



Portable Rock Crushing

SIC CODE: 1423 NAICS CODE: 212313

Mobile crushing plants are engaged in size reduction of various nonmetallic minerals including stone and concrete at various construction sites. Major rock types processed by the crushed stone industry include limestone, granite, dolomite, traprock, sandstone, quartz, and quartzite. Minor types include calcareous marl, marble, shell, and slate. Major mineral types processed by the pulverized minerals industry, a subset of the crushed stone processing industry, include calcium carbonate, talc, and barite.



The emissions of concern are PM/dusts generated by crushing, screening, conveying/stacking, storage, loading and unloading operations, and criteria pollutants emitted from the fuel combustion in the diesel engine. PM emissions associated with the loading/unloading, crushing, screening and conveying/stacking operations can be estimated using applicable emission factors in AP-42 Subchapter 11.19.2, "*Crushed Stone Processing & Pulverized Mineral Processing*". In general, wet suppression systems/devices such as water spray/wet suppression are used to control such PM and comply with the applicable PM and visible emissions limits.

Particle pollution includes:

- **PM₁₀**: inhalable particles, with diameters that are generally 10 micrometers and smaller; and
- **PM_{2.5}**: fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

How small is 2.5 micrometers? Think about a single hair from your head. The average human hair is about 70 micrometers in diameter – making it 30 times larger than the largest fine particle.

Due to these potential emissions an Air Quality permit may be required for your operations if emissions of air pollutants exceed permit exemption limits.

Typical Permits:

Typical permits for a Portable Rock Crushing plant will be a Minor (or B) permit. A Minor permit is issued when a facility's potential emissions will be below major source thresholds (typically 100 tons per year for criteria pollutants, in this case, PM₁₀ and PM_{2.5} for a Portable Rock Crushing plant) - the maximum limit of a potential pollutant that a minor source facility can emit. Minor permits are not required to pay operational fees at this time. Effective March 1, 2019, when applying for a Minor permit, an associated permit application fee of \$250 will be required.

Applying for a Permit:

The Georgia [SIP Construction & Operating Permit Application](#) (SIP Application) is used to apply for initial air quality permits and for modifications to existing air quality permits.

- The SIP Application consists of separate forms that request information about the facility, emission units, control devices, and pollutants emitted. Each application form contains specific instructions for completion. Chapter 319-3-1-.03(6)
- The SIP Application for a Generic Permit, a Permit-by-Rule and a Synthetic Minor Permit require addition forms.

Please contact SBEAP for all assistance with Permit by Rule application or SIP application. SBEAP can assist with potential emissions calculations as well as permit applications.

Primary Contact:

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<https://epd.georgia.gov/air/small-business-environmental-assistance>

Regulatory Information and Factsheets

U.S. EPA Federal Regulations:

- [Rule and Implementation Information for Nonmetallic Mineral Processing](#)

Helpful Tools & Resources

- Minnesota Pollution Control Agency (2004) - [Environmental Management at Aggregate Operations](#) (PDF)
- Texas Commission on Environmental Quality (2012) - [Best Management Practices for Quarry Operations](#) (PDF)
- AP-42 Subchapter 11.19.2, - [Crushed Stone Processing & Pulverized](#)

Georgia & Regional Trade Associations

- [Unified Screening & Crushing for the Mining & Aggregate Industries](#)
 - [Georgia Construction Aggregate Association](#)
 - [Georgia Highway Contractors Association](#)
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