Purpose and Applicability of Air Quality Regulations

Many businesses operate processes and equipment or engage in activities that emit air pollution. Although not all of these processes and activities directly discharge pollutants to the outdoor air through a stack, they do release air pollutants that eventually escape the building and enter the atmosphere. Some typical sources of air pollution that are regulated include coating and degreasing operations; combustion sources, such as boilers and incinerators; and material handling operations, such as concrete and asphalt batch plants. A source is one or more pieces of equipment or processes capable of emitting air pollutants (see Title 326, Article 1, Rule 2, Section 73 of the Indiana Administrative Code [326 IAC 1-2-73]).

The purpose of air quality regulations is to reduce the quantity of air pollutants that, directly or indirectly, enter the atmosphere. The regulations described in this chapter are not specifically aimed at reducing worker exposure to air pollutants in the workplace, but rather at protecting the public and environment from air pollutants. Regulations protecting workers from the inhalation of air pollutants are administered by the Indiana Department of Labor's Indiana Occupational Safety and Health Administration.

Agencies and Their Laws and Rules

The indirect or direct release of air pollutants into the outdoor air is regulated under federal and state statutes and rules. The U.S. Environmental Protection Agency (U.S. EPA) is responsible for developing new regulations that implement the mandates of the federal Clean Air Act. Federal air quality regulations are published under Title 40, Parts 50 through 99, of the Code of Federal Regulations (40 CFR Parts 50-99).

Title 326 of the Indiana Administrative Code contains the state regulations for sources of air pollutants. The Environmental Rules Board adopts air regulations in Indiana, sometimes by incorporating federal rules and sometimes by adopting rules that address air pollution issues specific to Indiana. The Indiana Department of Environmental Management's (IDEM's) Office of Air Quality (OAQ) is responsible for developing state air quality regulations to address federal requirements or special state needs. Air rules are promulgated by the Environmental Rules Board using a public rulemaking process. OAQ is also responsible for processing applications for air permits, as well as enforcing compliance with state and federal air quality requirements.

Chapter **1**

Air Quality Regulations

The intent of this chapter is to provide a basic understanding of the review process for an air permit. Because of the numerous factors that can influence the level of permitting and any permit requirements, all the complexities involved in permitting review cannot be fully addressed in this guide. Therefore, persons intending to engage in activities which may result in air emissions of regulated pollutants are advised they must be in compliance with the Code of Federal Regulations (Subchapter C – Air Programs) and the Indiana statutes and rules (326 IAC) regarding air pollution control.

To address the concerns of small businesses impacted by state and federal air quality regulations, Congress mandated that every state develop a program consisting of three elements: a technical assistance program, an ombudsman, and an advisory panel. In Indiana, IDEM's Compliance and Technical Assistance Program (CTAP) serves as the technical assistance program. CTAP provides free and confidential environmental assistance to small businesses by developing publications that simplify the air quality regulations, offering workshops on a variety of air quality regulatory programs, responding to phone inquiries, and conducting on-site visits.

Overview of Air Permitting

In its effort to minimize the emissions of regulated air pollutants and ensure that sources will operate in accordance with state and federal requirements, IDEM issues various types, or levels, of construction and operating permits. All sources of regulated air pollutants could potentially need a permit from IDEM.

The federal standards set forth in the Clean Air Act as amended in 1990 are the basis upon which Indiana has established emission thresholds and regulations for what are known as the regulated pollutants. For more information on this topic, as well as the criteria pollutants, please refer to IDEM's website at www.idem.IN.gov/airquality/2356.htm.

All sources, except those whose potential emissions are so low as to make them exempt from regulation, must have approval from IDEM's Office of Air Quality (OAQ) before they may construct or operate any source of air pollutants or any air pollution control equipment. In addition to new construction, any construction or operational changes that have the potential to increase emissions at existing sources may require a permit modification or source modification. The greater the expected emissions at a new or modified source, the higher the level of permit approval required.

