities (i.e., storage or process equipment) and then discharged into surface waters of the state (e.g., any storm water that is not co-mingled with another wastewater stream, dewatering water, or otherwise covered under a different NPDES permit)?

Notice of Coverage for NPDES Storm Water Discharges from Construction Activity or Permit-By-Rule

A Notice of Coverage for NPDES Storm Water Discharges from Construction Activity (NOC) or Permit-by-Rule would in all probability apply to your site at the initial development phase or ground breaking. A NOC or Permit-by-Rule is used to control run-off of soil and sediment into water bodies and neighboring properties if the construction activity will result in a discharge of storm water to surface waters of the state at any point during the construction process. The NOC and Permit-by-Rule controls storm water runoff from the site in the initial development period. This usually lasts until the initial earth change activity has been stabilized. Discharges associated with operation of the facility may then be covered by an operational permit.

Construction sites of one acre or greater of earth disturbance are covered by a “permit-by-rule.” “Permit-by-rule” means that permit requirements are stated in a formally promulgated administrative rule by the Water Resources Division. A facility requiring coverage under a “permit-by-rule” must abide by the provisions written in the rule. The rule requires that an application (Notice of Coverage) be submitted for construction sites five acres or greater in earth disturbance; construction sites between one and five acres have no application requirement and are automatically covered under Permit-by-Rule provided they comply with the provisions outlined in Permit-by-Rule.

Owners or recorded easement holders of earth change sites of five acres or more must submit a form called a **Notice of Coverage** (NOC) to apply for NPDES permit coverage. In order to submit an NOC, the applicant must first obtain a Soil Erosion and Sedimentation Control (SESC) permit. The SESC permitting programs are administered by local jurisdictions and counties in your area. SESC agencies can be identified online at **www.michigan.gov/soilerosion** or by calling the Environmental Assistance Center (EAC) at 800-662-9278. Authorization to discharge water from your job site is automatically granted upon submittal of a completed NOC and paying a one-time fee of $400 to the Water Resources Division through the MiWaters web-based permitting and compliance database.

Access to MiWaters can be found at **https://miwaters.deq.state.mi.us**.

Earth change sites that disturb one to five acres are provided automatic coverage under the NPDES Storm Water Construction Permit (Permit-by-Rule) as long as the earth change is first covered under a local or county Soil Erosion and Sedimentation Control (SESC) Program. Even though there is no application requirement or permit fee for one to five acre sites, construction site owners/operators must comply with the Permit-by-Rule requirements. Sites disturbing less than one acre could be required to have Permit-by Rule coverage if the earth change is part of a larger common plan of site development.

The Permit-by-Rule requires an owner/operator of a construction site to provide for weekly inspections of the soil erosion and sedimentation control practices identified in their SESC Permit. In addition, the site must be inspected within 24 hours of a rain event that causes run off from the site. These inspections must be conducted by, and recorded in, inspection logs by a Certified Storm Water Operator. The certification materials and testing to become a Storm Water Certified Operator are available in each of the, DEQ district offices. To find out more about training go to **www.michigan.gov/soilerosion** and follow the links for Training.

For more information on the Permit-by-Rule, including certified operator exam training materials and exam schedules, or storm water program contact information, contact any Water Resources Division district office or go to **www.michigan.gov/deqwater** (select “Permits” then “Surface Water” then “Storm Water,” then “Construction Site Program”).

Large Quantity Water Withdrawal Regulations

Mining operations that have large quantity water withdrawal capacity (combined capacity of all pumps) of over 100,000 gallons per day must be registered with the DEQ Water Use Program. New withdrawals or increases of additional withdrawal capacity greater than 100,000 gallons per day must be authorized by the DEQ Water Use Program via the online Michigan Water Withdrawal Assessment Tool (**http://www.deq.state.mi.us/wwat**) prior to making the withdrawal. New or increased withdrawal capacity greater than two million gallons per day bypass the Water Withdrawal Assessment Tool and must obtain a water withdrawal permit under Part 327.

This regulation was passed into law to comply with the interstate Great Lakes Compact, and to prohibit a new or increased large quantity withdrawal from causing an “adverse resource impact.” An adverse resource impact is defined as decreasing the flow of nearby rivers or streams, or decreasing the level of a natural lake if the withdrawal is made directly from a lake, by an amount that would impair the characteristic fish populations. Removing too much groundwater near a river or stream will change the flow and temperature of the stream, and hence the types and number of fish expected to be found there. The Water Withdrawal Assessment Tool and Part 327 permit review processes analyze the proposed withdrawal, and assess the likelihood of the groundwater or surface water withdrawal causing an adverse resource impact.

In addition, the owner of property with the capacity to make a large quantity water withdrawal must annually report the volume of that withdrawal to the DEQ by April 1 on a form provided by the DEQ. There is also an annual $200.00 fee for all withdrawals in excess of 1,500,000 gallons for the given year. Annual water use reports require the withdrawal volume, source and location, capacity, purpose of use, and discharge volume and location.

For a permit application or to learn more about this program, please call the Water Resources Division, Water Use Program, at 517-284-5563 or go to **www.michigan.gov/deqwateruse**.

PART 3

Waste Management Requirements

In This Part:

- **An Overview of the DEQ OWMRP Programs**
- **A Step-By-Step Approach to Identifying, Characterizing, & Disposing of Materials**

PART 3: Waste Management Requirements

The waste requirements that a crushing facility must follow depend on what kind and how much waste is generated from a facility's activities. The three most common types of waste are hazardous waste, liquid industrial by-product, and solid waste. Some materials may also exhibit radioactivity. When evaluating what kind of waste you have, you need to "characterize" the waste by evaluating the character and composition following prescriptive steps found under the waste regulations. These steps are required to ensure that human health and environment are protected from the hazards posed by the waste. Once waste is characterized and determined to be a hazardous waste, liquid industrial by-product, solid waste or radioactive waste, you can identify the management requirements that must be met when handling the waste. To encourage waste minimization, the hazardous waste regulations have less rigorous regulatory requirements for a site that generates smaller volumes of hazardous waste. Waste characterization and the specific management requirements that apply are discussed in greater detail later in this part.

Several state agencies oversee the following regulations including the Michigan Department of Environmental Quality's (DEQ), Office of Waste Management and Radiological Protection (OWMRP), Air Quality Division (AQD), and Water Resource Division; the Michigan Department of Licensing and Regulatory Affairs' Michigan Occupational, Safety and Health Act Program (MIOSHA); and the Michigan State Police, Commercial Vehicle Enforcement Division.

By using the steps outlined below, you can determine which of the state and federal regulations apply to the waste at your crushing facility to ensure you are properly managing your waste.

An Overview of the DEQ OWMRP Programs

First, it is important to understand that different types of waste have different regulations. The following is a short description of each.

- **Hazardous waste** – Part 111 of Act 451 and the Part 111 rules. Includes characteristic waste (ignitable, corrosive, reactive, and toxic) or listed waste which includes chemicals and processes that create the waste; overseen by OWMRP.
- **Universal waste** – Specified wastes (e.g., electric lamps, electronics, antifreeze, batteries, etc.) that a facility may choose to handle under the alternative hazardous waste rule R 299.9228; overseen by OWMRP.
- **Liquid industrial by-product** – Part 121 of Act 451. Includes discarded non-hazardous liquids that fails the paint filter test and is produced by a non-household, including most used oil; overseen by OWMRP. If waste oil is burned, there are additional requirements under Part 55 of Act 451; overseen by AQD.
- **Solid waste** – Part 115 of Act 451 and the Part 115 rules. Includes non-hazardous solid waste; overseen by OWMRP.
- Radiological waste – Part 135 Ionizing Radiation Rules of Act 368 and the Part 135 rules; overseen by OWMRP.
- **Scrap tires** – Part 169 of Act 451; overseen by OWMRP.

There are also other regulations that may be applicable to the types of waste coming from your facility. These include:

- **Flammable and combustible liquids regulations and Fire Protection Code** – Overseen by the Michigan Department of Licensing and Regulatory Affairs, Fire Services Bureau, Storage Tank Division when waste has a flashpoint below 200 degrees Fahrenheit. The local fire department and MIOSHA also have requirements.
- **US Department of Transportation hazardous materials regulations** – Overseen by Michigan State Police when transporting hazardous waste.
- **Worker health and safety standards for aboveground operations** – Overseen by the Michigan Occupational Health and Safety Administration.
- **Discharges of wastewater on site** – Overseen by Water Resources Division.

To find more information about waste requirements and the regulations, go contact the Environmental Assistance Center at 800-662-9278 or go to **www.michigan.gov/deqwaste**.

A Step-By-Step Approach to Identifying, Characterizing, & Disposing of Materials

Step 1: Identify all of the various discarded materials you generate on site and determine what waste or by-product regulations apply, including how much hazardous waste is generated in a calendar month.

Waste streams at your site may include those from:

- the office
- equipment and building maintenance
- any area where you are receiving or handling material to crush.

Common examples of wastes and applicable waste codes from crushing companies are listed in Table 3-1. The waste codes are used for labeling hazardous waste containers and for manifesting the waste when shipping it off-site. Waste codes also apply to manifesting liquid industrial by-product. Sometimes additional information is needed to determine which hazardous waste codes apply if you have used solvents. It may be necessary to read the waste description in the rules to determine which code applies. The table does not include waste codes that may apply if you have some specialty operation or if other chemicals or wastes were mixed with the waste. For example, cross contamination may occur in the maintenance area if overspray from an aerosol brake cleaner was used near some used antifreeze. Review the Table 3-1 waste details and view the 1-hour recorded ***Waste Characterization and Generator Status*** webinar available at **www.michigan.gov/deqwaste** to verify the regulatory status of your discarded materials and the management requirements that apply for handling, transport, and disposal. Discuss any questions you have with the OWMRP District Office, your waste disposal company, waste consultant, or contact the Environmental Assistance Center.

