

**Report to the Natural Resources Board on
Air Management's Implementation of
the General and Registration Permit Programs**

Wisconsin Department of Natural Resources

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Report to the Natural Resources Board on Air Management's Implementation of the General and Registration Permit Programs

The Natural Resources Board requested a report on Air Management's implementation of the registration and general permit programs, including a description of sources applying for and covered under registration and general permits, compliance information, emissions trends and air quality impacts, the satisfaction of facilities and the general public with the permit process, and information on petitions.

Executive summary

In response to a 2003 legislative mandate, the Department of Natural Resources (DNR) Air Management Program has expanded its air pollution control program for general permits and created a new registration permit program. Both of these allow expedited review times and greater flexibility and reduce paperwork and workload for both industry and DNR staff. New general permits are available for asphalt plants, rock crushers and printing facilities using certain processes. Registration permits, which have piloted an online permit application process, are now available generally for facilities with low actual emissions of air pollutants. There is also a registration permit available specifically for printing facilities.

While these permits are all relatively new and data are still being collected, to date many facilities have taken advantage of the new permitting options. As of December 31, 2007, 127 facilities were covered by registration permits and 60 asphalt plants, 224 rock crushers and 5 printing facilities were covered by general permits.

An evaluation of the new permitting programs to date shows the following:

- Covering facilities under the new permits, rather than going through the traditional air permitting process, has already saved thousands of hours of permitting staff time.
- A preliminary analysis of emissions data reported to the Air Emissions Inventory shows no measurable effect on statewide emissions rates from the new permits.
- While no survey or other quantitative data are yet available, anecdotal evidence indicates that businesses are pleased with the new permitting options.
- The implementation of inspections and compliance assistance in the registration permit program remains under development, with evidence from early inspections showing that facilities that had never had air permits before needed the most compliance assistance. Some facilities covered under the new registration permits have complained about the lack of compliance assistance.
- The DNR has received no petitions for new types of general permits, and only one petition for a new type of registration permit (which has since been issued). The DNR is continuing to develop new permits where it identifies specific needs.

Background

In order to speed review times and reduce paperwork for both businesses and the DNR, the Legislature mandated as part of 2003's Wisconsin Act 118 that DNR's Air Management Program expand its general permit program and create a registration permit program for facilities with low actual emissions. To carry out this mandate, the Air Management Program adopted goals for the registration and general permit programs (see Appendix A). The new general and registration permits developed cover both facility operations and the construction and modification of equipment.

The DNR revised and created several rules to define the requirements for the new permits, including which facilities can be covered. (The rules affected included ss. NR 407.105, NR 407.107, NR 406.16 and 406.17, Wis. Adm. Code.) These rules were finalized in November 2005. The Type A Registration Operation Permit and its companion, the Type A Registration Construction Permit, were issued on August 15, 2006. A Type C

Registration Permit for Printers was issued on April 20, 2007. The DNR also issued asphalt plant general operation and construction permits and revised the rock crusher general permits on April 20, 2007, and issued general operation and construction permits for printers on June 15, 2007.

General permits are written for a specific category or type of industry where all the facilities in that industry type (e.g., printers) have the same or similar applicable requirements. DNR staff write a detailed general permit that contains all applicable requirements, including emissions limits; compliance demonstration methods; and monitoring, recordkeeping and reporting requirements. A general permit undergoes a 30-day public comment period and is issued just like a traditional permit—except that it is not issued to a specific facility. After a general permit is issued, facilities meeting the eligibility criteria may then apply for coverage under the permit. Decisions on coverage must be made within 15 days of when the DNR receives an application. No further public comment period is provided on individual coverage decisions.

The **registration permit** is a type of general permit but differs in several ways. A single registration permit covers a variety of industry types; however, all covered facilities have low air pollution emissions. The registration permit also differs from general permits in that it is a simplified permit document containing only annual caps on emissions; requirements ensuring protection of air quality; minimum pollution control device requirements; and general monitoring, recordkeeping and reporting requirements. Like the general permits, the registration permit undergoes a 30-day public comment period before it is issued. After the DNR issues a permit, facilities meeting the eligibility criteria may apply for coverage under the permit. The registration permit piloted an online application system that further streamlines the application process. Coverage decisions for registration permits are made within 15 days of the DNR receiving an application. As with general permits, there is no further opportunity for public comment prior to granting coverage under a registration permit.

