Source Definitions Defining a Part 70 "Major Source" and a Non-Part 70 "Source"

1. Introduction

This manual discusses how the Office of Air Quality (OAQ) determines whether two (2) or more sources should be combined into one (1) "source" or one (1) "major source."

2. When should a source determination be done?

A source determination should be done when:

- Two (2) or more sources have a common owner or operator and are less than two (2) miles apart.
- There is a support relationship between two (2) or more sources having a common owner.
- There is a significant support relationship between two (2) or more sources.
- A new source is moving within two (2) miles of an existing source and they have the same owner or operator.
- A new source is moving into the general area of an existing source and will be providing raw material and services or will have some other relationship with that source.
- An on-site contractor or the contractee disagrees with being included as part of the same "major source."
- A source determination issue is raised by the source or any third party.
- 3. Rules Involved
 - 326 IAC 1-2-73 defines "source" for non-Part 70 sources.
 - 326 IAC 2-7-1(22) defines "major source" for Title V and FESOP sources.

4. Source Definition Components

Regardless of the rule being used, in order for two (2) or more sources to be considered one (1) source, they must meet all three (3) of the following criteria:

- (1) The sources must be under common ownership or common control.
- (2) The sources must have the same two-digit Standard Industrial Classification (SIC) Code or one (1) of them must serve as a support facility for the other.
- (3) The sources must be located on contiguous or adjacent properties.

5. How to Request a Source Determination

To request a source determination, the permit reviewer will fill out a source collocation checklist and send it to a Technical Environmental Specialist, along with the name, telephone number, and e-mail address for the permit application

contact. The Technical Environmental Specialist will review the checklist and seek any additional information. He/she may work directly with the applicant's contact person or ask the reviewer for additional information. When enough facts have been gathered to make a source determination, the Technical Environmental Specialist will prepare source determination wording that the permit reviewer can paste into the Technical Support Document (TSD) or addendum. Section A of the permit should include the result of the source determination, even if the sources were not combined.

6. Common Ownership or Common Control

Common ownership means the sources are owned or operated by the same person. A corporation is considered a "person" under Indiana law. Multiple sources having a common corporate owner are considered as owned by the same "person." A source that is a wholly owned subsidiary of another source is owned by that source. If one entity owns more than 50% of a business, it is the owner.

For purposes of major source determinations, the U.S. EPA and IDEM have held that common ownership is common control. IDEM's Nonrule Policy Document (NPD) 005 applies to "major sources" and also gives guidance for source determinations under 1-2-73. It suggests the use of two (2) tests to determine if common control exists in situations where there is no common ownership.

- (1) The "two-pronged test" Determine if one (1) source is an auxiliary activity, meaning:
 - Directly serving the purpose of another primary activity.
 - The owner or operator of the primary activity has a major role in the day-to-day operations of the auxiliary activity.
- (2) The "but/for test" The auxiliary activity would not exist without the needs of the primary activity. If all or a majority of the output of the auxiliary activity is consumed by the primary activity the "but/for test" is satisfied.

The U.S. EPA looks at the relationship between the sources, including whether contracts create support/dependency relationships. <u>Guidance</u> in this area comes from a U.S. EPA Region 7 letter, dated September 18, 1995, to Peter R. Hamlin of the Iowa Department of Natural Resources. The Hamlin letter sets out a "not exhaustive" list of questions to explore when determining whether two (2) sources are under common control. These questions include:

- Do the facilities share common workforces, plant managers, security forces, corporate executive officers, or board of executives?
- Do the facilities share equipment, other property, or pollution control equipment?
- What does the contract specify with regard to pollution control responsibilities of the contractee?

- Can the managing entity of one facility make decisions that affect pollution control at the other facility?
- Do the facilities share common payroll activities, employee benefits, health plans, retirement funds, insurance coverage, or other administrative functions?
- Do the facilities share intermediates, products, byproducts, or other manufacturing equipment?
 - Can the new source purchase raw materials from and sell products or byproducts to other customers?
 - What are the contractual arrangements for providing goods and services?
- Who accepts the responsibility for compliance with air quality control requirements?
- What is the dependency of one facility on the other?
 - If one shuts down, what are the limitations on the other to pursue outside business interests?
- Does one operation support the operation of the other?
- What are the financial arrangements between the two entities?