F002
Description in Rule
R 299.9220

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of 10% or more by volume of one or more of the above halogenated solvents or those solvents listed in FOO1, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

Table 3-1: Common Wastes at Crusher Facilities

COMMON WASTES AT CRUSHER FACILITIES				
Waste Stream	**Usual Type of Waste**	**Disposal or Recycle Recommendation & Waste Codes for Shipment**	**Additional information available?**	**How much is generated at your site?**
Oils and Fuels				
Used Oil	Liquid industrial by-product when recycled	Part 167 requires recycling of used oil.	Used Oil Overview with links to related guidance and Used Oil Common Violations Checklist	
Used Oil Filters	If the oil is completely drained, scrap metal is exempt from solid waste regulations when recycled.	If properly drained, codes are not applicable.	Used Oil and Spent Filters	
Waste Fuel	Liquid industrial by-product when recycled for use as fuel or sent for fuel blending. Hazardous waste when sent for disposal	If usable as is, it is a product. If recycled, the spent fuel is a liquid industrial by-product. If sent for disposal, the fuel is D001 and D018 hazardous waste.	No	
If the total amount of ALL oils (both discarded materials and products including fuels) on site meets or exceeds1,320 gallons, refer to Chapter 4 on Product Storage and Emergency Planning Requirements.				
Maintenance Related Waste				
Antifreeze	Liquid industrial by-product If non-hazardous or hazardous waste for lead that is recommended to be managed as universal waste.	Code not applicable when being recycled as liquid industrial by-product/universal waste. May be D008 hazardous waste if sent for disposal.	Antifreeze	
Batteries-Lead Acid	Hazardous waste that is recommended to be reclaimed or managed as universal waste.	Code not applicable when reclaimed or managed as universal waste	Universal Waste	
Batteries-Dry cell (e.g., nickel-cadmium)	Hazardous waste that is recommended to be handled as universal waste.	Code not applicable when handled as universal waste. Code will vary with type of battery if handled as hazardous waste	Universal Waste	
Laboratory Wastes	Varies, may be hazardous due to flashpoint or type of solvent used.	D001 or F listing depending on solvents used for quality control testing		

COMMON WASTES AT CRUSHER FACILITIES				
Waste Stream	**Usual Type of Waste**	**Disposal or Recycle Recommendation & Waste Codes for Shipment**	**Additional information available?**	**How much is generated at your site?**
Light Bulbs	Hazardous waste that is recommended to be handled as universal waste.	Code not applicable when handled as universal waste; code varies with type of bulb if handled as hazardous waste	Electric Lamp and Spent Ballast Universal Waste	
Painting Wastes	Paints and painting equipment cleaning solvents may be hazardous waste or liquid industrial by-product depending on product formulation	Varies: Some solvents used to clean painting equipment: F003-F005 Paints: if oil based, may be D001, other codes vary depending on formulation and may be liquid industrial by-product	See Chapter 2, section on painting wastes in the Michigan Guide to Environmental, Health and Safety Regulations	
Part Washer Solvents	May be hazardous waste or liquid industrial by-product depending on type of solvent and flashpoint	Recommend recycling. Codes vary depending on used solvent and concentration. If solvent- based product has flashpoint below 140 degrees Fahrenheit: D001; Listed waste codes (F003, F005, F001, F002, D039, D040) may apply depending on type of solvent used. Water-based cleansers are generally a liquid industrial by-product unless contaminated with other materials.	See Chapter 2, section on Spent Parts Washers and Other Solvents in the Michigan Guide to Environmental, Health and Safety Regulations	
Shop Rags	May be hazardous waste due to spontaneous combustion. If not hazardous and no liquids present in container, then solid waste	Recommend laundering for reuse to meet hazardous waste recycling exemption. If disposed, codes vary: D001 if spontaneously combustible or possible listed waste depending on what solvent used with the rag.	See Chapter 2, section on Shop Towels and Other Textiles in the Michigan Guide to Environmental, Health and Safety Regulations	
Batteries-Dry cell (e.g., nickel-cadmium)	Hazardous waste that is recommended to be handled as universal waste.	Code not applicable when handled as universal waste. Code will vary with type of battery if handled as hazardous waste	Universal Waste	
Laboratory Wastes	Varies, may be hazardous due to flashpoint or type of solvent used.	D001 or F listing depending on solvents used for quality control testing		

COMMON WASTES AT CRUSHER FACILITIES				
Waste Stream	**Usual Type of Waste**	**Disposal or Recycle Recommendation & Waste Codes for Shipment**	**Additional information available?**	**How much is generated at your site?**
Crusher Byproducts				
Wash Waters from Stone and Sand Processing	Liquid industrial by-product if not discharged on site under Water Resource Division authorization as described in Chapter 1 on Water Quality Requirements	Codes not applicable	No	
Tree, Stumps, other Land Clearing Debris	Exempt from solid waste regulations when handled as an inert material as defined in Part 115, Section 11504(2)	Codes not applicable	Solid Waste Common Violations	
Concrete and Asphalt	Exempt from solid waste regulation when managed as specified in Part 115, Section 11504(2)(g) and otherwise a solid waste	Codes not applicable. If bringing materials on site for recycling under exemption and verified uncontaminated. Do you know where it came from? What tests were done to ensure it is not hazardous waste? Do you receive copies of waste determinations and test results? Have you done visual inspections of loads? Is it stained, have an odor, or have paint on it?	Solid Waste Common Violations	
Other				
Scrap Tires	Exempt from solid waste regulation when managed as specified in Scrap Tire Designation of Inertness and otherwise a solid waste	Whole tires are banned from landfill disposal. Codes not applicable	Scrap Tire Designation of Inertness and Scrap Tire Common Violations	
Packaging Materials (Cardboard, Wood Pallets.)	Exempt from solid waste regulation when recycled as specified in exemption and statute, otherwise a solid waste	Recycling recommended Codes not applicable	Part 115 Scrap Wood Recycling Exemption and Locations	
Break Room Waste (Food, etc.)	Solid waste	Codes not applicable	No	

Step 2: Notify the OWMRP about your regulated waste activities.

Use the information you gathered during Step 1 and notify OWMRP about your current regulated waste activities. A site identification number is required for transport of hazardous waste and liquid industrial by-product. It is also required for facilities generating regulated volumes of hazardous waste and facilities receiving liquid industrial by-product from other sites. This number is site specific and does not move with the facility to new locations. Do this before it is time to have the waste shipped off-site. If you know you have already notified and the information is current, skip to Step 3.

If you are unsure if your facility previously notified the OWMRP or whether the waste information on file for your facility is current, go to the **Waste Data System** on the DEQ Web site (**www.deq.state.mi.us/wdspi/**). After selecting "Advance Search" on the top bar, enter your street number and zip (postal) code in those fields and hit "Run Query." For assistance searching, call the Environmental Assistance Center at 800-662-9278.

If you need to notify the DEQ of your of your liquid industrial by-product or hazardous waste activities to and obtain a site identification number or update information on file, submit the *Site Identification Form EQP 5150*. Follow the instructions and links to the form EQP5150 and online. When applying for a new number, or if you have had an owner/operator change or moved locations, *there is an application fee*. If you need help determining whether you need a site identification number or when completing the EQP 5150 form, contact the Environmental Assistance Center at 800-662-9278.

> **Helpful Hint**
>
> For first time applications, select initial notification in Box I. For update of information, select subsequent notification in Box I. You can request a prepopulated form for updating your information by calling the Environmental Assistance Center at 800-662-9278.

Potential Problems

The following fields are commonly **not** filled out correctly on the EQP 5150 form. The application will not be processed without all the required information.

Box IV – Inappropriate or missing NAICS code. More detailed descriptions of NAICS codes can be found at **www.naics.com**. Some common aggregate industry NAICS codes include:

212312	Crushed and Broken Limestone Mining and Quarrying
212313	Crushed and Broken Granite Mining and Quarrying
212319	Other Crushed and Broken Stone Mining and Quarrying
212321	Construction Sand and Gravel Mining
212322	Industrial Sand Mining

Box V – Missing or wrong Federal Identification Number (e.g., your federal tax number) and missing Number of Employees information.

Box IX – Failing to list information for both the site owner and operator along with missing or incomplete month/date/year information for when they became the site owner and operator.

Box X – Failing to select ALL types of regulated waste activities that are applicable to the work site and facility.

Liquid industrial by-product is often generated from rock crushing and maintenance activities and some facilities may generate hazardous waste from equipment or building maintenance activities. When hazardous waste is generated, the crushing facility needs to determine the facility's generator status based on how much hazardous waste is generated in a calendar month.

Crushing operations normally notify as:

- **Conditionally exempt small quantity generator** (CESQG) which means that less than 220 pounds of all hazardous waste is generated on site in a calendar month, and they never store more than 2,200 pounds of hazardous waste.
- **Small quantity generator** (SQG) which means between 200 and less than 2,200 pounds of all hazardous waste is generated on site in a calendar month, and they never store more than 13,200 pounds of hazardous waste.
- Liquid industrial by-product transporters if transporting their own liquid industrial by-product to another location for recycling or disposal.

Step 3: Determine if your wastes are being properly managed, recycled, or disposed on-site.

The environmental requirements for waste depend on the type of waste you have and where it ultimately will be disposed or recycled. To help you make a thorough assessment of how waste is managed at your job sites, go through the checklist in Table 3-2 and indicate "yes" or "no" to these basic questions. If you find yourself answering "no" to the question, it could be an indication your facility could use a better method or management plan to properly handle your waste.

Table 3-2: Audit Checklist on Current Facility Waste Handling Methods

	QUESTION	Yes	No	Problem Corrected?
Waste Type: Wastewater or wash water, septage				
1	If disposing of waste or wash water on site, is the facility meeting the Water Resource Division requirements in Chapter 2 of this guide?			
2	If waste or wash water is being shipped off-site for recycling or disposal, are containers kept closed and protected from weather, fire, physical damage, vandals? Are containers labeled so workers and emergency responders know what is in them? Are containers compatible with waste and in good condition?			
3	If porta-johns are used on site or if septic tanks are installed at			

	QUESTION	Yes	No	Problem Corrected?
	permanent locations, is the pumping company licensed by the Office of Drinking Water and Municipal Assistance, Septage Program?			
Waste Type: Used Oil				
4	Are used oils being burned at the site for space heating, service water heating, or indirect heating, and are you meeting the following conditions? • Does the used oil burner have a rated heat input capacity 500,000 or less BTU per hour? If not, does the facility have an AQD permit for it? • Is the oil you use only generated at the same geographical site where the burner is located? If not, does the facility have an AQD permit for the burner? • Are you burning anything else besides used oil? • Has the facility obtained any local permits required by fire officials, zoning, etc. for the oil burner? • Are you required to meet any insurance company restrictions? If you answered "yes" to any of these questions, you may need to discuss your used oil burning activities with your AQD district office. See the Used Oil Burning guidance for more details.			
5	If the facility is bringing used oil from its other sites to a central location for either burning or to consolidate it for shipping it to a recycler, has the facility notified the OWMRP that it is operating a used oil collection or aggregation point and that it is a liquid industrial by-products designated facility? See the Used Oil Collection Centers and Aggregation Points guidance for more details.			
6	Are waste oil storage containers labeled "Used Oil;" kept closed; and protected from weather, fire, physical damage, and vandals? See the Used Oil Overview guidance for more details on storage. • If the oil flashpoint is below 200 degrees Fahrenheit, does it meet the storage conditions listed in Chapter 4 of this guide on storage tanks? If there are more than 1,320 gallons of all oils on site, is the facility in compliance with the federal Spill Prevention Control and Countermeasures (SPCC) Requirements? See Chapter 4 on Product Storage and Emergency Planning.			
Open Burning or Burying Waste				
7	Are any other wastes being burned without an AQD permit? It is illegal to open burn waste from a business.			
8	Is land clearing debris being buried on-site or at another location approved by the landowner? Does it meet the following conditions? • Amount buried is no more than 1 acre in size and not more than 20 feet in depth. • Burial is not in a floodplain or wetland without the Water Resource Division approval. • Buried land clearing debris is placed at least 3 feet above groundwater table as observed at the time of placement. • Burial does not create a nuisance. • Burial does not violate other laws or local ordinances.			