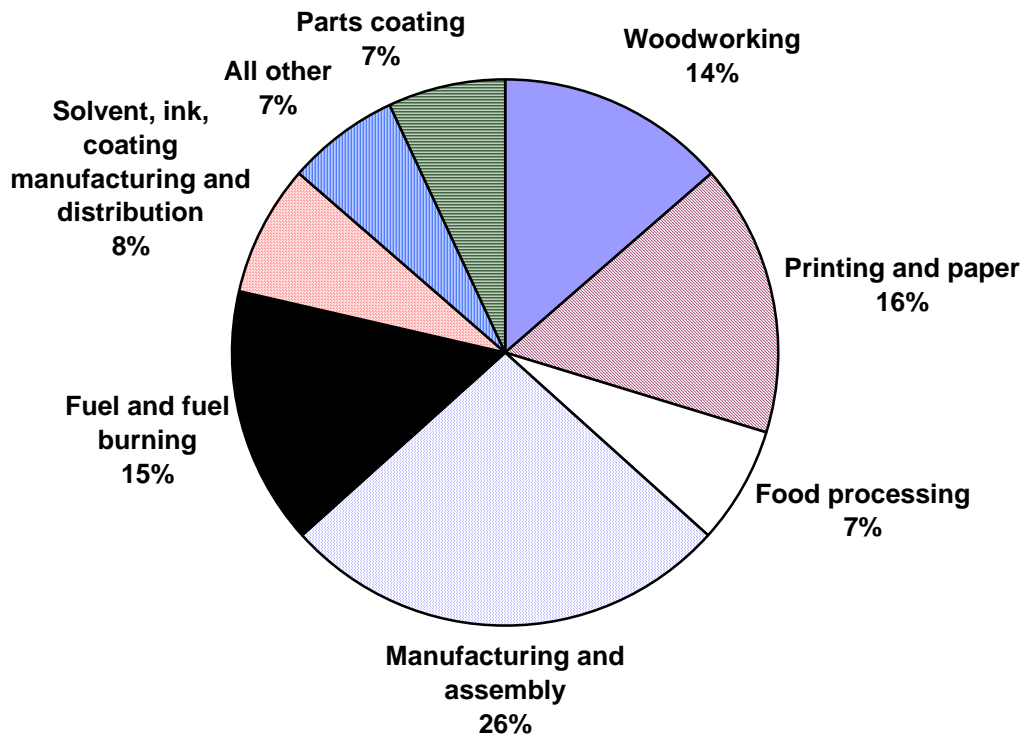
Both types of permits limit emissions of “criteria pollutants,” which include particulate matter (PM), volatile organic compounds (VOCs), sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen oxides (NO_x) and lead, along with hazardous air pollutants (HAPs).

Description of sources applying for and covered under registration and general permits

A variety of facilities are applying for and receiving coverage under the registration permit program (see Figure 1). As of December 31, 2007, 127 facilities have been granted coverage under the program. The DNR has granted coverage under the Type A Registration Permit to 113 facilities, including many small woodworking facilities and cabinet makers, metal and plastic parts coating job shops, food processors, hospitals, and coating manufacturers. Several small biodiesel facilities were constructed and now operate under the Type A Registration Permit as well. In addition, the DNR has granted coverage under the Type C Registration Permit for Printers to 14 small printing facilities, including flexographic, heatset and non-heatset lithographic, sheetfed and screen printing.

About one-fifth of the facilities applied for coverage under a registration permit because their existing operation permit was up for renewal. Many others applied because they were planning construction projects that would be covered by the permit. A few facilities simply wanted a simpler permit or had applied for but not yet received their traditional, facility-wide operation permits. About one-fourth of the facilities now covered by registration permits had never before applied for an air pollution control permit of any kind. See Appendix B for more details.

Figure 1: Types of Facilities Applying for Coverage Under Registration Permits (Type A and Type C)