The new source performance standards establish emissions limits which apply to new or modified sources. For more information, please refer to U.S. EPA's Technology Transfer Network – Air Toxics website at www.epa.gov/ttn/atw.

Gaining OAQ approval could be as simple as registering as a source of air pollutants, or it could be more complex, requiring the source to obtain a state- or federal-level construction permit or modification approval. Some levels of construction approval for smaller sources automatically allow the source to operate when construction is completed. In other situations, the source must obtain, or be transitioned to, an operating permit after construction is completed and before operation may begin.

Depending on its potential to emit (PTE), a source can be either:

- Exempt from any permitting requirements (the PTE is fairly low so the source is not required to obtain a permit or any other pre-approval from OAQ prior to construction and operation), although the operation of the source would still be subject to all applicable regulations;

- Subject to registration (the PTE is high enough to require that the source register with OAQ as a source of air pollution, but not so high as to require that it obtain a detailed, source specific permit), requiring that the source register with IDEM prior to construction and operation; or

- Subject to permit requirements (the PTE is high enough to require that the source obtain some level of permit prior to constructing either the units that will be generating the air pollutants, or any pollution control equipment). Once construction is completed, the source will also need an operating permit prior to operating the equipment. The construction and operating permit process can run concurrently. Once a facility has received their permit, they are eligible to construct emission units and can advise IDEM through the affidavit of construction when construction of emission units is complete. However, those generally smaller sources which may be eligible for some types of Source Specific Operating Agreement may both construct and operate under that agreement, instead of obtaining separate construction and operating permits.

While the PTE is perhaps the most important factor in determining if a source needs a permit, and what type, it is not always the only factor. Location—whether the source is, or will be, located in an attainment or non-attainment area—can be a factor. In addition, there are sources that are identified in the rules as being automatically required to be permitted at a specific level. There can also be special requirements regarding specific types of emissions, such as the various levels of control technology required on volatile organic compound emissions.

For detailed information on what IDEM considers a "source" regarding air permitting, and a discussion of PTE, please refer to IDEM's Nonrule Policies website at www.idem.IN.gov/4694.htm.

What Types of Air Permits Does IDEM Issue?

For new construction of relatively small emission sources or modifications to existing small sources, a state air permit is required unless the source or modification has such a low level of emissions that it is exempt from permitting. New construction of relatively large emission sources or modifications to existing major sources are subject to federal air permitting requirements. In Indiana, those federal permits are issued by IDEM.

The requirements for large emission sources may be stricter than for small sources, so it is important to determine what type of permit your project requires. It is possible, in many cases, for a source to agree to emission limits in its permit that will ensure that it remains a small source, and remains subject to the less complex permitting requirements than those required for larger sources.

For more information, please refer to IDEM's website at www.idem.IN.gov/airquality/2356.htm.

The Differing Definitions of State and Federal Construction

State Construction

For purposes of state New Source Review (for registrations or any level of New Source Construction Permits) the applicant may install building supports and foundations, lay underground piping, erect storage structures, dismantle existing equipment, order equipment or control devices, initiate off-site fabrication or temporarily store equipment on-site other than where the permanent installation will occur. However, applicants may not fabricate, erect, or install the equipment that constitutes an emission unit or air pollution control equipment at the location intended for the use of that equipment until a permit has been issued (see 326 IAC 1-2-21).

Federal Construction

The federal New Source Review program is much more stringent. It only allows for limited activities on-site prior to commencement of construction. Activities allowed may include: planning, ordering of equipment and materials, site-clearing, grading and on-site storage of equipment and materials. However, all of the above activities are at the owner's risk. Activities of a permanent nature are prohibited. These include but are not limited to: installation of building supports and foundations, paving, laying underground pipe, and construction of permanent storage structures. Any construction activities of a permanent nature which take place prior to the issuance of the permit could result in an enforcement action (see 326 IAC 2-2-1 and 326 IAC 2-3-1[d]).

