

# Aggregate Facilities

## Registration of Smaller Sources (ROSS) Program Guide



### What is the Registration of Smaller Sources Program?

The ROSS program is a mandatory registration program for emission sources with low emissions. It replaces the current mandatory smaller source permitting program for these sources and is intended to simplify air regulatory requirements. Air permitting is simply a formal process for regulatory agencies to combine applicable federal and state requirements associated with a source of air pollution into one legally enforceable document. **All** owners/operators, of emission sources are required to comply with all applicable state, federal and local environmental air pollution control requirements in addition to any permit or registration requirements with the Illinois Environmental Protection Agency.

This guide is intended to assist aggregate sources in understanding air pollution control environmental obligations as a ROSS source. The guide highlights applicable air regulations for the industry but is not intended as a substitute for the rules.

The ROSS rules, 35 IL Administrative Code 201.175 can be found at:  
<http://www.ipcb.state.il.us/SLR/IPCBandIPEAEnvironmentalRegulations-Title35.aspx>

### How do I determine if I must register with the Agency under the Registration of Smaller Sources Program?

Sources meeting the following criteria must register:

- Not required to get a Title V or Clean Air Permit Program (CAPP) permit
- Not required to get a Federally Enforceable State Operating Permit (FESOP)
- Not required to get a permit under the New Source Performance Standards (NSPS) or under the National Emission Standards for Hazardous Air Pollutants (NESHAP) or by USEPA.
- Actual emissions from the source's emission units are less than the following limits for the prior calendar year\*:
  - 5.0 Tons/yr of combined pollutants (particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and volatile organic material)
  - 0.50 Tons/yr of combined Hazardous Air Pollutants (HAPs)

- 0.05 Tons/yr of mercury air emissions
- 0.05 Tons/yr of lead air emissions

*\*Do not include emissions from units that are exempt from the permitting requirements as found at 35 Ill. Adm. Code 201.146 or the publication "Does My Business Need An Air Pollution Control Permit?" in your source-wide actual emissions calculations.*

- If an existing source, the sum of the actual emissions from all non-exempt units associated with the source for the prior calendar year must meet the limits as stated above. If the source is new or has been operating less than one calendar year, projected estimated emissions may be used for all of the remaining months in the prior calendar year.
- Emission units or source is not subject to maximum achievable control technology under 40 CFR Part 61 or the NESHAP under 40 CFR Part 63 unless it is categorized as an area source
- Emission units at the source are not used as thermal desorption systems pursuant to 35 Ill. Adm. Code 728 Table F or as an incinerator system.

- The source is not subject to local siting review under Section 39.2 of the Act

## Is there a fee and is there a deadline to register?

Yes, the annual registration fee is \$235 and there are registration deadlines. The annual fee payment renews your registration and will serve as the owner or operator's verification that the source met the eligibility criteria for the calendar immediately prior to the year for which the fee is due. The registration deadlines are as follows:

- Sources holding a permit must have registered no later than their annual fee payment due date in state fiscal year 2013 (July 1, 2012 through June 30, 2013). The registration fee was due by this date also.
- The owner or operator of an operating source not holding a permit shall have registered no later than July 1, 2012 and payment of the fee was due at the time of registration.
- The owner or operator of a new source shall register at least 10 days before commencing construction or operation and may commence construction or operation 10 days after submittal to the Agency. Fee payment is due at the time of registration.
- Annual payment of the site fee for renewal of your registration is due on your assigned site fee due date.
- To register, complete the ROSS Registration Form found at: <https://www2.illinois.gov/dceo/SmallBizAssistance/EnvironmentalAssistanceProgram/Pages/SBEAP-ROSSProgram.aspx>

## What if I exceed the ROSS emission thresholds?

Permits previously issued to ROSS sources are kept in the source's file at the Illinois EPA. While the source is registered under ROSS, the source no longer has to comply with the terms and conditions of the permit (unless still applicable under other requirements). Should the source's eligibility for the ROSS program change, the source must notify the agency within 90 days of the source's annual fee payment date that it will comply with the terms of its permit and the source's status will be changed from a ROSS eligible source to a permitted source. If your operation has changed since the issuance of the lifetime permit and now includes activities or

equipment that are not consistent with the terms of your permit, you may be required to revise your permit or obtain additional permits.