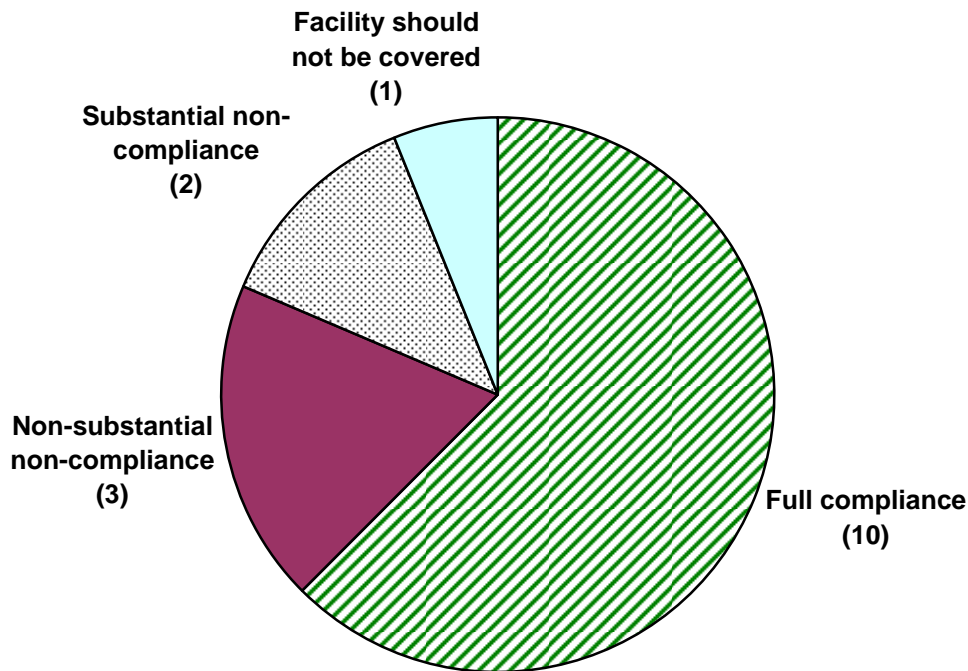


The DNR has issued general permits for minor, synthetic minor and major sources of air pollution covering five different types of printing equipment at printing facilities. It also issued facility-wide general permits for asphalt plants and rock crushers. So far, the general permits for asphalt plants cover over 50 percent of the asphalt plants in the state, while the rock crusher general permits cover 99 percent of all rock crushers operating in Wisconsin. The general permits for printers are different in that each permit covers only one category of press and associated emissions at a facility—many of which have multiple types of printing operations. On the whole, facilities that have taken an interest in the general permits for printers begin looking into permitting when they need to install a new press or renew an old operation permit. As of December 2007, five printing facilities have received coverage under general permits.

Facility compliance with regulatory requirements

During spring 2007, the DNR conducted inspections at 16 of the 50 sources covered under the registration permit at that time to assess compliance with air pollution requirements. Figure 2 shows the results of these inspections. Ten of these facilities were deemed to be in compliance. Three facilities had small difficulties with recordkeeping requirements. The inspector worked with those facilities at the time of inspection to establish better recordkeeping. Two of the facilities had failed to model emissions prior to being covered under the registration permit (more substantial non-compliance). Regional compliance staff subsequently worked with those facilities to have modeling conducted and correct deficiencies with the facilities' emissions stacks. One facility had emissions levels that showed it likely did not qualify for the registration permits, also a non-compliance issue. Regional compliance staff are working with that facility to resolve the issue.

Figure 2: Spring 2007 Compliance Inspection Results for Facilities Covered by a Registration Permit



In general, the facilities that had never been permitted before had the most difficulties. It has been proposed that compliance inspections themselves can be important tools for making sure facilities with registration permits are in compliance. Recommendations have been made to the compliance team to inspect all facilities covered under the registration permits within two or three months of when the facilities receive coverage. The exceptions would be those small facilities that are part of larger corporations with good environmental compliance records, facilities with environmental staff, and facilities—such as paste ink manufacturers—that have very low maximum theoretical emissions and few applicable requirements. The Air Program is considering adjusting compliance inspection and compliance assistance activities based on the results of the initial round of inspections. However, options for doing so are limited by the funding levels available for this category of sources.

Because facilities only began gaining coverage under the general permits in summer 2007, no data are yet available on compliance rates for crushers, asphalt plants or printers covered under general permits.

Emission trends and air quality impacts

An evaluation of emissions reported to the Air Emissions Inventory shows that the registration permits have had no measurable impact on emissions rates of existing facilities statewide. More than half of the facilities now covered under the registration permits did not previously report emissions to the DNR. These facilities will be added to the Air Emissions Inventory as a result of receiving coverage under the registration permit. By comparing past years' reported emissions with emissions reported in 2006, it does not appear that facilities' emissions increased as a result of receiving registration permit coverage. There is no evidence that facilities reduced emissions to qualify for registration permit coverage, either.