7. On-site Contractors

IDEM's NPD 006 applies to on-site contractors. IDEM determined that an onsite contractor is presumed to be part of the primary source located on the property if the contractor provides a majority of its goods or services to the primary source. A primary source or on-site contractor can rebut this presumption by establishing that the on-site contractor does not provide the majority of its goods or services to the primary source.

The U.S. EPA takes a similar view regarding on-site contractors. On May 29, 2001, the U.S. EPA Office of Air Quality Planning and Standards (OAQPS) sent a letter to John E. Hornbeck, Director of Kentucky's Division of Air Quality (DAQ), finding that Gallatin Steel and its on-site contractor, Heckett MultiServ, were one "major source." The U.S. EPA noted all of Gallatin's slag is processed by Heckett and they do not process slag for any other source. In addition, the quality and quantity of slag is controlled by Gallatin and directly effects the emissions from Heckett's processing facility.

8. SIC Codes

The Standard Industrial Classification (SIC) Code is based on the source's primary activity or product. Although Occupational Safety and Health Administration (OSHA) started using the North American Industry Classification System (NAICS), a 6-digit industry grouping system in 2003. IDEM's rules still refer to the SIC Code Manual. The <u>Standard Industrial Classification Code</u> Manual, 1987 is still available through OSHA.

The SIC Code Manual has different divisions for activities like agriculture, mining, manufacturing, wholesale trade, etc. Each two-digit code is a major group. Each four-digit code is a specific type of establishment. The source SIC code determination cannot always be relied on. The code given by the source must be checked and a determination must be made as to whether or not it represents the principal product or activity of the source.

For example, a source making aluminum ingots has a four-digit SIC Code of 3334 for Primary Production of Aluminum. It has a two-digit code of 33 for steel works, blast furnaces, as well as rolling and finishing mills performing smelting, refining, rolling, drawing, alloying, casting, and manufacturing of metal products and/or coke.

8. Support facility

If at least fifty percent (50%) of the output of the support facility is dedicated to the source, a stationary source (or a group of stationary sources) is considered a support facility, though the rule does not define how to measure the output. Sources making more than one (1) product or providing more than one (1) service have given IDEM their output by identifying the total weight of different products, the sale prices, and even the number of units. Since output is a measure of the work being done, the best measurement will be the one best representing the work the facility put into each type of output.

9. Contiguous or adjacent properties

The following definitions are given:

- Contiguous is defined as uninterrupted in time, sequence, substance, or extent.
- Adjacent is defined as close to, lying near.

In order to determine if two (2) or more sources are adjacent, OAQ looks at both the distance and interaction between the sources. The U.S. EPA has a similar view on how to interpret "adjacent." In a May 21, 1998 Region 8 letter to Lynn Menlove of the Utah DAQ, the U.S. EPA noted that whether or not two (2) sources are adjacent must be considered on a case-by-case basis. There is no set measurement or distance. The case-by-case consideration must relate to the common sense notion of a source. The U.S. EPA looks at the relationship between the two sources in much the same way as under the Hamlin letter for determining common control.

10. Examples of Source Determinations

Decatur Plastic

Decatur Plastic Product Inc.'s Flocking Division plant is located approximately three (3) miles from Decatur Plastic Product Inc.'s existing injection molding plant. Both plants have the two-digit SIC Code. Approximately twenty percent (20%) of the parts produced at the injection molding plant will be sent to the new flocking plant for processing. Most of the parts processed at the flocking plant come from sources other than the injection molding plant.

OAQ examined whether the two (2) sources are actually one (1) "major source" as defined at 326 IAC 2-7-1(22). In order for these two (2) plants to be considered one (1) "major source," they must meet all three (3) of the following criteria:

- (1) The plants must be under common ownership or common control.
- (2) The plants must have the same two-digit SIC Code or one must serve as a support facility for the other.
- (3) The plants must be located on contiguous or adjacent properties.

The two (2) plants have the same owner, so the first criterion is met. The plants have the same two-digit SIC code, so the second criterion is met. OAQ determined the plants are not located on contiguous or adjacent properties. The plants will operate independently of each other. Twenty percent (20%) of the product from the injection molding plant will go to the flocking plant, but this will be less than half of the total parts the flocking plant will process. If the support relationship between the two (2) plants changes significantly, OAQ may need to re-evaluate this determination. Therefore, the term "source" in the permit documents refers only to Decatur Plastic Products, Inc., Flocking Division.