	QUESTION	Yes	No	Problem Corrected?
9	Is any concrete or asphalt being reprocessed or disposed on site? • Is it materially contaminated by staining, covered in part with lead paint, or is it a hazardous waste? If so, you cannot accept it from others, use it as fill, or bury it. • If used on-site as fill, does it have exposed rebar? If so, burial is not allowed. • Does it contain other construction and demolition waste? If so, acceptance and burial are not allowed. • Have you received a permit from the Water Resource Division if you want to put it in a floodplain or wetland area?			
10	Are all liquid industrial by-product containers kept closed and labeled so you can tell what is in the container? Are containers compatible with waste and in good condition? Are the containers protected from weather, fire, physical damage, and vandals?			
11	Are all hazardous waste containers properly labeled and managed on site? Specific requirements will depend on your hazardous waste generator status. For more information, see the DEQ's CESQG and SQG guidance documents.			
12	If your crushing activity is aboveground, are waste rags used with solvents put in metal waste baskets and properly disposed at least once a day at the end of shift? If so, discuss this requirement with MIOSHA Consultation Education and Training Division at (517) 322-1809.			
13	Are there any scrap tires stored on site in compliance with any local restrictions? If 500 or more scrap tires are on site, is the site registered with OWMRP and meeting the scrap tire storage requirements? Questions can be directed to the OWMRP scrap tire inspector for your district.			
14	Is solid waste stored in containers and not on the ground? Are you meeting your solid waste hauler and disposal company's requirements? Are any local requirements being met including privacy fencing?			

Step 4: Determine if off-site shipments of hazardous waste and liquid industrial by-products are being properly managed for recycling or disposal.

Specific requirements for your facility will depend on who is doing the waste hauling and what materials are slated to be disposed. These options will be discussed in the following sections. The specific shipping labels and other management requirements to prepare materials for shipment will depend on whether the waste is hazardous waste or not and the hazardous waste generator status of the facility. To learn more about the CESQG and SQG requirements, see the OWMRP's guidance documents on the Web.

Helpful Hint

Check with your recycling and disposal company to see what services they offer for exempted hazardous waste. If you are a CESQG and have hazardous wastes that do not contain liquids, check to see if your solid waste disposal company and waste hauler will accept the waste. Often they have special waste programs to service your needs. Even if the waste regulations allow for landfill disposal, often landfills will divert the waste to environmentally preferred management methods.

Hiring Commercial Transporters to Haul Liquid Industrial By-product or Hazardous Waste

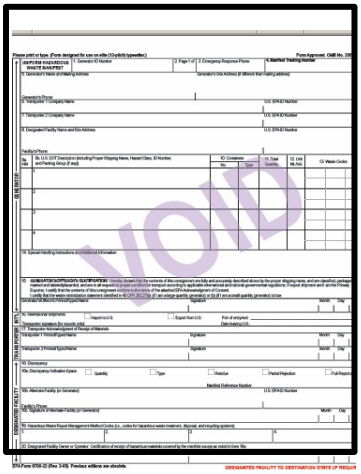
All liquid industrial by-product and hazardous waste transport companies must be permitted and registered with the OWMRP. Select a transport company with the appropriate waste permit and registration based on the type of waste hauled. If the waste is:

- Non-hazardous liquid — hire a permitted and registered liquid industrial by-products transporter.
- Hazardous wastes generated at a CESQG — hire a permitted and registered liquid industrial by-products or hazardous waste transporter.
- Hazardous and you generate more than 220 pounds of hazardous waste in a calendar month — hire a permitted and registered hazardous waste transporter.

Use the **Waste Data System** (WDS) to locate permitted and registered transporters in your area. The OWMRP uses the WDS to track program activities at facilities related to solid waste, scrap tire, hazardous waste, and liquid industrial by-product. WDS can provide you with:

- Information on ownership and operation of a company.
- The status of any required permits, licenses, or registrations.
- The compliance history of a company.
- A list of permitted and registered transporters.
- Manifest records for shipments of hazardous waste.

For instructions to locate a permitted and registered transporter, go to www.michigan.gov/deqwaste, select the “Transporters” tab on the left side of the page, then select “Participating Transporters.”



As a waste generator, you are also required to meet the manifest requirements when shipping hazardous waste from a small quantity or large quantity generators of hazardous waste. There are similar shipping documentation requirements for shipping liquid industrial by-product. Most commercial transporters and disposal companies can assist with completion of the required national “Uniform Hazardous Waste Manifest” or “shipping document” required for the transport of these materials. Generators must retain records of the pick-up documentation. Generators must also track getting copies of the manifest back from the receiving hazardous waste treatment,

storage, or disposal facility and the confirmation of delivery received back from any designated facilities accepting liquid industrial by-product. Consider using the optional DEQ Manifest Tracking Log to track shipments of hazardous waste and by-product. For additional details on liquid industrial by-product shipping documents, please see the Part 121 Liquid Industrial By-product Frequently Asked Questions (**www.michigan.gov/documents/deq/deq-oea-faq-Waste-Part121Changes_515763_7.pdf**). For additional details on use of the manifest, please see the manifest instructions.

Hauling Your Own Generated Liquid Industrial By-product (includes used oil) and Hazardous Waste When the Facility is a CESQG

Generators can transport their own liquid industrial by-product and CESQG hazardous waste liquids if desired, The shipping document requirements of amended Part 121 must be met and spill insurance is maintained. No permit and registration to transport is required if the waste was

generated from equipment in the generator has an ownership interest, If self-transporting, the generator also has to notify as a transporter of liquid industrial by-product using the Site Identification Form. There are no specific documentation requirements for transporting solid waste or CESQG hazardous wastes that are solid.

Shipping document for the transport of liquid industrial by-product and/or CESQG hazardous waste liquids, generators may be a manifest, bill of lading, invoice, log or other document that includes all of the following information and the required generator certification:

- The name and address of the generator
- The name of the transporter
- The type and volume of liquid industrial by-product in the shipment
- The date the liquid industrial by-product was shipped off-site from the generator
- The name, address, and Site Identification (Site ID) number of the designated facility

The March 2016 amendment of Part 121 eliminated the requirement to use a manifest for shipping liquid industrial by-product and the eliminated the use of liquid industrial waste codes that accompanied the manifest process. For more information about the shipping document certification and distribution process, please see the Part 121 Liquid Industrial By-product Frequently Asked Questions.

When using a manifest as the shipping document for a site that does not have a Site ID, enter the following in Item 1 for the generator Site ID:

- Enter “MICESQG” if the shipment includes only CESQG liquid hazardous waste
- Enter “MILIB” if the shipment include only liquid industrial by-product
- Enter “MICESQGLIB” if the shipment includes both CESQG liquid hazardous waste and liquid industrial by-product.

> Consider using the DEQ shipping document/manifest tracking log to track your shipments and verify compliance.

Step 5: Determine if solid waste is properly handled and shipped off site for disposal or recycling.

Local ordinances may require fencing around the waste dumpsters. Do not store solid waste directly on the ground. Use closed containers to control blowing of waste, and to prevent odors and the presence of rodents.

> ***NOTE:*** *Do not put banned waste in the trash that might be headed for a landfill. Banned waste includes certain types of beverage containers, yard clippings, liquid waste, lead acid batteries, whole scrap tires, etc. Contact the commercial solid waste hauler, landfill, transfer facility, or incinerator operator for their requirements.*

Your facility has two options for hauling trash (solid waste) off site:

1. Haul your own waste to a permitted transfer station, licensed landfill, or incinerator. As you transport your trash, use a cover to prevent waste from blowing out of your transport vehicle. Additionally, you should not have any liquids dripping out of bags or containers.
2. Hire a waste hauler. The OWMRP does not license solid waste haulers. Check the yellow pages or contact a landfill or incinerator for waste hauling companies that service your area.

Step 6: Determine if scrap tires are properly handled and shipped off site for disposal or recycling.

Contact your local fire department or local health department about local storage requirements. Ideally, avoid collecting 500 or more used tires on your property. Those with 500 or more used tires must register with the OWMRP as a collection site. Whole scrap tires are prohibited from disposal in landfills.

There are several disposal options available depending on the number of scrap tires you have. You can:

- Haul 10 or less of your own scrap tires at a time to a registered collection site or disposal area licensed under Part 115. Lists of registered companies are available online at www.michigan.gov/scraptires.
- Ask if your solid waste hauler will accept them.
- Hire a registered scrap tire hauler. The registered scrap hauler must give you a Scrap Tire Transportation Record form (EQP 5128). You are required to keep that at least three years from the shipment date. Lists of scrap tire haulers are on the above Web site

PART 4

Product Storage and Emergency Planning Requirements

In This Part:

- **Chemical Storage**
- **Handling Oil Products Including Vehicle and Heating Fuel Storage**
- **Storage Tanks**
- **Where to Go for More Assistance**

PART 4: Product Storage and Emergency Planning Requirements

Chemical Storage

You must meet certain requirements if you have any of the chemicals listed in the Department of Environmental Quality's (DEQ's) Water Division's Part 5 rules of Part 31 of Act 451 (e.g., solvents, ethylene glycol used in antifreeze, sulfuric acid in lead acid batteries, etc.). These requirements apply if you store these chemicals outside in an amount equal to or greater than 220 pounds, or inside a building in amounts equal to or greater than 2,200 pounds. The Water Bureau requirements include preparing a Pollution Prevention Incident Plan (PIPP) along with surveillance, storage requirements, secondary containment, release reporting, and notifications to local agencies and the DEQ when a company falls under these chemical storage criteria. A PIPP documents information such as what chemicals are on site and how the company will respond to releases of these chemicals. Go to the Web at **www.michigan.gov/deqwater** and select "Emergency Response to Releases to Water" from the left drop-down menu for a checklist of what is in a PIPP, a list of regulated chemicals, and other information along with a list of Water Bureau staff contacts.