Because facilities did not begin gaining coverage under the general permits until summer 2007, no effect on emissions rates of printers, asphalt plants and rock crushers due to coverage under a general permit can yet be shown. Appendix C, however, shows a definite trend toward a reduction in actual criteria pollutant emissions reported by crushers to the Air Emissions Inventory in the first three years after the original crusher general permit was issued in 1996. This may have been due to facilities gaining an understanding of and following compliance requirements spelled out in the general permit. It should also be noted that the asphalt plant and new

crusher general permits both limit emissions to 79 tons per year for each of the criteria pollutants. Prior to gaining coverage under general permits, most of these facilities would have had permit limits of 99 tons per year or greater.

There is no evidence that registration or general permits have impacted air quality. Facilities covered under general permits must all meet specific emissions limits ensuring protection of air quality standards. Facilities covered under the registration permit also must continue to meet air quality standards.

Satisfaction with the permit process by facilities and the general public

The DNR does not have specific survey results or other quantitative measures of general and registration permit satisfaction at this time. Anecdotally, however, facilities are very happy with the ease of applying and the speed of permit decisions. Applicants have complimented the online application system for registration permits. Only two facilities did not have the necessary computer equipment to apply online. (Alternative paper copy application process is available for facilities unable to use the registration permit online application.)

Some facilities have complained after receiving coverage under the registration permit that they do not have any way to figure out their applicable requirements. The department continues to work on providing compliance assistance tools for these facilities. Most recently, the DNR worked with the Department of Commerce to create a comprehensive compliance assistance workbook for the printing industry. This pilot program, known as the Environmental Results Program for Printers, was funded through a U.S. Environmental Protection Agency (USEPA) State Innovation Grant.

No data are available on public satisfaction with the registration and general permit process. The general public did not comment during the public comment periods for the registration or general permits. Environmental organizations and industry trade associations both submitted comments on the draft Type A Registration Permits. However, very few comments were received on the Type C Registration Permit for Printers issued eight months later. There is no public comment before the DNR grants coverage to individual facilities under a registration or general permit.

Status of petitions for general and registration permits

The DNR has not received any petitions to issue new general permits for additional industries. Only one petition has been submitted for a new registration permit: the Department of Commerce petitioned DNR on July 11, 2006, to develop a registration permit for printing facilities in Wisconsin with low actual emissions. The DNR granted this petition request and issued the Type C Registration Permit for Printers on April 20, 2007.

Other registration permit program accomplishments

The registration permit has been very successful in streamlining the permit process for small facilities. Registration permits allow facilities to install or modify new equipment without first getting a permit. Based on conversations with applicants, about a quarter of the facilities applying for coverage under a registration permit mentioned that they were doing so because they wanted to add or modify equipment. These facilities were able to begin their construction projects in about half the time it takes for approval using traditional permits. This also translates into about 25 or 30 construction permits that facilities did not have to apply for or wait to receive, and represents the elimination of hundreds of hours of work by DNR permit staff.

An additional 10 facilities that obtained coverage under the registration permits were brand new. These "greenfield" facilities were able to break ground within 15 days of submitting an application to DNR. At least one company stated that the existence of the registration permit was pivotal in its decision to remain in Wisconsin

rather than relocate to a different state. From a DNR workload perspective, these 10 facilities represent 10 fewer traditional facility-wide construction and operation permits for department personnel to write. This alone is the elimination of about 1,000 hours of permit workload.

One of the most noticeable accomplishments of the registration permits is that they can be very efficiently administered. The personnel currently working on the registration permits consists of one half-time air permit writer and one half-time program assistant who continues to do her regular duties on top of the new registration permit work. Traditional air pollution control operation permits, even for small sources, take many times longer to issue. In general, a full-time permit writer can expect to issue around 10 operation permits a year. Based on this data, in one year the registration permit program and a half-time permit writer were able to eliminate the equivalent of 10 years' worth of permit work of a full-time permit writer.

Other accomplishments are listed below. The registration permit program has been very successful in meeting many of the permit streamlining goals listed in Appendix A, including the following:

- 100 percent of registration permit coverage decisions have been made within the required 15-day timeframe.
- 28 facilities with outstanding State Operation Permit applications have been covered and 19 facilities with outstanding Federally Enforceable State Operation Permit applications have been covered, helping to eliminate this permit backlog.
- 30 facilities previously unknown to the Air Management Program are now covered by a registration permit, reporting information on air pollution emissions and submitting compliance certifications.
- 46 facilities covered under the registration permits are located in the Southeast Region and will keep their VOC emissions below 25 tons per year despite an increase in the major source emissions threshold for these counties.
- Since the registration permits do not expire, each of the facilities covered to date represents the elimination of an operation permit that would need to be renewed.