Application Requirements – Steps to Take

Some of the things a new source should do to comply with the requirements of New Source Review include (but are not limited to):

- Thoroughly complete the air construction permit application, taking care to not omit any information that is needed for IDEM staff to calculate the PTE for the source (insufficient information for determining the level of permitting required can prolong the permitting process);
- Submit two copies of the application to IDEM and also, within 10 days of the submission of the application, place a copy on file at the public library in the county in which the permitted activity is to take place. Take care not to exceed the limitations on construction prior to obtaining a registration or permit approval; and
- Once a construction permit is issued, the permittee must begin construction within 18 months, and all sources building under a new source construction permit must submit an affidavit of construction upon the completion of construction, after which IDEM transitions the source into an operating permit program.

Time Frames – What to Expect

IDEM has 60 days to process a registration, while New Source Construction Permits will be processed within 120 days, and federal construction permits within 270 days. Federal construction permits must be reviewed by the U.S. Environmental Protection Agency prior to issuance. If IDEM needs any additional information to process the application, it will contact the applicant with a request for additional information. Any time that passes while IDEM is awaiting a response will not be counted against IDEM's allotted permit processing time frames.

Letters of exemption and registrations do not require a public notice period. On the other hand, all draft permits must be made available for a 30-day public comment period. The applicant or the public may also request a hearing. An additional 45 days is added to the time frame if IDEM conducts a public hearing on a construction permit application.

Fees will be assessed and billed once IDEM has made a final determination as to the level of permitting that will be required.

Operating Permits

All new sources that obtain construction permits from IDEM transition into an operating permit program following the completion of construction and submittal of the affidavit of construction. In addition, IDEM has established two alternative operating permit programs—the Source Specific Operating Agreement Program and the Permit-by-Rule Program, which will be discussed later.

For more detailed information on these topics, please refer to the Additional Forms and Information section on IDEM's website at www.idem.IN.gov/airquality/2495.htm.

Amendments or Modifications to Existing Permits

Existing sources that intend to make changes to production processes, emission units, or air pollution control equipment may need IDEM approval in the form of an administrative amendment, permit modification, or source modification. Also, whenever a permitted source of air pollutants undergoes a change of operators or ownership, it can have an impact on permitting status. Some permits must be transferred over by IDEM to the new ownership. Other permits may become void and require the new owner to reapply for permit coverage. Such permit transfers are required to ensure that the new owner becomes the legally responsible party for the permitted source or facility.

Construction Approval for Existing Sources: Who May Need a Change to an Operating Permit?

Existing sources sometimes wish to change or add an emission unit(s) or pollution control unit, or otherwise alter their manner or scale of operations. These changes can sometimes be so insignificant as to be exempt from IDEM approval requirements, or may only require that the source notify IDEM of the changes through the administrative amendment process.

Other Forms of Authorization

Not all sources of air pollutants need to be permitted. The table below shows the types of authorization required and exemptions offered for six criteria pollutants regulated under the National Ambient Air Quality Standards, as well as for hazardous air pollutants (HAPs) and greenhouse gases (GHGs). The Clean Air Act Amendments of 1990 List of Hazardous Air Pollutants can be reviewed at U.S. EPA's website at www.epa.gov/ttn/atw/orig189.html. For additional information and a complete listing of greenhouse gases, review U.S. EPA's website at www.epa.gov/climatechange/ghgemissions/gases.html.