Handling Oil Products Including Vehicle and Heating Fuel Storage

There are several agencies that oversee the environmental regulations pertaining to the storage of oil products and heating fuel storage. A federal Spill Pollution Control and Countermeasure (SPCC) Plan that addresses storage requirements including secondary containment and emergency response measures, is required when a company's site has 1,320 gallons or more of storage capacity for all oil products and wastes. The definition of oil products includes lubricating oils, motor oils, hydraulic oils, diesel fuel, and gasoline. If you would like more information on the proposed changes to the SPCC, go to the U.S. Environmental Protection Agency's (U.S. EPA's) Web site at **www.epa.gov/oilspill** or contact a U.S. EPA Region 5 staff person at 312-886-0185.

Storage Tanks

Many crushers utilize aboveground storage tanks (ASTs), liquefied petroleum gas (LPG) tanks, LPG containers, and other storage containers in their day-to-day operations. The storage and handling of products such as gasoline, diesel fuel, fuel oils, and other liquid chemicals can have environmental and safety consequences if the tanks are not properly installed and maintained. Also, the product transfer operations must be properly managed to minimize the possibility of spillage, releases, and possible fire hazards. Storage tank regulations were designed to promote the safe storage and handling of flammable and combustible liquids such as petroleum products and other hazardous substances. The following requirements are designed to promote safer storage and handling practices at a company, and result in overall economic benefits to crushing operations and consumers.

An Overview of the Storage Tank Program

The Storage Tank Division of the Bureau of Fire Services in the Department of Licensing and Regulatory affairs oversees the storage and use of the flammable and combustible liquids (FL/CL) and regulates ASTs. It also oversees the regulations for LPG systems in Michigan. Proper certifications for these tank units must be in place prior to conducting a fueling or storage activity. Companies that *supply* flammable or combustible liquids with flash points less than 200 degrees Fahrenheit *and* that have an individual tank storage capacity of more than 1,100 gallons must obtain a permit from the Storage Tank Program.

The tank systems, storage tanks, portable tanks, generator tanks, or containers must have their engineering and layout plan reviewed and certified and the tanks inspected. In order for the permit to be granted, a fee must also be paid. Additionally, any FL/CL AST system greater than 660 gallons and containers 60 gallons or more in capacity must meet secondary containment requirements. More information on this requirement is available on the Web at **www.michigan.gov/deqland**. Select “Underground Storage Tanks” from the left drop-down menu.

Basic Requirements for FL/CL Aboveground Storage Tank Systems

- Have spill containment of 110 percent for the largest container at the company (which is the volume of the container plus 10 percent in case of precipitation).
- Meet isolation distances from property lines and buildings based on the size of the storage system.
- Protect storage area from trespassers.
- Keep area free from weeds, combustible materials, and other debris.

Liquid Petroleum Gas (LPG) Tanks

Companies with any of the following are also regulated by the WHMD STU program:

- Any flammable compressed gas or LPG container filling location.
- A company that supplies flammable compressed gas or any LPG that has a tank with a water capacity of more than 2,000 gallons or two or more tanks with an aggregate water capacity of more than 4,000 gallons.

The LPG systems listed above require an installation application, must pay annual fees, have field inspections, and be certified. Any LPG tank in connection with a building heating system or its equipment is also regulated by the Mechanical Division of the Michigan Department of Licensing and Regulatory Affairs (LARA) under the State Construction Code Act. For more information about these separate requirements, go to the LARA Web site at **www.michigan.gov/lara**.

Basic Requirements for LPG Tank System or Containers

LPG storage is defined as any vessel containing a material having a vapor pressure not exceeding that allowed for commercial propane, which is composed predominately of the following hydrocarbons, either by themselves or as mixtures, and is used to store or transport this mixture:

- Propane
- Propylene
- Butane (normal butane or isobutane)
- Butylene

In addition, LPG tank systems or containers must:

- Meet isolation distances from property lines and buildings based on the size of the storage system.
- Have a protected storage area from trespassers.
- Have an area free from weeds, combustible materials, and other debris.

Transportation of LPG, Similar Hydrocarbons, and Mixtures

The Michigan State Police Traffic Safety Division oversees the transportation of LPG and other similar hydrocarbons in Michigan. To learn more about the transportation regulations, please visit the Michigan State Police Web site at **www.michigan.gov/msp**. Select "Specialized Divisions," then "Traffic Safety Division," and then "Hazardous Materials" from the left-hand menu. Mobile fueling tanks are not regulated by the WHMD if the tank meets the transportation requirements, is insured, and has a current vehicle license (i.e., sticker).

Finally, in association with the transportation requirements for fuel sources, it is also important to contact your local fire authority and the LARA Michigan Occupational Safety and Health Administration (MIOSHA) program at 517-322-1809 regarding their requirements for flammable and combustible liquids used above ground. Their Web site is **www.michigan.gov/miosha**.

Where to Go for More Assistance

As you go through this guide and have additional questions or concerns about the application of the regulations to your crushing facility, please feel free to call the Environmental Assistance Center at 800-662-9278.

The DEQ's Environmental Assistance Program provides:

- ***FREE*** consultations to business and industry.
- Answers to your questions.
- The resources to help you come into and maintain compliance with the environmental regulations.

When you call the toll-free telephone number, tell the operator you need help with one or more of the following environmental topics, and a staff person who specializes in that area will be more than happy to answer your questions.

- Air quality
- Water quality
- Waste management
- Aboveground storage tank management

PART 5

Land Development and Lake/Pond Creation Requirements

In This Part:

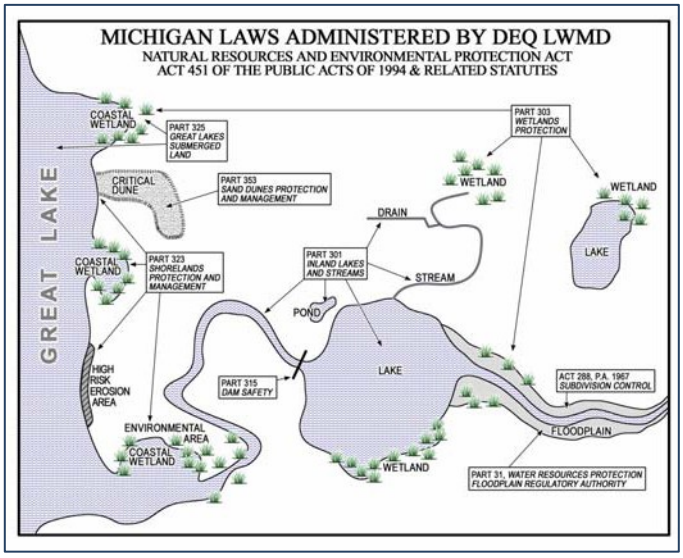
- **Overview of Land and Water Interface Permit Programs**

PART 5: LAND DEVELOPMENT AND LAKE/POND CREATION REQUIREMENTS

Significant changes to the landscape and the creation of lakes and ponds are a common result of rock crushing facilities and their associated mining operations. Frequently, regulated impacts to natural features such as wetlands, floodplains, lakes, and streams, occur with the development of land for mining or rock crushing facilities. With the exception of designated sand dune areas along the Lake Michigan shoreline, non-metallic mining is not specifically regulated as an activity. Yet the creation of water bodies, and impacts to wetlands, floodplains, lakes, streams, and sand dunes that occur as a result of rock crushing and mining operations may require authorization from Michigan Department of Environmental Quality (DEQ).

Overview of Land and Water Interface Permit Programs

The DEQ, Water Resources Division (WRD), administers several parts of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451), that regulate activities that are on, within, or involve any of the following land/water features:



- A 100-year floodplain or floodway
- A stream, river, ditch, drain, channel, or canal
- An inland lake
- Land change activities that result in the creation or alteration of a canal, ditch, lagoon, pond, or lake within 500 feet of an existing inland lake or stream
- A wetland
- A dam
- A Great Lake
- High-risk erosion areas, critical dune areas, and environmental areas in coastal counties

The U.S. Army Corps of Engineers (U.S. ACE) regulates some of the above activities at the federal level if they occur within Great Lakes coastal counties, as well. To simplify the permit process for Michigan's residents, the WRD has developed a "MDEQ/USACE - Joint Permit Application" process with the USACE to jointly regulate activities at or near the land/water interface.

Part 301 of Act 451: Inland Lakes and Streams

Open pit mining that occurs below the groundwater table frequently results in the creation of a lake or pond. Creation of water bodies are regulated under Part 301, Inland Lakes and Streams, of Act 451. Other land development activities in lakes or streams that may be associated with rock crushing operations may also be regulated under Part 301. For example, road crossings of streams, stormwater outfalls, stream relocations or enclosures, and ditches connected to a lake or stream created as part of rock processing facilities may also require a Part 301 permit.

Under Part 301, a permit is required for the following activities below the ordinary high-water mark of inland lakes and streams:

- Dredge or fill bottomlands.
- Construct, enlarge, extend, remove, or place a structure on bottomland.
- Erect, maintain, or operate a marina.
- Create, enlarge, or diminish an inland lake or stream.
- Structurally interfere with the natural flow of an inland lake or stream.
- Construct, dredge, commence, extend, or enlarge an artificial canal, ditch, lagoon, pond, lake, or similar waterway through which the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high- water mark of an existing inland lake or stream.
- Connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or wetland with an existing inland lake or stream for navigation or any other purpose.

Under Part 301, a lake is defined as a body of surface water greater than 5 acres in size, and a pond any water body smaller than 5 acres. If dewatering of the mining pit occurs during operations, a permit is still required for creation or alteration of a lake or pond even if it is completed in dry conditions.

As indicated in Part 2, a National Pollution Discharge Elimination System (NPDES) permit may also be required for a wastewater discharge from a dewatering operation. Construction of an outfall pipe in a lake or stream for the dewatering operation may require a permit under Part 301, in addition to a NPDES permit.

Part 303 of Act 451: Wetlands Protection

Regulated wetlands are defined in Part 303 and associated administrative rules. Part 303 defines a wetland as *"land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh."* Part 303 is intended to protect the functions and values wetlands provide such as flood and storm control, wildlife habitat, clean subsurface water resources, pollution treatment, erosion control, nutrient cycling, and economic and educational services. The following activities are prohibited in wetlands unless a Part 303 permit has been obtained from the DEQ:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain water from a wetland.Development of a property for mining or rock crushing operations that may involve wetland filling, draining, or excavating may require a permit under Part 303.

The drainage of surface or sub-surface water from wetlands is often associated with dewatering of open pit mines. Dewatering operations frequently result in a drawdown of local groundwater tables. Wetlands located within the area of influence of a groundwater drawdown could be incidentally drained by the dewatering operations. This influence of wetland hydrology by sub-surface drawdown of groundwater may require a permit under Part 303.