Other general permit accomplishments

General permits have also been highly successful in meeting permit streamlining goals. The general permits allow facilities flexibility to construct or change out equipment and operate without waiting for construction permit review and issuance. Facilities covered under a general permit are all on a level playing field because they are covered by identical permit requirements.

As with registration permits, the administrative streamlining advantage for the DNR is huge. One permit writer has taken care of the permitting needs of nearly 300 facilities while continuing to do other permit work. This kind of streamlining helps the Air Program meet its permitting commitments and avoid a backlog. It also frees up resources so that the DNR can focus its efforts implementing the many new federal air pollution regulations and ensuring timely permitting and compliance for the larger, more complex air pollution sources.

In addition, the following accomplishments for general permits can be touted:

- 100 percent of general permit coverage decisions have been made within the required 15-day timeframe.
- 60 asphalt plants and 224 rock crushers are covered under general permits, eliminating those facilities from the pool of facilities needing operation permit renewals. As of December 2007, 11 general permits for printers have been issued to 5 printing facilities. (Some facilities have multiple general permits to cover different printing processes.)
- 2 brand-new asphalt plants and 10 rock crushers received coverage under general construction permits, allowing them to begin construction within 15 days of submitting an application.
- 5 printing facilities received general construction permits in lieu of traditional construction permit reducing construction permit workload by 300 hours last year.

Conclusions and recommendations

The registration and general permits have both been very successful in streamlining the air permit process for the facilities that have received coverage under them. These programs have also been highly successful in reducing the permit workload for the Air Management Program, allowing it to meet its statutory obligations with respect to permit issuance while continuing to provide environmental protection, even with a much-reduced workforce. On the whole, registration and general permits are extremely efficient tools for the air permit program.

While there is no evidence that small facilities covered by a registration permit have a greater understanding of their air pollution rules and regulations, there does seem to be a benefit in getting them registered, and submitting compliance reports and emissions inventory reports is an important first step in raising the compliance rates of this category of air pollution sources. The Air Program is considering adjusting compliance inspection and compliance assistance activities under the registration permit program based on the results of the initial round of inspections. However, options for doing so are limited by the funding levels available for this category of sources.

General permits, on the other hand, appear to be at least as good a compliance tool as the traditional, source-specific air permits.

Given the success of these programs it is recommended that the Air Management Program consider expanding the universe of facilities that can qualify for these types of permits. General permits should be developed for other source categories, including, generators, natural gas compression stations and small heating units. The Air Program should also evaluate whether additional registration permits should be issued.

In summary, future recommendations for these programs include:

- Create more compliance assistance tools, such as environmental results programs, for covered facilities.
- Conduct compliance assistance inspections for most facilities covered by the registration permits at the time of initial coverage.
- Evaluate whether additional registration permits should be issued.
- Continue to refine the online permit application system and expand it to all other types of air permits.
- Develop general permits for additional source categories.

Appendix A: Goals for the registration and general permit programs

The registration and general permits were developed through the Air Permit Improvement Initiative (APII), a workgroup created to address industry concerns about permit efficiency in the DNR Air Permit Program. The registration and general permit developers, in conjunction with the APII, put together the following goals for these programs:

- Meet 2003 Wisconsin Act 118 requirements.
- Meet operation permitting obligations for state only sources.
- Provide a simplified permit process for small businesses.
- Provide a consistency in permitting.
- Reduce DNR workload to help manage workforce reductions.
 - Reduce the number of construction permits that need to be written.
 - Reduce the number of permit renewals that need to be written.
 - Move facility from five- or three-year inspection cycle to 10-year inspection cycle.
 - Transfer workload for small businesses from permitting to compliance assistance.
- Allow Wisconsin facilities to remain economically competitive.
 - Reduce the need for construction permitting when environmental and public health risks are very low.
 - Eliminate renewal applications for small facilities.
 - Create flexible permitting options to allow for quick implementation of construction projects.
 - Simplify recordkeeping and compliance requirements.
- Protect the environment.
 - Increase the number of facilities statewide covered under a permit.
 - Eliminate the state operation permit backlog.
 - Provide incentives for facilities in the ozone nonattainment counties to remain below 25 TPY VOC.
 - Increase the number of facilities reporting to the inventory and certify compliance annually.
 - Provide incentives to facilities to reduce emissions so that they can qualify for streamlined permitting approaches.