Type of Authorization Required			
Pollutant	Exemption (tons/year)	Registration (tons/year)	Construction (tons/year)
Particulate Matter and PM_{10}	< 5	≥ 5 and < 25	≥ 25
Sulfur Dioxide	< 10	≥ 10 and < 25	≥ 25
Nitrogen Oxide	< 10	≥ 10 and < 25	≥ 25
Volatile Organic Compounds[1]	< 10	≥ 10 and < 25	≥ 25
Volatile Organic Compounds[2]	< 5	≥ 5 and < 25	≥ 25
Carbon Monoxide	< 25	≥ 25 and < 100	≥ 100
Lead	< 0.2	≥ 0.2 and < 5	≥ 5
Hazardous Air Pollutant[3]	< 10	- - - - -	≥ 10
Hazardous Air Pollutants[4]	< 25	- - - - -	≥ 25
Greenhouse Gases	- - - - -	- - - - -	≥ 100,000

[1] Sources not required to use air pollution control equipment to comply with provisions of 326 IAC Article 8
[2] Sources required to use air pollution control equipment to comply with provisions of 326 IAC Article 8
[3] One hazardous air pollutant
[4] More than one hazardous air pollutant

For more information on the Source Specific Operating Agreement Program, please refer to the Additional Forms and Information section on IDEM's website at www.idem.IN.gov/airquality/2495.htm.

A registration incorporates the documentation needed by IDEM for both pre-construction and operation periods; therefore, separate documentation is not required to be submitted for each period.

Additionally, some sources that consist of only certain activities such as space and process heaters, heat treat furnaces, or boilers using natural gas with heat input of ten million British Thermal Units (BTUs) per hour or less are exempt from permitting as an insignificant source of air pollution. No applications to IDEM are required for exemptions.

Some sources with a PTE which exceeds one of the thresholds listed above can opt to obtain and comply with one of the following enforceable Source Specific Operating Agreements per 326 IAC 2-9:

- 326 IAC 2-9-2.5 or 326 IAC 2-9-3 for surface coating operations
- 326 IAC 2-9-4 for woodworking operations
- 326 IAC 2-9-5 for abrasive cleaning operations
- 326 IAC 2-9-6 for grain elevators
- 326 IAC 2-9-7 for sand and gravel operations
- 326 IAC 2-9-8 for crushed stone processing plants
- 326 IAC 2-9-9 for concrete batch operations
- 326 IAC 2-9-10 for coal mines and coal preparation plants
- 326 IAC 2-9-11 for automobile refinishing operations
- 326 IAC 2-9-12 for degreasing operations
- 326 IAC 2-9-13 for external combustion sources
- 326 IAC 2-9-14 for internal combustion sources

Indiana Air Emissions Reporting System

The federal Clean Air Act requires that each state maintain an inventory of air pollution emissions for certain facilities and update this inventory every year.

Many Indiana businesses report emissions data by the emission reporting rule (326 IAC 2-6). An emissions statement contains the amounts of nitrogen oxides, volatile organic compounds, sulfur dioxide, carbon monoxide, particulate matter that is 10 microns or smaller and 2.5 microns or smaller, ammonia, and lead or lead compounds released to the air each year. IDEM's Office of Air Quality uses the reported emissions for many purposes including air quality planning and to calculate fees for Title V permits (Part 70 Permit Program, 326 IAC 2-7).

Common Questions and Answers on the Air Emission Reporting System

Do I have to report?

You will only report regularly if you are a Title V source, a source that emits 25 tons or more of VOC or NO_x in Lake or Porter counties, or a source that emits 5 tons of lead or more.

How often will I have to report?

Sources located in Lake, LaPorte and Porter counties that emit 25 tons or more of VOC or NO_x must report annually. Sources will have to report annually only if they have the potential-to-emit VOC or PM_{10} at 250 tons or more per year, or CO, NO_x or SO_2 at 2,500 tons or more per year. All other sources must report one year's worth of data once every three years.

When must I report?

All sources must report by July 1st of their required reporting year, but may report earlier.

Do I have to report hazardous air pollutants?

You do not have to report hazardous air pollutants on a regular basis. The rule does allow for IDEM to request this information, but reporting hazardous air pollutants was not made a regular reporting requirement.