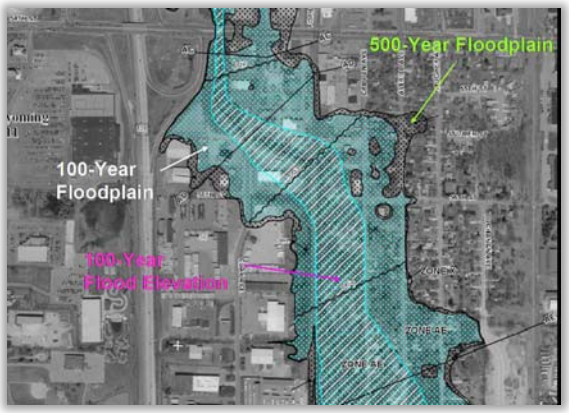
Wetlands Identifications

While wetland inventory maps and other online tools are helpful in determining the potential for wetlands, an on-site investigation is required to actually identify wetlands on a property. The DEQ's WRD, Wetland Identification Program (WIP), is a fee-based program that offers two levels of service to identify wetland and upland areas on a property. For a Level 2 Identification, a Wetlands Specialist conducts an on-site review to determine the presence or absence of wetlands, and physically marks the wetland boundaries in the field. A Wetlands Specialist can also provide a Level 3 Identification, which is an on-site review to confirm specific wetland boundaries marked by a wetland consultant. Both levels of service include a letter and map from the DEQ summarizing the findings, which is guaranteed for a period of three years. Individuals interested in WIP services must submit a WIP application to the WRD, Wetlands, Lakes and Streams Unit. The WIP application and a fee calculator can be downloaded at **www.michigan.gov/wetlands** or you may call 517-284-5543.

Part 31 of Act 451: Water Resources Protection, Floodplain Regulatory Authority

A Part 31 permit is required for any occupation, construction, filling, or grade change that occurs within the 100-year floodplain of a river, stream, drain, or lake. Bridges, culverts, access roads, and stockpiles are considered an occupation of the floodplain. Stockpiling material, whether temporarily or permanently, within the floodplain is regulated under Part 31.

These activities are regulated under Part 31 with the purpose of ensuring that the channels and floodways are kept clear and uninhabited, and that filling and grade changes do not result in harmful increases in flood stages or stage characteristics of the water body. The floodway includes the stream channel and that portion of the floodplain that is required to convey the flow of floodwater. Any grade changes, filling, or stockpiling of material within the floodway must be placed so that it will not result in harmful increases in flood stages to obtain a permit under Part 31. Permanent grade changes, filling, or stockpiles of material that are placed outside of the floodway portion of the floodplain must be properly



compensated by removing material from the site to prevent harmful changes in flood stages. This can be accomplished by excavating an equivalent volume of material from the floodplain at similar elevations to the fill that has been placed on the site.

Under Part 31, the 100-year floodplain is defined by the 100-year flood elevation. A 100-year flood has a one (1) percent chance of occurring or being exceeded in any given year. The 100-year floodplain elevation for a given location can be obtained from Flood Rate Insurance Maps produced by the Federal Emergency Management Agency at **www.msc.fema.gov**.

Section 404 of the Federal Clean Water Act of 1977 and Section 10 of the Rivers and Harbors Act of 1899

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States, including inland lakes and streams, the Great Lakes, and wetlands, without a permit. Michigan was the first of only two states currently authorized to administer the permit program for the federal government through state law. In most areas of the state, issuance of a permit by DEQ's WRD in accordance with the CWA requirements also authorizes a project under Section 404, and no separate federal permit is required. However, since Section 10 does not provide for similar transfer to states, the U.S. Army Corps of Engineers (USACE) retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and their adjacent wetlands. Therefore, authorization is also required from the USACE for projects in traditionally navigable waters including the Great Lakes, connecting channels, other waters connected to the Great Lakes where navigational conditions are maintained, and wetlands directly adjacent to these waters. Submittal of a single, completed DEQ/USACE - Joint Permit Application to the WRD ensures that Section 404 permit applications will be processed by all appropriate agencies, including projects that require both DEQ and USACE authorization.

Information on the DEQ/USACE – Joint Permit Application may be found at **www.michigan.gov/jointpermit.**

APPENDIX A

Completing the Air Quality General Permit to Install Application

APPENDIX A

Completing the Air Quality General Permit to Install Application

The *"General Permit to Install Application for Nonmetallic Mineral Crushing Facilities"* consists of three forms: the General Information form (EQP5727), the Process Information form (EQP5756), and the Relocation Notice form (EQP5757). These can be downloaded from the Air Quality Division (AQD) Web page at **www.deq.state.mi.us/aps.** Select "General Permits – Application Forms and Instructions" or contact the AQD Permit Section at 517-284-6802.

The General Information Form (EQP 5727)

DEQ

Michigan Department Of Environmental Quality - Air Quality Division
GENERAL PERMIT TO INSTALL APPLICATION
GENERAL INFORMATION

FOR DEQ USE ONLY
PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a source, process or process equipment under the terms and conditions of a general permit to install pursuant to Rule 201a. Prepare this form together with one or more of the forms identified in Item 19, according to type of source, process or process equipment, which will be installed and operated. Please submit all information, including forms, in duplicate. **NOTE:** This general permit does not apply to a source, process, or process equipment that is included in a Permit to Install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgment.

1. FACILITY CODES STATE REGISTRATION NUMBER (SRN)	STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE	
2. APPLICANT NAME *(Business license name of the corporation, partnership, individual or government agency that owns the facility)*		
3. APPLICANT MAILING ADDRESS *(Street Address or P.O. Box Number)*		
4. CITY	5. STATE	6. ZIP CODE
7. NAME OF AUTHORIZED COMPANY MEMBER		
8. TITLE *(person identified in Item 7)*		9. TELEPHONE NO. *(person identified in Item 7)* ( ) -
10. CONTACT PERSON *(technical point of contact, if different than name in Item 7)*		11. TELEPHONE NO. *(contact person)* ( ) -
12. EQUIPMENT OR PROCESS LOCATION *(complete Items 12 - 15 if different than mailing address)*		
13. CITY	14. ZIP CODE	15. COUNTY
16. EQUIPMENT IS *(check one)* New Existing	17. PRIOR AIR PERMIT NO. *(existing equipment only)*	

18. EQUIPMENT OR PROCESS INSTALLATION TIMETABLE *(enter dates in Items 18a - 18d for those which apply)*		
FOR NEW EQUIPMENT (PROCESS INSTALLATION OR CONSTRUCTION)	18a. START DATE	18b. COMPLETION DATE
FOR EXISTING EQUIPMENT (PROCESS MODIFICATION OR RELOCATION)	18c. START DATE	18d. COMPLETION DATE

19. THE FOLLOWING COMPLETED FORMS ARE ATTACHED TO AND MADE A PART OF THIS PERMIT APPLICATION *(check all that apply)*	
TYPE OF FORM	NUMBER ATTACHED
EQP [ ][ ][ ][ ] _____ PROCESS INFORMATION *(complete one form for each process - insert form number and type of process in spaces provided)*	
EQP5729 - ADDITIONAL INFORMATION	

Applicant Certification: I certify, under penalty of law, that this permit application and the attachments identified in Item 19 were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

20. SIGNATURE *(person identified in Item 7)*	21. DATE

Submit this completed application and the attachments identified in Item 19 to:
PERMIT SECTION, AIR QUALITY DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. BOX 30260, LANSING, MI 48909-7760

DEQ USE ONLY - DO NOT WRITE BELOW	
DATE APPLICATION COMPLETE	DATE OF DETERMINATION OF NON-APPLICABILITY
DATE GENERAL PERMIT TO INSTALL GRANTED	SIGNATURE
DATE GENERAL PERMIT TO INSTALL REVOKED	SIGNATURE

EQP5727 (Revised 9/2000)

Facility Codes - Two Facility Codes are required. The State Registration Number (SRN) is an alphanumeric identifier assigned to a stationary source by the AQD. The SRN is unique to the physical location of a source (except for portable equipment) and is comprised of a letter followed by four digits (i.e., A1497). The SRN for a facility can be found on the Michigan Air Emissions Reporting (MAERS) forms that are submitted annually to the AQD or on a previously issued PTI. If the application is for a new facility or one that has not had previous business with the AQD an SRN may not exist. The AQD will assign an SRN during the review of the permit application. If you are a new owner of an existing company, it is likely the source already has an SRN. To verify the existence of an SRN for your company, contact your local AQD district office (*see Appendix E*).

The North American Industry Classification System (NAICS) provides a numeric code that identifies an industry. The NAICS, which has replaced the Standard Industrial Classification (SIC) system, was developed jointly by the USA, Canada and Mexico to provide new comparability in statistics about business activity across North America. Information about NAICS and links to the NAICS codes are available at the following sites: **www.census.gov/epcd/www/naics.html** or **www.epa.gov/ttn/chief/codes/index.html#naics**. A six digit code is preferred for a more exact description, however five digits are acceptable. Table A-1 lists some common NAICS codes used for the crushing industry:

Table A-1: Common NAICS Codes for the Crushing Industry

NAICS Code	INDUSTRY DESCRIPTION
212311	**Dimension Stone Mining and Quarrying**
212312	**Crushed and Broken Limestone Mining and Quarrying**
212313	**Crushed and Broken Granite Mining and Quarrying**
212319	**Other Crushed and Broken Stone Mining and Quarrying**
212321	**Construction Sand and Gravel Mining**
212322	**Industrial Sand Mining**
212391	**Potash, Soda, and Borate Mineral Mining**
212392	**Phosphate Rock Mining**
212393	**Other Chemical and Fertilizer Mineral Mining**
212399	**All Other Nonmetallic Mineral Mining**

To review the NAICS descriptions refer to the U.S. Census Bureau's online NAICS reference guide at **www.census.gov/epcd/naics02/N02TOS87.HTM**.

Applicant Name – The applicant should be the entity (e.g., corporation, partnership, individual owner, or government agency) that actually owns and/or is responsible for the operation of the process or process equipment. If the crushing equipment is leased from another company, you must first establish who has the legal responsibility to complete this application to meet the state of Michigan's air permitting requirement. In most cases, the operator of the equipment bears the responsibility for applying for state environmental permits; however, the leasing agent of the equipment may already have applied for and received an air quality permit for the equipment.

If the leasing agent already has a permit, the operator may operate the equipment under the existing permit; however, the permit must be updated to reflect the new job site where the equipment will be used. Either you or the leasing agent must provide this update by using the *Relocation Notice* form (EQP5757). For more information on how to relocate your equipment, see page 1-15.