Appendix B: Who Is Applying for Registration Permits?

The following graphs reflect permit applications received through December 2007.

Figure A-1: Previous Air Permit Status of Facilities Covered Under Registration Permits

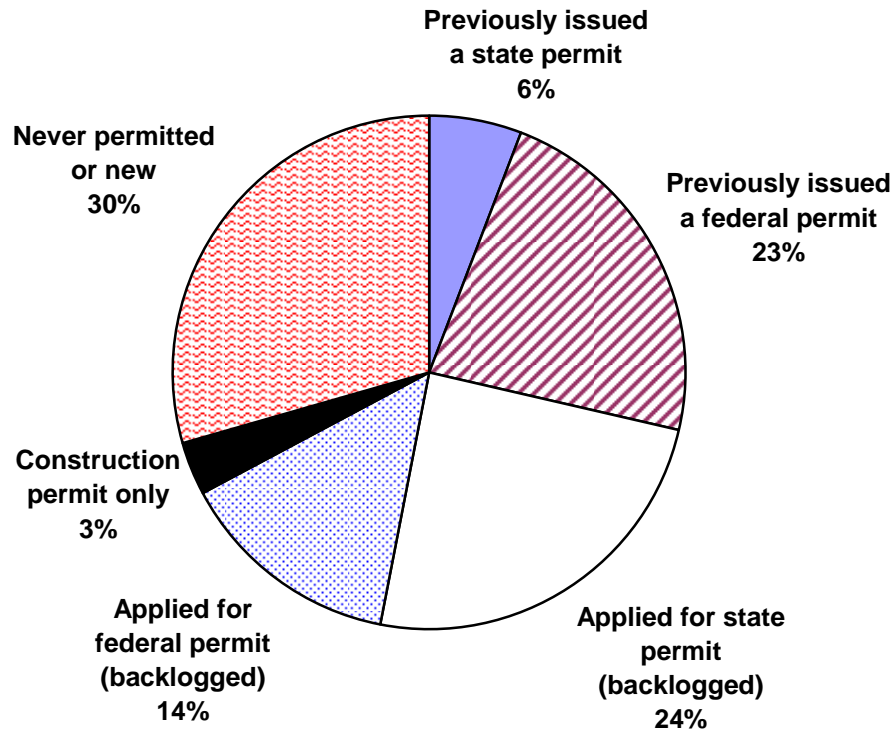
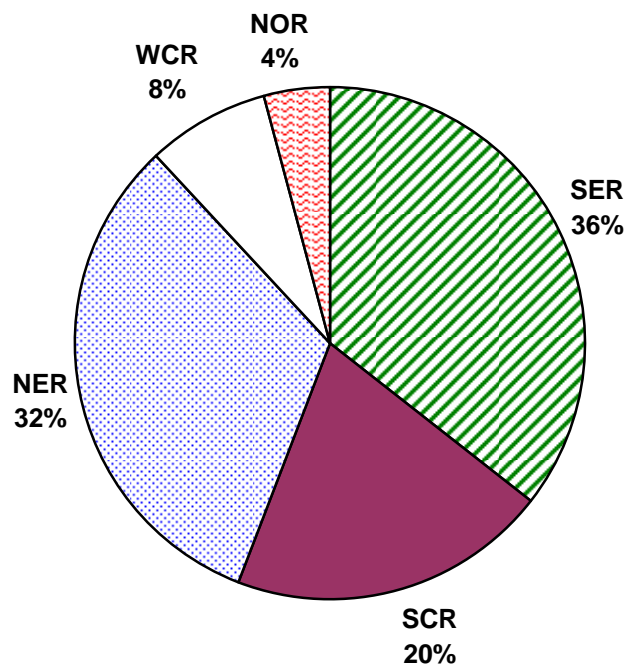
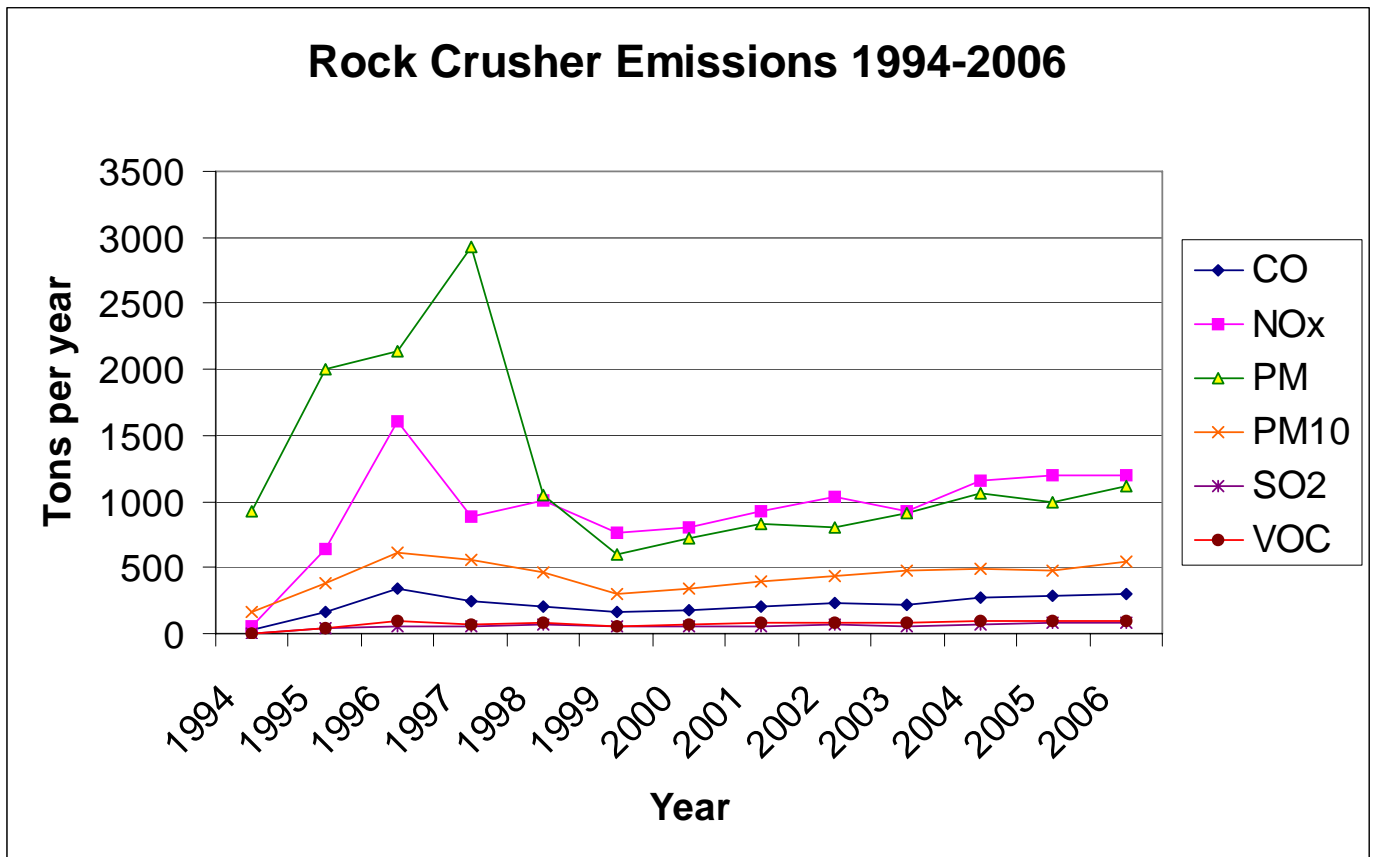