When would I have to report hazardous air pollutants?

You only have to report hazardous air pollutants when requested by IDEM. The rule allows IDEM to require that this information be reported when it is to be used for a study of an area, an industry, to address public complaints, to better develop modeling inventories, to reply to information requests, and to verify Toxic Release Inventory information.

Who do I contact for more information?

For more information, call IDEM's Office of Air Quality at (800) 451-6027, ext. 3-0178 or (317) 233-0178.

Asbestos

The Indiana Department of Environmental Management works to ensure that people working with asbestos are properly trained and that individuals performing asbestos abatement comply with rules governing the work activity. These rules are designed to protect the individual employee performing asbestos abatement work and the general public that occupy the area or building in which the work occurs.

Why Regulate Asbestos?

Asbestos is a mineral that has been used in more than 3,000 different products over the last 100 years for its insulating, acoustical, and fire protective properties. Common products that contain asbestos are pipe insulation, floor and ceiling tile, spray-on insulation, boiler wrap insulation, and electrical appliances, such as toasters and hair dryers. Asbestos-containing materials are frequently encountered in a wide range of environments, including, but not limited to, industrial and commercial facilities, schools and universities, and residential properties.

Asbestos is actually the name of a group of minerals that share similar chemical and physical properties. The most common of these minerals are Chrysotile, Amosite, and Crocidolite. The primary characteristic that makes asbestos a concern is its ability to separate into microscopic needle-like fibers. Once these fibers become airborne (usually by disturbing the product in which they are contained), they are easily inhaled into the

lungs. Once in the lungs, these needle-like fibers can penetrate the lung tissue and the lining that holds the lung in place (pleura). This begins the process that can eventually lead to one of the three diseases most commonly associated with asbestos:

- Asbestosis—A scarring and hardening of the lung tissue
- Lung Cancer—Malignant tumor of the lung tissue
- Mesothelioma—A scarring or malignant tumor of the lung lining

All of these diseases can lead to death. Exposure to asbestos is also associated with increased incidences of gastrointestinal cancer. Further, epidemiological studies indicate that the risk of lung cancer among exposed workers who smoke cigarettes is greatly increased over the risk of lung cancer among non-exposed smokers or exposed nonsmokers. Therefore, smoking among asbestos workers is strongly discouraged.

The key to preventing occupational illnesses/diseases involving asbestos is to initially recognize products that may contain asbestos and then train, protect, and equip employees to work with these products in a safe manner.

Who Is Exposed?

Nationwide, an estimated 1.3 million employees in construction and general industry potentially face significant asbestos exposure on the job. Heaviest exposures occur in the construction industry, particularly during building renovation or demolition activities where asbestos is disturbed or removed. Employees may also be exposed during custodial/maintenance activities in a building containing asbestos, during the manufacture of asbestos products (such as textiles, friction products, insulation, and other building materials), and during automotive brake and clutch repair work.

General Requirements

The Indiana Occupational Safety and Health Administration is responsible for the enforcement of asbestos regulations listed in Title 29 of the Code of Federal Regulations, Sections 1910.1001 and 1926.1101. IDEM's Office of Air Quality issues approvals to individuals performing asbestos-related work.

Approval of Asbestos Training Courses

In order for individuals performing asbestos-related work to become accredited, they must successfully complete a designated training course that is recognized or approved by the U.S. EPA or IDEM's Office of Air Quality. For the 32-hour asbestos abatement worker, 40-hour contractor/supervisor, 24-hour project designer, 24-hour inspector, and 16-hour management planner courses, Indiana course sponsors must submit an appli-

cation and other specified materials to IDEM's Office of Air Quality and receive approval before they may teach the course in Indiana. Specifically, course sponsors must submit all course materials, instructors' credentials, and a completed application form with the appropriate fee.