Aventine Ethanol and Consolidated Grain & Barge

The proposed Aventine ethanol plant will be located adjacent to Consolidated Grain & Barge's (CGB) existing grain elevator at the Port of Indiana Maritime Center (the Port). OAQ examined whether these two (2) plants should be considered one (1) "major source" as defined at 326 IAC 2-7-1(22). In order for these two (2) plants to be considered one (1) "major source," they must meet all three (3) of the following criteria:

- (1) The plants must be under common ownership or common control.
- (2) The plants must have the same two-digit SIC Code or one must serve as a support facility for the other.
- (3) The plants must be located on contiguous or adjacent properties.

The owner of the proposed Aventine ethanol plant (129-00051) has entered into an agreement with CGB. Under the agreement, CGB will send corn to the Aventine plant, mainly from CGB plant number 129-00014 (Plant 14) located at the Port adjacent to the proposed Aventine site. Plant 14's current output includes milo, wheat, soybeans, and corn, although at least ninety percent (90%) of its current total output is corn. CGB estimates that ninety-nine percent (99%) of the corn output from Plant 14 will go directly to Aventine. CGB may also provide corn to Aventine directly from other CGB plants or even purchase it from other companies and ship it directly to Aventine.

The Aventine plant will produce ethanol and, as a by-product, Dry Distillers Grain with Solubles (DDGS). Aventine will ship out some ethanol and DDGS by rail and truck; however, CGB will be responsible for loading all the ethanol and DDGS being shipped by barge using facilities at Plant 14.

Under the agreement between Aventine and CGB, CGB transferred to Aventine the rights to lease 116 acres at the Port. The Aventine ethanol plant will be

constructed at this site. In exchange for the lease rights, CGB will be the exclusive grain originator and DDGS export marketer for the Aventine plant, as well as the sole provider of ethanol and DDGS loading at the site.

IDEM's NPD Air-005, discusses how the relationship between sources, though not commonly owned, can show that the sources are under common control. The first test looks at whether one source is an auxiliary activity which directly serves the purpose of a second source, where the second source has a major role in the day-to-day operation of the auxiliary source. The U.S. EPA's Hamlin letter sets out a "not exhaustive" list of questions to explore when determining whether two (2) sources are under common control. Two (2) of those questions are pertinent here:

- (1) Do the facilities share intermediates, products, byproducts, or other manufacturing equipment?
- (2) Can the new source purchase raw material from and sell products or byproducts to other customers?

Aventine and CGB Plant 14 will share products, corn and ethanol, as well as a byproduct, DDGS. Aventine must purchase all of its corn from CGB and must allow CGB to market all of its DDGS being exported. In addition, Aventine relies on Plant 14 to provide all ethanol and DDGS barge loading using Plant 14's equipment. The dependency of the Aventine plant on Plant 14's grain output and loading facilities, as well as the other contractual obligations, supports a finding that the two (2) plants are under common control.

The plants have different two-digit SIC codes. The Aventine plant belongs to the two-digit Major Group 28, for Chemicals and Allied Products. CGB Plant 14 belongs to the two-digit Major Group 51, for Wholesale Trade-Nondurable Goods. However, Plant 14 will be sending more than fifty percent (50%) of its total output to the Aventine plant. Pursuant to 326 IAC 2-7-1(22), Plant 14 is a support facility to the Aventine plant.

The two (2) plants will be located on adjacent properties, so the third and final part of the "major source" definition is met. OAQ found the proposed Aventine ethanol plant and CGB Plant 14 to be one "major source."

11. 326 IAC 1-2-73 "Source" definition

A "source" is defined as an aggregation of one (1) or more stationary emission units located on one (1) piece of property or on contiguous or adjacent properties that are owned or operated by the same person (or by persons under common control) and belong to a single major industrial grouping. For purposes of defining a source, two (2) or more contiguous or adjacent properties shall be considered part of a single major industrial grouping if all of the pollutant emitting activities at such contiguous or adjacent properties belong to the same major group (i.e., all having the same two-digit SIC code as described in the Standard Industrial Classification Manual, 1987). Any stationary source (or group of stationary sources) supporting another source, where both are under common control of the same person (or persons under common control) and are located on contiguous or adjacent properties, shall be considered a support facility and part of the same source regardless of the two -digit SIC code for that support facility. A stationary source (or group of stationary sources) is considered a support facility to a source if at least fifty percent (50%) of the output of the support facility is dedicated to the source. A source does not include mobile sources, non-road engines, or non-road vehicles.