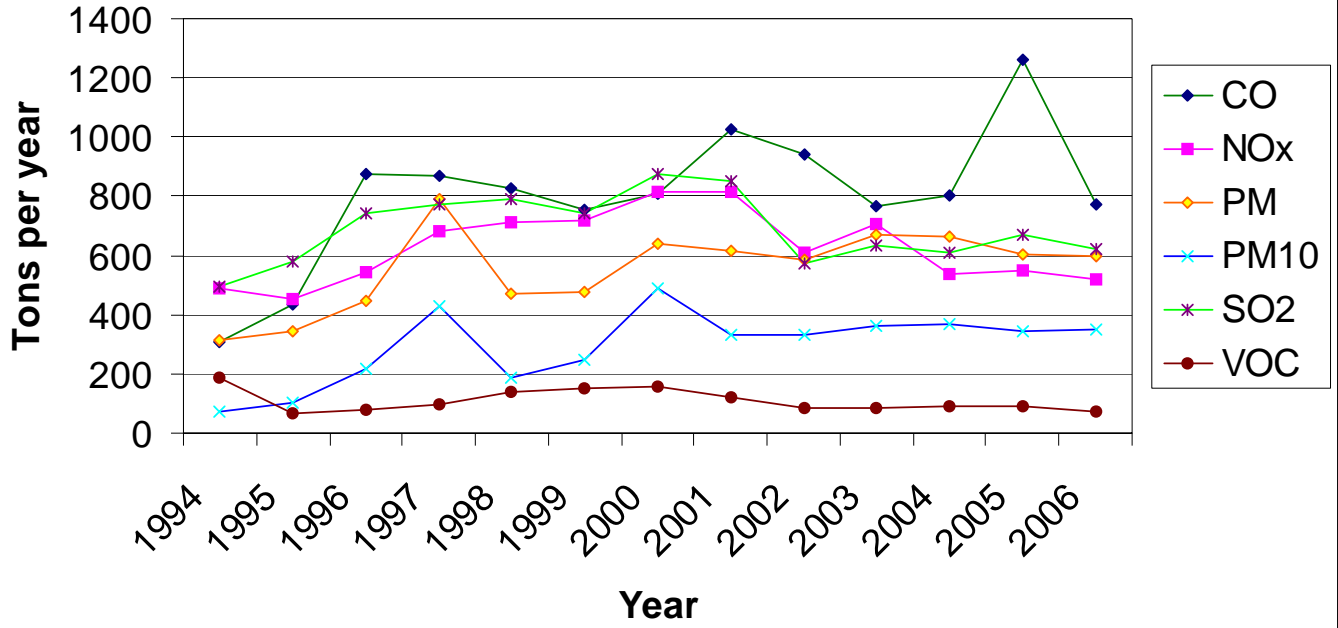
Figure A-2: Location of Facilities Covered Under Registration Permits, by Region