When a course sponsor has satisfied Indiana's minimum requirements, it receives "Contingent Course Approval" and is able to provide asbestos-related training within the state of Indiana. Sponsors must then pass an on-site review of their course before receiving "Full Course Approval."

Accreditation of Workers

Asbestos abatement workers, supervisors, project designers, inspectors, and management planners must successfully complete the appropriate initial and refresher training requirements that are required by IDEM's Office of Air Quality, and become accredited before working in Indiana. Individuals who work as abatement workers, supervisors, project designers, building inspectors, or management planners must submit proof that they have attended and successfully completed their respective training courses. Asbestos inspectors, management planners, and project designers must also satisfy asbestos-related work experience requirements to become accredited and maintain accreditation to work in the state.

Licensing of Asbestos Abatement Contractors

Other than specified exempt licensed trade groups (e.g., electricians, mechanical contractors, plumbers, residential builders, or residential maintenance/alteration contractors), any individual or company within Indiana that is hired to remove or encapsulate friable asbestos on the premises of another must be licensed by IDEM's Office of Air Quality before engaging in any asbestos abatement activities. To become licensed, a contractor must have workers' compensation insurance and proof that all workers and supervisors have been accredited before receiving their annual licenses. The designated exempt licensed trade groups are allowed to remove or encapsulate friable asbestos materials without obtaining an asbestos abatement contractor's license provided the job they are performing is incidental to their primary license trade, and it does not exceed 260 linear feet or 160 square feet of friable asbestos-containing materials.

Processing of Asbestos Abatement Project Notifications

Contractors that perform friable asbestos removal or encapsulation work in Indiana must provide project notifications indicating the starting and ending dates and other job-related information to IDEM's Office of Air Quality within a specified time frame. IDEM's Office of Air Quality requires project notification 10 days prior to any non-emergency asbestos abatement project exceeding 10 linear feet or 15 square feet, or both, of friable asbestos materials. A one-percent project notification fee must also be included.

Emergency asbestos abatement projects must provide notification by phone, fax, or mail prior to starting the projects, followed by submission of the original written project notification.

Compliance Investigations

Asbestos inspectors from IDEM's Office of Air Quality conduct on-site evaluations of the abatement activities of contractors and also respond to complaints or referrals involving improper work practices or procedures during asbestos abatement or disturbance activities.

Employer's Responsibilities

If your work involves asbestos-containing materials, it is important to recognize an employer's responsibilities under the Indiana Occupational Safety and Health Administration concerning exposure monitoring, regulated areas, engineering controls and work practices, respiratory protection, protective clothing, hygiene facilities for employees, communication of the hazards associated with asbestos in construction activities, housekeeping, medical exams, and record keeping.

Building Owner's Responsibilities

- Building must be surveyed by an asbestos inspector.
- Builders must maintain asbestos-containing materials in a safe manner.
- Builders must have all employees appropriately trained.
- Builders must notify all contractors or parties who may contact or be exposed to asbestos-containing materials at your facility.

For more information on asbestos training or asbestos abatement activities, please contact IDEM's Office of Air Quality at (317) 233-3861 or (800) 451-6027, ext. 3-3861.

For More Information

Indiana Air Regulations	www.IN.gov/legislative/iac/title326.html
Air Permits	www.idem.IN.gov/airquality/2356.htm
Compliance and Technical Assistance Program (CTAP)	CTAP provides free and confidential environmental assistance to Indiana businesses. CTAP is a nonregulatory program. CTAP staff are available weekdays to answer your environmental questions regarding air, water, and waste regulations, pollution prevention, and recycling. CTAP offers a Quality Assurance Guarantee that IDEM will not issue a Notice of Violation assessing a gravity-based penalty against a regulated entity that has sought out, received, and relied upon CTAP's written compliance assistance prior to the alleged violation. (800) 988-7901 (toll free in Indiana) or (317) 232-8172 www.idem.IN.gov/ctap
Emissions Reporting Program	www.idem.IN.gov/4587.htm

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