

# Instructions and Equipment Checklist for the Minor Source Emissions Inventory for Quarrying, Crushing and Screening Facilities

Inventory Period: January 1 - December 31, 2020  
**Submittal Deadline: April 1, 2021**

Refer to your general construction permit (GCP) or New Source Review (NSR) permit to determine the type of records that should be maintained.

Use the following guide to determine which records you need to record in order to calculate the actual emissions for each piece of active, regulated equipment.

**Questions? Please Contact at Roslyn Higgin at 505-476-4319 or [Roslyn.Higgin@state.nm.us](mailto:Roslyn.Higgin@state.nm.us)**

**For each of the following Equipment:      Keep Records of:**

<b>Bucket Elevators, Feed Bins, Hoppers, Crushers, Screens, Shakers, Mixers</b>	<ul style="list-style-type: none"> <li>• the daily and annual quantity and type of material processed</li> <li>• the daily and annual operating hours for each unit</li> <li>• whether any type of control device was employed (e.g., water sprays)</li> </ul>
<b>Conveyors</b>	<ul style="list-style-type: none"> <li>• the daily and annual quantity of material processed</li> <li>• the number of transfer points in a set of conveyors</li> <li>• the daily and annual operating hours for each conveyor or set of conveyors</li> <li>• whether any type of control device was employed (e.g., water sprays)</li> </ul>
<b>Engines, Internal Combustion, including Generators</b>	<ul style="list-style-type: none"> <li>• the daily and annual operating hours for each engine</li> <li>• type of fuel used for each engine</li> <li>• the daily amount of fuel consumed (gal or MMSCF)</li> <li>• manufacturer specifications, including:               <ul style="list-style-type: none"> <li>○ make and model</li> <li>○ serial number</li> <li>○ date of manufacture</li> <li>○ emission factors or guaranteed emission rate (if available)</li> <li>○ rich or lean burn</li> <li>○ factory and allowable horse power (HP)</li> <li>○ maximum RPM</li> <li>○ annual and hourly flowrate</li> <li>○ minimum load percentage</li> <li>○ displacement</li> </ul> </li> <li>• fuel delivery manifests or other documentation that identifies:               <ul style="list-style-type: none"> <li>○ type of fuel</li> <li>○ fuel HHV or LHV, as MMBtu/SCF or MMBtu/gal</li> <li>○ sulfur content</li> </ul> </li> </ul>

**For each of the following Equipment:**      **Keep Records of:**

<b>Haul Roads</b>	<ul style="list-style-type: none"> <li>• the type and weight of each truck (mean vehicle weight in tons)</li> <li>• the length of each haul road segment (miles)</li> <li>• the number of round trips for each haul road segment per day</li> <li>• the annual number of round trips for each haul road segment</li> <li>• the quantity and frequency of water or surfactant application to haul roads</li> <li>• the frequency of haul road sweeping (if paved)</li> <li>• emissions generated by the operation of earth-working equipment (dozers, front end loaders) will not be part of the emissions inventory, only haul road traffic emissions</li> </ul>
<b>Heaters: Natural Gas, Diesel, or Propane-Fired</b>	<ul style="list-style-type: none"> <li>• the daily and annual operating hours for each heater</li> <li>• type of fuel used for each heater</li> <li>• the daily amount of fuel consumed (gal or MMSCF)</li> <li>• the firing rate (MMBtu/hr)</li> <li>• control devices (if applicable)</li> <li>• fuel delivery manifests or other documentation that identifies: <ul style="list-style-type: none"> <li>○ type of fuel</li> <li>○ fuel HHV or LHV, as MMBtu/SCF or MMBtu/gal</li> <li>○ sulfur content</li> </ul> </li> </ul>
<b>Silos</b>	<ul style="list-style-type: none"> <li>• the amount of each type of material processed (added or removed) from each silo</li> <li>• the daily and annual number of operating hours of each silo</li> <li>• use of any type of pollution control equipment (e.g., bag house)</li> </ul>
<b>Adding Material to Stock or Storage Piles, and Truck or Rail Loading Stations (Drop Points)</b>	<ul style="list-style-type: none"> <li>• the daily and annual amount of each type of material processed</li> <li>• the daily and annual operating hours of each drop point</li> <li>• whether any type of control device was employed (e.g., water sprays)</li> </ul>

## Quarrying, Crushing, and Screening Facilities – Records Required for Emissions Calculations by Piece of Equipment

Actual emissions from the stationary equipment included in your permit or on the equipment list in your GCP registration form must be reported in the Minor Source Emissions Inventory. If you are operating equipment found in the above table that is not included in your permit or on the equipment list in your GCP registration form, you must update your permit or registration.

### Portable Equipment

Equipment substitutions and relocations are common with this industry. Keep records of your substitutions and relocations of equipment in order to report the actual emissions and the location (latitude/longitude) for each individual piece of equipment during calendar year 2020. If a specific piece of equipment was relocated during 2020, then report actual emissions from the location at which the equipment operated for the longest period of time.

## Bundling of Equipment and Emissions

Emissions should be reported for each piece of equipment separately unless it is specifically noted that they may be bundled (reported as a single item). Bundling is only allowed if the equipment is used for the same material type, throughput, and size.

## Types of Pollutants subject to this Minor Source Inventory

### Criteria Pollutants:

- PM<sub>2.5</sub> Particulate Matter less than or equal to 2.5 micrometers
- PM<sub>10</sub> Particulate Matter less than or equal to 10 micrometers
- SO<sub>2</sub> Sulfur Dioxide
- NO<sub>x</sub> Nitrogen Oxides
- CO Carbon Monoxide
- Pb Lead

### Non-criteria Pollutants:

- VOCs Volatile Organic Compounds
- H<sub>2</sub>S Hydrogen Sulfide

### Hazardous Air Pollutants (HAPs):

- Please see your permit or registration form for HAPs that are emitted at your facility.
- See the [EPA list of Hazardous Air Pollutants](#) for a full list.

## Acronyms

gal	gallon
HHV	higher heating value
hp	horsepower
LHV	lower heating value
lbs./hr.	pounds per hour
MMBtu/gal	million British thermal units per gallon
MMBtu/hr.	million British thermal units per hour
MMBtu/scf	million British thermal units per standard cubic foot
MMSCF	million standard cubic feet
RPM	revolutions per minute
tpy	tons per year