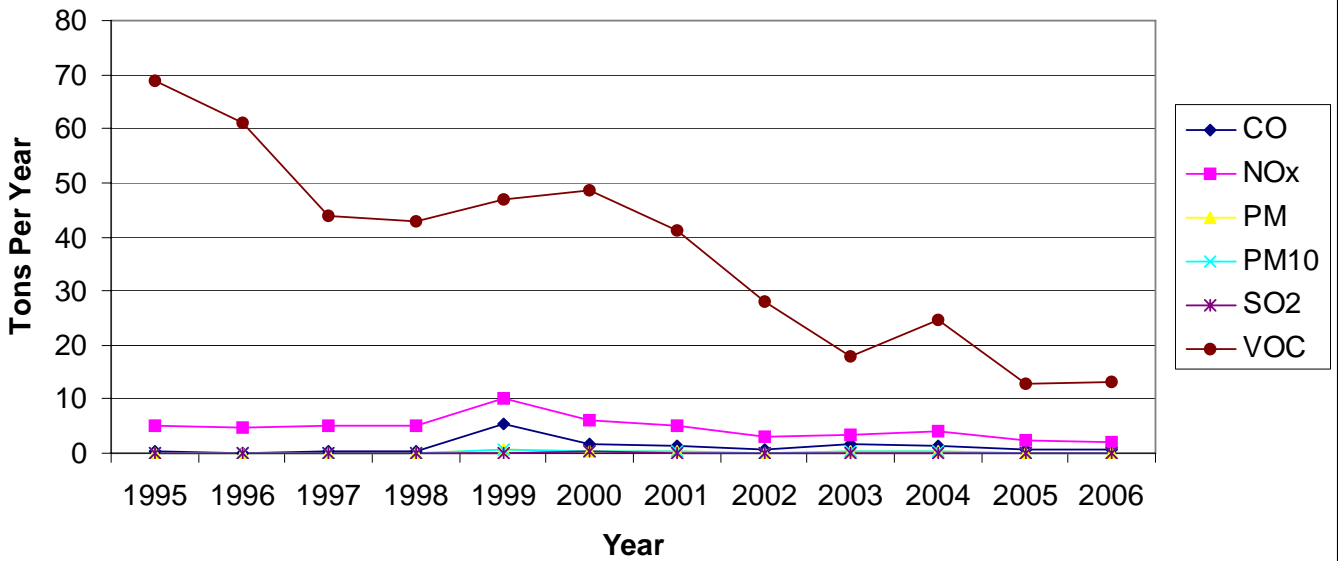
Appendix C: Emissions Trends for Facilities Under General Permits



Asphalt Plant Emissions 1994-2006



Printer Emissions 1995-2006





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