If the source was not constructed or operated at the time of initial registration and has actual emissions in excess of the eligibility levels during the first or second year of operations the owner or operator must apply for an operating permit and pay avoided construction permit application fees.

The owner or operator of a source that did not have a permit prior to registration must apply for a permit within 90 days of the source's annual fee payment date if they fail to meet the eligibility criteria.

It is important to note emission criteria for renewal of registrations allow the total sum of actual emissions of combined particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and volatile organic material air pollutant emissions for the prior calendar year to be less than or equal to 7 tons, with the total sum of actual emissions of combined particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and volatile organic material air pollutant emissions from the prior two calendar years less than or equal to 10 tons.

## How are portable emission units registered under ROSS?

It is mandatory that portable emission units meeting the ROSS eligibility criteria register in the program. ROSS registrations are tied to the emission unit's location and a Site ID number is assigned by the Illinois EPA when the ROSS certificate is issued. If the owner/operator will be moving the emission unit to a new location, a new [ROSS registration form](#) and fee must be sent 10 days prior to the equipment move. A new ROSS certificate and Site ID will be issued by the agency for each new equipment location. **NOTE: Site fees are billed annually for all locations. To avoid unnecessary site fees, the owner/operator must send IEPA a letter withdrawing the ROSS registrations for the locations the portable emission unit will not be returning. It is very important that Site ID numbers for locations being withdrawn be included in the letter.**

An Owner or operator should ensure they do not locate the emission source on a site with a source that is subject to the Title V Clean Air Act Permit Program (CAAPP) requirements under

Section 39.5 of the Act; it would become subject to the CAAPP if the emissions of all regulated pollutants from the portable emission source were included in such source's potential to emit.

In addition, an owner or operator should not modify the operation of an emission unit in such a way so as to make the emission unit subject to New Source Review (NSR) requirements under 35 Ill. Adm. Code 203 or to Prevention of Significant Deterioration (PSD) under 40 CFR 52.21 or make the emission unit a support facility of a source that is subject to the CAAPP program.

Plants relocated in certain parts of McCook and Lake Calumet in Cook County and Granite City in Madison County may be subject to further fugitive dust requirements including: from storage piles, crushing, roadways and parking areas. (See Part 212 discussion below)

### What are my ROSS recordkeeping and reporting requirements?

ROSS sources are required to keep the following records and make them available for inspection by the Agency:

- A description of the emission units associated with the source and their associated control devices;
- A description of control efficiency or emission rates of any control devices



### What are my regulatory requirements as a ROSS aggregate facility?

Many state and federal environmental requirements apply regardless of permit status. Many times, these requirements are reinforced as permit terms or conditions; however, it is important to note that applicable environmental requirements must be complied with regardless if the source has a permit or is registered. These requirements may include but are not limited to best management practices, materials or equipment, record keeping, reporting and monitoring requirements.

that are relied upon to meet the ROSS eligibility criteria;

- Documentation of the source's actual emissions and calculations demonstrating that the source is eligible for ROSS. This documentation may include, but is not limited to, annual material usage or emission rates;
- A copy of the source's initial registration; and a copy of the source's annual fee payment for at least the most recent 5 calendar years.
- The Illinois EPA must also be notified in writing within 45 days if there is a change in the name, address, or telephone number of the source or if the person responsible for submitting and retaining copies of the registration information and the records has changed per 35 Ill. Adm. Code 201.175(f).
- Payment of the annual fee will serve as the owner or operator's verification that the source continues to meet the registration criteria and will automatically renew the source's registration.
- *Notification, reporting, and recordkeeping requirements under the source's other applicable federal or state regulations would continue to apply.*