Applicant Mailing Address – This is the mailing address to receive correspondence regarding the application. Include the actual street address, post office box (if applicable), city, state, and zip code.

Authorized Employee – The application must be signed by an authorized employee of the applicant. This signature certifies the truth of the information provided in the application. Provide the name, title, telephone number (extension if applicable) and e-mail address for the individual signing the application.

Contact – Complete this if someone other than the authorized employee should be contacted with questions regarding this application. Provide the name, title, telephone number (extension if applicable) and e-mail address for the contact. A contact person not employed directly by the applicant, such as an attorney or a consultant, may file an application as an agent of the applicant; however, an agent may not sign the application. If the contact is an agent, include the name of the company the agent is affiliated with (e.g., consulting firm, law firm).

Equipment or Process Location – This is the site where the crushing facility will be located. This item need only be completed if the process location is different from the mailing address or if the mailing address is a P.O. Box.

Equipment New/Existing – Check the appropriate box. If the equipment is existing, either purchased from a previous owner or already owned by your company, please include the installation date (approximate month and year) when the equipment was first put into use.

Existing Permits – If any or all of the equipment in the application has been covered by a previously issued Permit to Install, either obtained by your company or another company if the equipment was purchased from a previous owner, include the permit number. If you are unsure whether the equipment may have been covered under a previous permit, contact the local AQD district office (*see Appendix E*).

Renewable Operating Permit (ROP) – Facilities that meet the definition of a major source are required to obtain an ROP. A source that has the potential to emit 10 tons/year of a single hazardous air pollutant (HAP), 25 tons/year of all HAPs combined, or 100 tons/year of any regulated air pollutant like particulate matter (PM) is considered a major source. Guidance on how to calculate potential to emit is available at **www.michigan.gov/deqair**. Select "Clean Air Assistance," and then "Potential to Emit." However, most nonmetallic mineral processing facilities are not large enough to meet the definition of a major source.

Consent Orders – If your company has an outstanding consent order or judgment, or is currently involved in an environmental enforcement case, you cannot use the General Permit to Install. A consent order or judgment may be issued against your company or against you as a subcontractor of another company. An outstanding consent order or consent judgment means your equipment is not in compliance with the environmental regulations. You must apply for a regular Permit to Install.

Forms Submitted – You are required to fill out the Process Information form (EQP5756). Check the box and write the form number in the space provided. Check the box for Additional Information for all additional information submitted such as a detailed site map (required), process layout drawings or equipment specifications.

Signature of Authorized Employee – The application must be signed by an authorized employee of the applicant. This signature certifies the truth of the information provided in the application. A missing signature will result in an application being returned and a delay in processing.

The Process Information Form (EQP5756)

The Process Information form must be completed for each crushing facility (production line). A production line means all of the equipment (crushers, grinding mills, screening operations, elevators, conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or connected together by a conveying system.

DEQ

Michigan Department Of Environmental Quality - Air Quality Division

GENERAL PERMIT TO INSTALL APPLICATION

PROCESS INFORMATION - NONMETALLIC MINERAL CRUSHING (PAGE 1 OF 2)

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and /or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a nonmetallic mineral crushing facility, under the terms and conditions of a general permit to install pursuant to Rule 201a. If two or more primary crushers operate in parallel, each constitutes a separate facility. Complete a separate copy of this form for each facility. Prepare and submit this form with the General Information form (EQP5727). **For a Modification:** Complete Items 1 - 9. Identify all existing and new or additional process equipment. Certify and submit pages 1 and 2 of this form to the Permit Section and the appropriate district office. See map for district office locations.

1. FACILITY CODE STATE REGISTRATION NUMBER (SRN)			2. MINE/QUARRY NAME
SECTION	TOWNSHIP	RANGE	3. AMOUNT PROCESSED AT THIS SITE *(tons per year)*

4. DESCRIPTION *(Brief description of this facility or proposed modification. Attach a detailed site map showing all site characteristics including the location of any residential and/or commercial establishments and places of public assembly located within 1,000 feet of the proposed site)*

5. DOES THIS FACILITY HAVE ANY OUTSTANDING UNRESOLVED AIR VIOLATIONS? ☐ YES ☐ NO

6. ARE THE CRUSHER(S) LOCATED A MINIMUM OF 500 FEET FROM ALL RESIDENTIAL OR COMMERCIAL ESTABLISHMENTS OR PLACES OF PUBLIC ASSEMBLY? ☐ YES ☐ NO

7. WAS THIS FACILITY PREVIOUSLY PERMITTED PURSUANT TO RULE 201? IF YES, PERMIT NO._____ ☐ YES ☐ NO

8. APPLICATION IS FOR NEW GENERAL PERMIT MODIFICATION TO EXISTING GENERAL PERMIT - PERMIT NO. _____

9. **FOR A MODIFICATION:** IS THE FACILITY CURRENTLY IN COMPLIANCE WITH ALL CONDITIONS OF THE EXISTING GENERAL PERMIT, INCLUDING BUT NOT LIMITED TO THE TESTING OF ALL NSPS SUBJECT EQUIPMENT? ☐ YES ☐ NO

Instructions for completing the following items: Each piece of equipment must have a unique Identification number (ID). The ID may be any combination of up to 10 letters, numbers or keyboard characters with no spaces between characters. Provide an ID and complete all items for each piece of process equipment at the facility. A manufactured date is required. If a device is shop built, the manufactured date may be estimated. If a device is not subject to NSPS Subpart OOO, an explanation is required. Use Additional Information form EQP5729 if more space is needed. Use as many copies of page 2 as needed to list all process equipment.

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXMUM RATED CAPACITY *per hour)*	CONTROL? ☐ YES ☐ NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED ☐ NO, REASON NOT SUBJECT		

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXIMUMRATED CAPACITY *per hour)*	CONTROL? ☐YES ☐NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED ☐ NO, REASON NOT SUBJECT		

This page must be certified by an authorized employee

Applicant Certification: I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF AUTHORIZED EMPLOYEE	DATE

EQP5756 (Revised 7/2003)

Michigan Department Of Environmental Quality - Air Quality Division

GENERAL PERMIT TO INSTALL APPLICATION
NONMETALLIC MINERAL CRUSHING- (PAGE 2 OF 2)

FOR DEQ USE ONLY
PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and /or criminal penalties for providing false information.

Instructions: Page 1 of this form must be completed and certified by an authorized employee. Provide an ID and complete all items for each piece of process equipment at the facility. A manufactured date is required. If a device is shop built, the manufactured date may be estimated. If a device is not subject to NSPS subpart OOO, an explanation is required. Use Additional Information form EQP5729 if more space is needed. Use as many copies of this page as needed to list all process equipment.
For a Modification: Provide the information for all existing and new or additional process equipment. Submit pages 1 and 2 to the Permit Section and the appropriate district office. See map for district office locations.

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXIMAUM RATED CAPACITY *(tons per hour)*	CONTROL? ☐ YES ☐ NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST ☐ SCHEDULED NO, REASON NOT SUBJECT		

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXIMUM RATED CAPACITY *(tons per hour)*	CONTROL? ☐ YES ☐ NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST ☐SCHEDULED NO, REASON NOT SUBJECT		

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXIMUM RATED CAPACITY *(tons per hour)*	CONTROL? ☐ YES ☐ NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST ☐ SCHEDULED NO, REASON NOT SUBJECT		

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXIMUM RATED CAPACITY *(tons per hour)*	CONTROL? ☐ YES ☐ NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST ☐ SCHEDULED NO, REASON NOT SUBJECT		

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)*	DEVICE ID *(Assign an identification number for this device)*	
MAKE AND MODEL	SERIAL NUMBER	MANUFACTURED DATE *(MM/DD/YY)*
MAXIMUM RATED CAPACITY *(tons per hour)*	CONTROL? ☐ YES ☐ NO CONTROL TYPE	
IS DEVICE SUBJECT TO NSPS? ☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST ☐ SCHEDULED NO, REASON NOT SUBJECT		

EQP5756 (Revised 7/2003)

Facility Code – This is the SRN from the General Information form. See detailed explanation on page A-1.

Mine/Quarry Name and Location - Enter the mine/quarry site name. This may be the same as the parent company name or may have a unique identifying name that denotes the physical location of the site. If the mine/quarry does not have a street address, provide the section, township, and range where the crushing facility will be located. These coordinates can be determined from a plat map. Plat maps are coordinate-based maps, with all distances and location bearings based on the

directions of north-south and east-west. Plat maps are considered legal records showing real estate divisions in Michigan's cities, townships, and villages.

- A *section* comprises one mile square (640 acres).
- A *township* is defined as land that is divided into 6-mile-squares and runs north to south.
- A *range* is defined as the east or west position of a land site.

Plat maps can be obtained from your local city, township, village, or county clerk office. Some plat maps are available online through the Michigan Department of Labor and Economic Growth at **www.cis.state.mi.us/platmaps/sr_subs.asp.**

New General Permit or Modification - Identify if this application is for a new General Permit to Install or if you are making a significant change to an existing General Permit to Install. A modification to an existing General Permit is required if equipment is being added or removed. Refer to the section of this guide that discusses modifications beginning on page 1-17. Include the existing General Permit number for a modification.

Process Description - Provide a brief description of the crushing operation and accurately describe the type of product being crushed (i.e., concrete building debris, limestone, rocks, sand and gravel, etc.). A site map is also required to identify where equipment will be located on the property and to document any residential homes, commercial establishments, and places of public assembly located within 1,000 feet of the site.

Amount of Material Processed at the Site – The General Permit limits production to 2 million tons per year of nonmetallic mineral products at any one site. If the facility will process more than this amount, a regular Permit to Install is required.

Outstanding or Unresolved Violations – A Violation Notice (VN) is issued if a company is not in compliance with the state air pollution control rules and/or federal regulations. A VN is not the same as an environmental consent order or judgment. It is a tool used to initiate enforcement action to bring a company into compliance. If you have a pending VN, you do not qualify for the General Permit to Install.

Distance of Crusher to Other Area Residents/Establishments - The General Permit requires your crushing operation be a minimum of 500 feet from residential or commercial establishments, and places of public assembly such as a government building, church, or school. This distance is needed to limit the adverse health effects or damage to personal property from the dust. Include a standard map that clearly identifies the distances from your crushing process to the nearest property line in all directions.

Compliance Verification with an Existing Permit – If this application is to modify a current General Permit, verify whether or not the facility is in compliance with the current permit. If your company has received a VN or is referenced in an ongoing VN through your contractual services with another company, you must check NO.