12. 326 IAC 2-7-1 "Major Source" Definition

A "Major source" is defined as any stationary source or any group of stationary sources described within this section. For purposes of clauses (B) and (C), the term shall include any group of stationary sources located on one (1) or more contiguous or adjacent properties that are under common control of the same person (or persons under common control) and belong to a single major industrial grouping. In addition, for the purposes of defining "major source" in clause (B) or (C), a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of stationary sources on contiguous or adjacent properties belong to the same major group (i.e., having the same two-digit code) as described in the Standard Industrial Classification Manual, 1987. For purposes of clauses (B) and (C), any stationary source (or group of stationary sources) supporting another source, where both are under common control of the same person (or persons under common control) and are located on contiguous or adjacent properties, shall be considered a support facility and part of the same source regardless of the twodigit SIC code for that support facility. A stationary source (or group of stationary sources) is considered a support facility to a source if at least fifty percent (50%) of the output of the support facility is dedicated to the source.

This term includes the following:

(A) A "major source" under Section 112 of the CAA, which is defined as follows:(i) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate:

(AA) ten (10) tons per year (tpy) or more of any hazardous air pollutant having been listed in Section 112(b) of the CAA;(BB) 25 tpy or more of any combination of such hazardous air pollutants; or

(CC) such lesser quantity as the U.S. EPA may establish by rule. (ii) Notwithstanding item (i):

> (AA) emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are "major sources;" and (BB) research and development activities may be considered separately for purposes of determining whether a "major source" is present, and need not be aggregated with collocated stationary sources unless the research and development activities contribute

to the product produced or service rendered by the collocated sources in a more than de minimis manner.

(iii) For radionuclides, "major source" shall have the meaning specified by the U.S. EPA by rule.

(B) A major stationary source of air pollutants, as defined in Section 302 of the CAA, directly emitting or having the potential to emit100 tpy or more of any regulated air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by the U.S. EPA by rule). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the CAA unless the source belongs to one (1) of the following categories of stationary sources:

(i) Coal cleaning plants (with thermal dryers)

(ii) Kraft pulp mills

(iii) Portland cement plants

(iv) Primary zinc smelters

(v) Iron and steel mills

(vi) Primary aluminum ore reduction plants

(vii) Primary copper smelters

(viii) Municipal incinerators, or combinations of municipal incinerators

capable of charging more than 50 tons of refuse per day

(ix) Hydrofluoric, sulfuric, or nitric acid plants

(x) Petroleum refineries

(xi) Lime plants

(xii) Phosphate rock processing plants

(xiii) Coke oven batteries

(xiv) Sulfur recovery plants

(xv) Carbon black plants (furnace process)

(xvi) Primary lead smelters

(xvii) Fuel conversion plants

(xviii) Sintering plants

(xix) Secondary metal production plants

(xx) Chemical process plants

(xxi) Fossil fuel boilers (or combination thereof) totaling more than

250,000,000 British thermal units (Btu) per hour heat input

(xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels

(xxiii) Taconite ore processing plants

(xxiv) Glass fiber processing plants

(xxv) Charcoal production plants

(xxvi) Fossil fuel fired steam electric plants of more than 250,000,000 Btu per hour heat input

(xxvii) Any other stationary source category regulated under Section 111 or 112 of the CAA and for which the U.S. EPA has made an affirmative determination under Section 302(j) of the CAA

(C) A major stationary source as defined in Part D of Title I of the CAA, including the following:

(i) For ozone nonattainment areas, sources with the potential to emit:

(AA) 100 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as marginal or moderate;

(BB) 50 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as serious;

(CC) 25 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as severe; or

(DD) 10 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as extreme; except that the references in this item to 100, 50, 25, and 10 tpy of nitrogen oxides shall not apply with respect to any source for which the U.S. EPA has made a finding, under Section 182(f)(1) or 182(f)(2) of the CAA, that requirements under Section 182(f) of the CAA do not apply.

(ii) For ozone transport regions established under Section 184 of the CAA, sources with the potential to emit 50 or more tpy of volatile organic compounds.

(iii) For carbon monoxide nonattainment areas:

(AA) that are classified as serious; and

(BB) in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the U.S. EPA;

sources with the potential to emit 50 tpy or more of carbon monoxide. (iv) For particulate matter PM10 nonattainment areas classified as serious, sources with the potential to emit 70 tpy or more of PM10.