In addition to the general requirements for ROSS Sources under 35 Illinois Administrative Code Part 201.175 Registration of Smaller Sources discussed above, regulations of concern for registered aggregate sources in Illinois include but may not be limited to applicable portions of:

#### Part 212 of 35 Illinois Administrative Code Visible and Particulate Matter Emissions

Some requirements under [Part 212](#) for aggregate facilities are discussed below. *This publication is intended as general guidance. It is important for the owner/operator of the source to determine federal and state regulatory requirements for their facility based upon their*



*specific operation.* Certain sources must also comply with requirements under the federal New Source Performance Standards (NSPS) Subpart A General Provisions and Subpart 000 for Nonmetallic Mineral Processing Plants discussed below.

*Pursuant to the requirements in Part 212, a source must:*

- Not cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity that is visible by an observer looking generally toward the zenith (that is, looking at the sky directly overhead) from a point beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301 Fugitive Particulate Matter.
- Operate pollution control devices at all times when the associated emission unit(s) is in operation and emitting air contaminants.
- Maintain a surface moisture content of the aggregate materials as crushed of 1.5% or more by weight (if using AP-42 emission factors for controlled emissions)
  - To demonstrate compliance a representative sample should be tested weekly using ASTM Procedures (C566-97) for total moisture content of the materials (The source should maintain weekly records of moisture measurements.); Compliance with this requirement may be presumed if moisture content of crushed aggregate material as shipped is at least 1.5%; or.
  - Water sprays should be used at each crusher and on other emission units as necessary, except when weather conditions are below or expected to fall below freezing temperatures, to provide moisture that will reduce emissions of particulate matter.

The water supply to the spray equipment should be equipped with a metering device used to determine water usage for the control of particulate matter emissions. At least once per week the water spray equipment and operation should be inspected by the owner/operator for leaking, adequate flow, clogging of flow lines, etc.) when the facility is in operation.

35 Illinois Administrative Code Part 212 can be found in its entirety at:  
<http://www.ipcb.state.il.us/SLR/IPCBandIEPA/EnvironmentalRegulations-Title35.aspx>

*Recordkeeping:*

- ✓ Maintain operating logs for the water spray equipment, including dates and times of usage, malfunctions (type, date and measures taken to correct), water pressure, and dates when there was at least 0.25" of rainfall during the preceding 24 hours and the water spray equipment was not operated. Weekly records of water consumption in the spray equipment and amount of precipitation should be maintained.
- ✓ Maintain records of all moisture content tests performed, including date, time, individual performing test, location of sample e.g., prior to crushing or as shipped.
- Comply with the applicable opacity limitations of 35 Ill. Adm. Code 212.123 Visible Emissions Limitations for All Other Emission Units and the particulate matter emission limitations of 35 Ill. Adm. Code 212.321 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.

*Recordkeeping:*

- ✓ Maintain records of the amount of aggregate material processed (tons/month, tons/year)
  - ✓ Maintain records of PM emissions (tons/month, Tons/year) with supporting calculations (utilize Table

11.19.2-2, AP-42 for tertiary crushing, screening, and conveying)

- ✓ Maintain records of opacity measurements performed by a certified observer using USEPA Method 9, 40 CFR 60 Appendix A.
- Plants located in certain parts of McCook and Lake Calumet in Cook County and Granite City in Madison County may be subject to further fugitive dust requirements including: from storage piles, crushing, roadways and parking areas. To see if these requirements apply to your facility's location consult 35 Ill. Adm. Code 212.302 (a) & (b).

### Section 9(a) of the Illinois Environmental Protection Act

No person shall cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the Board under this Act.