Process/Equipment Information – Each piece of equipment must be identified and described. For each crusher, screen, conveyor, elevator, grinder, etc. provide the following:

Device Description and Device ID - Describe the type of equipment using the technical name (i.e., jaw crusher, cone crusher, impact crusher, etc.), as well as the role it plays in the crushing operation (i.e., primary jaw crusher, secondary cone crusher, etc.). The Device ID is a unique equipment identifier. A Device ID may be any combination of up to 10 letters, numbers, or keyboard characters (i.e., SCREEN01, Conveyor #3, PRICRUSHER).

Make and Model, Serial Number, and Manufactured Date - Identify the manufacturer of the equipment, model number, and a serial number. You may need to contact the manufacturer of the equipment to obtain the make and model information. A manufactured date is required.
This date can be obtained from the equipment name plate. Do not confuse the manufactured date with the installation date. If the equipment was shop built (i.e., from miscellaneous parts), indicate that the equipment is shop-built in the Make and Model field and write NA in the Serial Number field. Try to approximate the date (month and year) when the equipment was built and added to the crushing operation. The AQD will not process your application without this information.

Maximum Rated Capacity or Dimensions - The maximum rated capacity can be found in an equipment manual or specification book. The maximum rated capacity for crushers is measured in tons/hour. For screening operations or conveyor belts, give the dimensions for the total surface area of the top screen or the width of the conveyor belt. Storage bin capacity is measured in tons.

Device Control - Each crusher and screening operation must have water sprays installed prior to operation. A baghouse dust collector or wet scrubber may be used in place of the water sprays. Conveyors, material storage piles, and other process equipment related to the crushing operation are required to have dust control on an as-needed basis.

Federal New Source Performance Standard (NSPS) - Indicate whether the equipment is subject to the NSPS for nonmetallic mineral processing facilities (Subpart OOO). If the equipment is not subject, you must include a reason. Equipment that is not subject to the NSPS includes:

- Equipment at fixed sand and gravel plants and crushed stone plants with capacities of 25 tons per hour or less.
- Equipment at portable sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less.
- Equipment that replaces existing equipment and is of equal or smaller size and has the same function as the existing equipment, unless all existing equipment in a production line is being replaced.
- Equipment listed in the Table A-2 that was manufactured prior to August 31, 1983, and was never modified or reconstructed after that date. See page 1-17 for definitions of modification and reconstruction.
- Equipment not listed in the Table A-2.

Table A-2: Crusher Equipment Subject to NSPS Subpart OOO

Crushers	Belt conveyors
Grinding mills	Bagging operations
Screening operations	Storage bins
Bucket elevators	Enclosed truck or railcar loading

If the equipment is subject to the NSPS Subpart OOO, it may be subject to an initial performance test. Performance testing is discussed on page 1-13. If the equipment requires a performance test, include the date the equipment passed the performance test, or if a performance test has not yet been done, the date that the test is scheduled. If the equipment does not require a performance test, you must explain why. Equipment that is not subject to a performance test under the NSPS includes:

- Equipment in Table A-2 that was manufactured prior to August 31, 1983, and never modified or reconstructed on or after August 31, 1983.
- Equipment in Table A-2 that was manufactured, modified, or reconstructed on or after August 31, 1983, and replaces equipment that was larger in size. Testing will not have to occur until all existing equipment has been replaced with new equipment.

- Wet screening operations and subsequent wet screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill, or storage bin.
- Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin the in the production line.

Signature - Include a signature by an authorized employee of the applicant as on the General Information form. This signature certifies the truth of the information provided in the application. A missing signature will result in an application being returned and a delay in processing.

Make additional copies of Page 2 of the Process Information form (EQP5727) to include all equipment associated with your crushing process.

The Additional Information Form (EQP 5729)

An Additional Information form should be filled out for any piece of equipment for which you plan to submit additional documentation. Failure to complete this form and include the attachments can result in delay of processing the application.

Michigan Department Of Environmental Quality - Air Quality Division

GENERAL PERMIT TO INSTALL APPLICATION
ADDITIONAL INFORMATION

FOR DEQ USE ONLY
PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required if additional information is needed to make an application complete. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to include additional information or attachments. Prepare and submit this form with General Information form (EQP5727).

1. FACILITY CODE

STATE REGISTRATION NUMBER (SRN)

2. ID *(Provide the identification number of the device, emission unit or stack/vent for which additional information is being submitted.)*

3. WHAT TYPE OF ADDITIONAL INFORMATION ARE YOU SUBMITTING WITH THIS APPLICATION? *(check all that apply)*

☐ ATTACHMENT *(if checked, describe and list what is attached. May include drawings, charts, calculations, assumptions, etc.)*

☐ TECHNICAL *(Specialized information regarding the installation, construction, or use of a process or stack/vent)*

☐ GENERAL *(Any supplemental information that is not technical information)*

4. ADDITIONAL INFORMATION NARRATIVE *(A brief description of the information or attachment. May include calculations, design parameters, small diagrams, etc.)*

EQP5729 (Revised 1/2003)

The Facility Code - This is the SRN from the General Information form.

Device ID – This is the ID created on the Process Information form.

Type of Additional Information - Check one or more of the boxes as applicable. Attachments include:

- A site map, a building layout map, or information such as a plat map. Site drawings or building layout maps should be properly marked showing:
  - The spot where the crusher operation, equipment, storage piles, etc. are located.
  - A scale showing the distance in feet, yards, or meters to surrounding population areas and places of public assembly.
  - A north pointing directional arrow.
- Process diagrams or drawings showing equipment type and layout.

Examples of a site or building layout map and a process diagram/drawing are available in Appendix C.

Technical information includes documentation which pertains to the installation, construction, or use of your company's equipment such as:

- Flow charts and production rates
- Flow rate calculations
- Design parameters or descriptions
- Documentation from an operator manual (i.e., maximum rated capacity of the equipment)

An example of a flow chart showing production rates is available in Appendix D.

General information includes any supplemental information that is not technical in nature such as written descriptions of the process layout and production schedule.

Additional Information Narrative - Use this space to describe or explain any of the additional information rather than providing it as an attachment.

APPENDIX B

Completing the Relocation Notice Form (EQP5757)

APPENDIX B

Completing the Relocation Notice Form (EQP5757)

Facility Codes, Applicant Name, Applicant Mailing Address, Authorized Employee, and Contact – See detailed instructions for these fields in Appendix A.

Michigan Department Of Environmental Quality - Air Quality Division

DEQ

GENERAL PERMIT TO INSTALL APPLICATION
RELOCATION NOTICE

FOR DEQ USE ONLY
PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and /or criminal penalties for providing false information.

Instructions: Use this form to request authority to relocate a nonmetallic mineral processing facility under the terms and conditions of a general permit to install pursuant to Rule 201a. A copy of the original general permit forms (EQP5727, EQP5729, and EQP5756) and any additional Process Information forms for modifications to this plant must be submitted with this form. Attach a detailed site map for the new location which shows all site characteristics including the location of any residential and/or commercial establishments and places of public assembly which are located within 1,000 feet of the proposed site. Certify and submit this form and any attachments to the Permit Section and the appropriate district office for the new location. See map for district office locations.

1. FACILITY CODES STATE REGISTRATION NUMBER (SRN)		STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE
2. APPLICANT NAME *(Business license name of the corporation, partnership, individual or government agency that owns the facility)*		
3. APPLICANT MAILING ADDRESS *(Street Address or P.O. Box Number)*		
4. CITY	5. STATE	6. ZIP CODE
7. NAME OF AUTHORIZED EMPLOYEE		
8. TITLE *(person identified in item 7)*		9. TELEPHONE NO. *(person identified in Item 7)* ( ) -
10. CONTACT PERSON *(technical point of contact, if different than name in Item 7)*		11. TELEPHONE NO. *(contact person)* ( ) -

CURRENT PLANT LOCATION		
12. MINE/QUARRY NAME		13. GENERAL PERMIT NUMBER
14. STREET ADDRESS		
15. CITY	16. ZIP CODE	17. COUNTY
18. SECTION	19. TOWNSHIP	20. RANGE

NEW PLANT LOCATION		
21. MINE/QUARRY NAME		
22. STREET ADDRESS		
23. CITY	24. ZIP CODE	25. COUNTY
26. SECTION	27. TOWNSHIP	28. RANGE
29. DATES PLANT IS TO BE LOCATED AT THIS SITE T0	30. AMOUNT TO BE PROCESSED AT THIS SITE *(tons per year)*	
31. DIRECTIONS FROM NEAREST TOWN		

Applicant Certification: I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

32. SIGNATURE OF AUTHORIZED EMPLYOEE	33. DATE

EQP5757 (Revised 7/2003)

CURRENT PLANT LOCATION

Facility/Site Name and General Permit Number – Provide the facility/site name at the current location. Include the General Permit Number issued by the AQD for this facility.

Address – Provide the current location of the facility. This item need only be completed if the process location is different from the mailing address or if the mailing address is a P.O. Box. If a street address is not available, provide the section, township, and range for the facility.

NEW PLANT LOCATION

Facility/Site Name – Provide the proposed facility/site name.

Address – Provide the proposed location for the facility. Include the street address, city, zip code, and county. If a street address is not available, provide the section, township, and range of the proposed site.

Location Dates and Process Amounts – Include the dates the facility will be located at the proposed site and the amount of material to be processed at the site. Note that the General Permit limits the amount of material processed at any one site to 2 million tons per year.

Directions from the Nearest Town – Include brief driving directions to locate the plant.

Attach Additional Information – Attach a copy of the original General Permit forms (EQP5727, EQP5729, and EQP5756) plus any Process forms for modifications that have been approved. A detailed site map showing any residential and/or commercial establishments and places of public assembly within 1,000 feet of the proposed site is also required.

Signature of Authorized Employee – The application must be signed by an authorized employee of the applicant. This signature certifies the truth of the information provided in the application. A missing signature will result in an application being returned and a delay in processing.