### Federal Requirements that May Apply to Your Facility

#### 40 CFR Part 60 - New Source Performance Standards (NSPS) Subpart 000 for Nonmetallic Mineral Processing Plants

The U.S. EPA regulates the emissions of particulate matter from nonmetallic mineral crushing facilities through the New Source Performance Standards (NSPS), Subpart 000. 40 CFR 60.670(a) 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 which commences construction, reconstruction or modification after August 31, 1983. Based on this definition, the requirements of Subpart 000 apply to individual pieces of equipment and include, but are not limited to, equipment specific opacity limits, notification of equipment startup, and reporting and recordkeeping provisions. Subpart 000 also requires an initial performance test for most subject equipment.

*Facilities at the following plants are **not** subject to Subpart 000:*

- 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.

#### Subpart 000 Requirements Include:

- Fabric baghouses not to exceed seven percent opacity or 0.05 grams per dry standard cubic meter (g/dscm) of particulates. Baghouses constructed, modified, or reconstructed after April 22, 2008, must meet 0.032 g/dscm. Dry control devices on individual enclosed storage bins must meet 7 percent opacity.
- Conveyor and transfer points not to exceed 10 percent opacity. Conveyors and transfer points constructed, modified, or reconstructed after April 22, 2008, must meet 7 percent opacity.
- Crusher not to exceed 15 percent opacity. Crushers constructed, modified, or reconstructed after April 22, 2008, must meet 12 percent opacity.
- Opacity observation periods have been reduced to 30 minutes. A 7-day advance notice period is required.
- Testing must be performed as required in [Table 2 to Subpart 000 of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems](#) and [Table 3 to Subpart 000 of Part 60—Fugitive Emission Limits](#)
- For all new or replacement facilities or new equipment subject to Subpart 000, you must submit a description of the affected facility or equipment to the Illinois EPA.

**Note:** You do not need to submit this description information to the Illinois EPA if the replacement equipment described above and subject to Subpart 000 is of a lesser size or capacity than the original equipment.

NSPS Subpart 000 requirements in their entirety can be found at:

<https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.ooo>

#### 40 CFR 63—National Emissions Standards for Hazardous Air Pollutants Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ establishes national emission limitations and operating limitations for

hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The RICE NESHAP applies to stationary reciprocating internal combustion engines. Stationary engines are commonly used to generate electricity and to power pumps and compressors, and also in emergencies to produce electricity and pump water for flood and fire control. All sizes of stationary engines are covered by the rule.

The RICE NESHAP does not apply to engines used in motor vehicles and mobile nonroad equipment. Mobile nonroad engines are those that are:

- Self-propelled (such as tractors, bulldozers)
- Propelled while performing their function (such as lawnmowers)
- Portable or transportable (has wheels, skids, carrying handles, dolly, trailer, or platform) and do not remain in one location for more than 12 months, or full annual operating period of a seasonal source

The applicable RICE NESHAP requirements

For information to assist you in determining your requirements under Subpart ZZZZ, visit:  
<https://www2.illinois.gov/dceo/SmallBizAssistance/EnvironmentalAssistanceProgram/Pages/RICE.aspx>

typically differ depending on whether the engine is a compression ignition (CI) or a spark ignition (SI) engine. Compression ignition engines are generally those that use diesel fuel. Spark ignition engines generally use gaseous fuels such as natural gas, gasoline, propane, or digester gas. The RICE NESHAP requirements for an engine also depend on factors including the engine size and type, construction date, and application (non-emergency or emergency). The requirements also depend on whether the facility is a major source or an area source of HAP.

### **Local Ordinances:**

Local county and municipal governments may also have ordinances regarding emissions of particulates, we suggest you contact local agencies for possible further regulations.

This publication is intended as general guidance only and is not a substitute for the rules. The owner/operator of the emission source is encouraged to read the rules to determine all applicable requirements for their specific operation at their facility.

### **For More Information:**

The State of Illinois provides free assistance to Illinois small businesses in understanding and complying with their environmental requirements. If you have questions or would like more information regarding the ROSS Program or other state or federal environmental requirements, contact the **Illinois Small Business Environmental Assistance Program** at the Illinois Department of Commerce and Economic Opportunity at **800-252-3998** or visit [www.ildceo.net/enviro](http://www.ildceo.net/enviro).