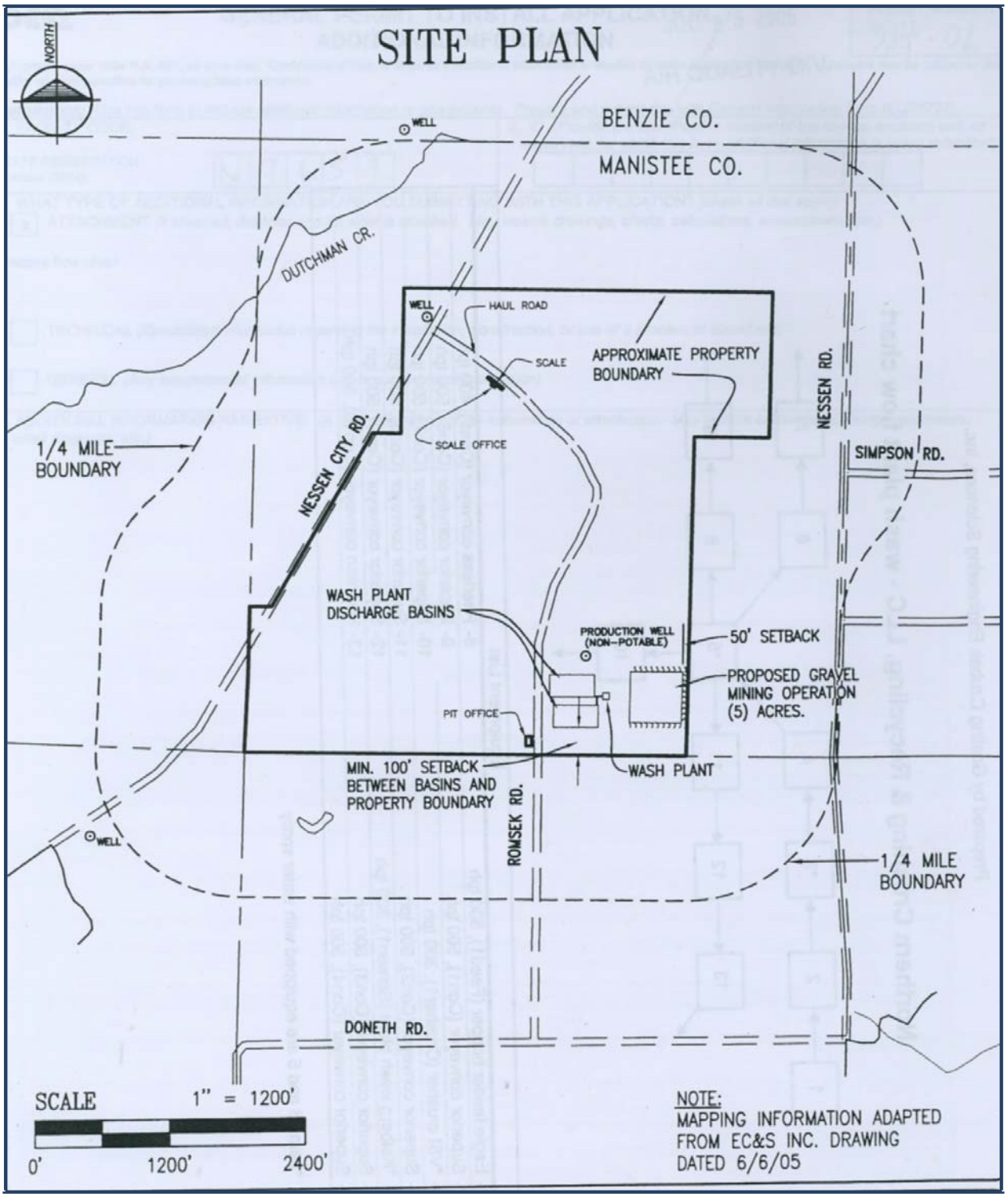
Submit the completed form and attachments to both the AQD Permit Section (see page 1-7 of this guide for Permit Section contact information) and the AQD district office for the proposed plant location. To locate the appropriate district office, see Appendix E.

APPENDIX C

Sample Site/Plan Layout Map

APPENDIX C

Sample Site/Plan Layout Map

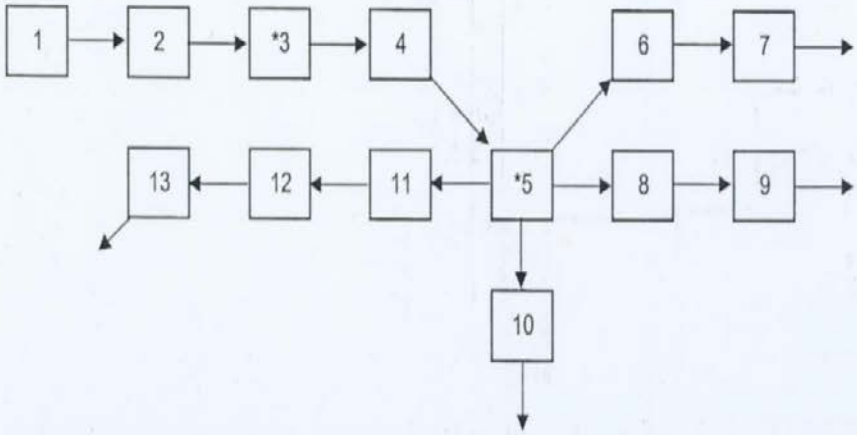


APPENDIX D

Sample Flow Chart

APPENDIX D

Sample Flow Chart



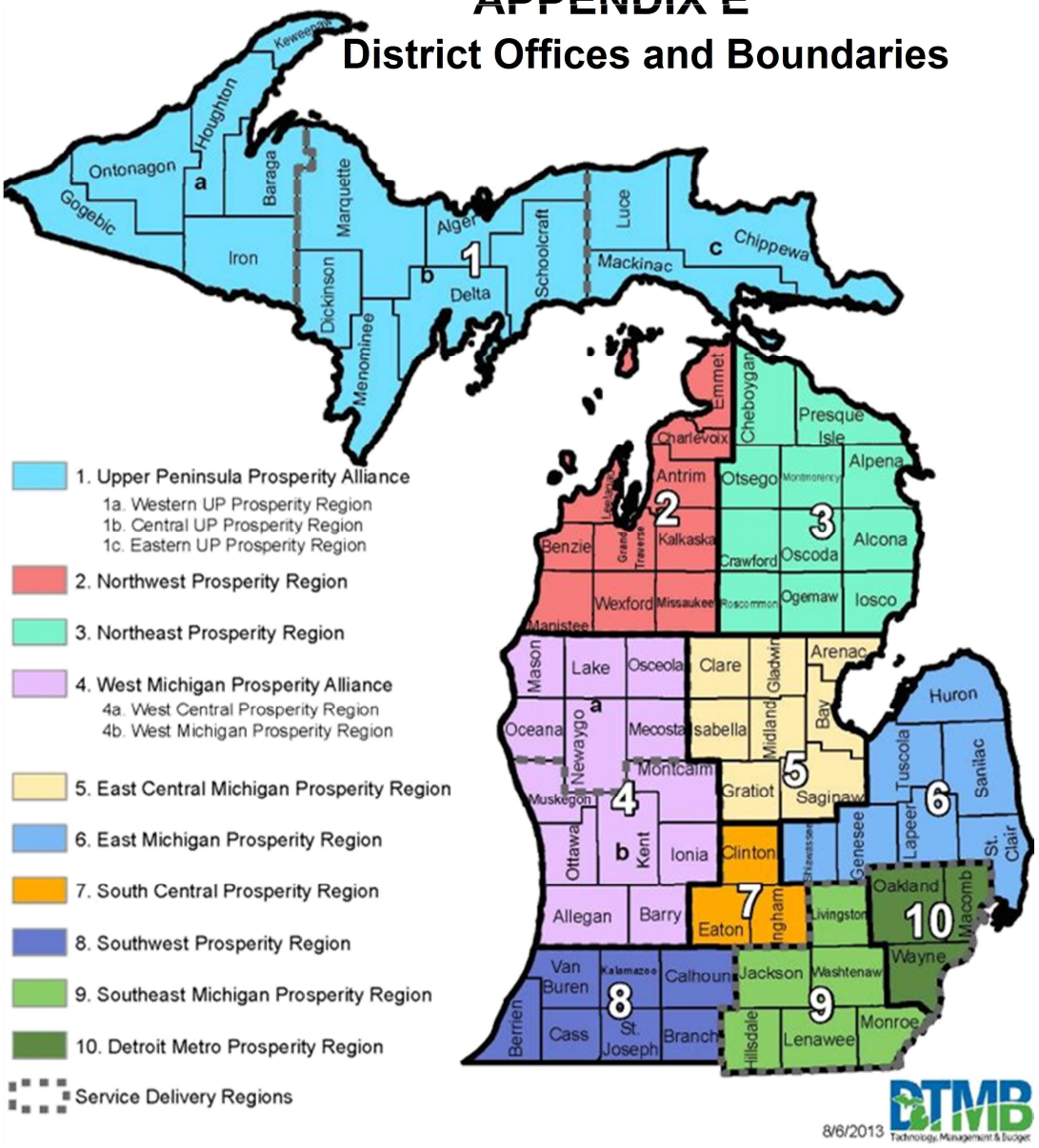
Equipment List	
1- Eagle feeder hopper (Feed1), 500 tph	8- Peerless conveyor (Con5), 400 tph
2- Superior conveyor (Con1), 500 tph	9- Superior conveyor (Con6), 500 tph
3- *VSI crusher (Crusher1), 300 tph	10- Superior conveyor (Con7), 500 tph
4- Superior conveyor (Con2), 500 tph	11- Superior conveyor (Con8), 500 tph
5- *Kolberg wash plant (Screen1), 300 tph	12- Superior conveyor (Con9), 500 tph
6- Superior conveyor (Con3), 500 tph	13- Hartman conveyor (Con10), 500 tph
7- Superior conveyor (Con4), 500 tph	

*Items 3 and 5 are equipped with water spray

APPENDIX E

District Offices and Boundaries

APPENDIX E
District Offices and Boundaries



Region 1 - Upper Peninsula District Office
1504 West Washington Street
Marquette, MI 49855
Phone: 906-346-8300

Region 2 - Cadillac District Office
120 West Chapin St.
Cadillac, MI 49601
Phone: 231-775-3960

Region 3 - Gaylord Field Office
2100 West M-32
Gaylord, MI 49735
Phone: 989-731-4920

Region 4 - Grand Rapids District Office
350 Ottawa Avenue, NW, Unit 10
Grand Rapids, MI 49503-2341
Phone: 616-356-0500

Regions 5 & 6 - Saginaw Bay District Office
401 Ketchum Street, Suite B
Bay City, MI 48708
Phone: 989-894-6200

Region 7 - Lansing District Office
Constitution Hall, 1st Floor South
525 West Allegan Street
Lansing, MI 48933
Phone: 517-284-6651

Region 8 - Kalamazoo District Office
7953 Adobe Road
Kalamazoo, MI 49009-5025
Phone: 269-567-3500

Region 9 - Jackson District Office
301 East Louis Glick Highway
Jackson, MI 49201-1556
Phone: 517-780-7690

Region 10 - SE Michigan District Office
27700 Donald Court
Warren, MI 48092-2793
Phone: 586-753-3700

Detroit Field Office
Cadillac Place
3058 W. Grand Blvd., Ste. 2-300
Detroit, MI 48202
Phone: 313-456-4700

NOTES:

NOTES: