

3745-31-01 Definitions.

- (A) Except as otherwise provided in this rule, the definitions in rules 3745-15-01 and 3745-27-01 of the Administrative Code shall apply to this chapter.
- (B) "Actual emissions" means the actual rate of emissions of an air pollutant from an emissions unit, as determined in accordance with paragraphs (B)(1) through (B)(4) of this rule.
- (1) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the air pollutant during a two-year period that precedes the particular date and is representative of normal emissions unit operation. The director may allow the use of a different time period upon a determination that it is more representative of normal emissions unit operation. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored or combusted during the selected time period.
  - (2) The director may presume that emissions unit-specific allowable emissions for the emissions unit are equivalent to the actual emissions of the emissions unit.
  - (3) For any emissions unit (other than an electric utility steam generating unit) that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emissions unit on that date.
  - (4) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit), actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the unit owner or operator maintains and submits to the director, on an annual basis for a period of five years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten years, may be required by the director if he determines such a period to be more representative of normal unit post-change operations.
- (C) "Air contaminant" means particulate matter, dust, fumes, gas, mist, radionuclides, smoke, vapor or odorous substances, or any combination thereof.

- (D) "Air contaminant source" means each separate operation, or activity that results or may result in the emission of any air contaminant. This definition applies to operations or activities that emit air contaminants, whether regulated under Ohio law or regulated under the Clean Air Act.
- (E) "Allowable emissions" means the emissions rate of an air contaminant source calculated using the maximum rated capacity of the air contaminant source (unless the air contaminant source is subject to federally enforceable limits that restrict the operating rate or hours of operation, or both), and the most stringent of the following:
- (1) The applicable standards as set forth in 40 CFR parts 60 and 61; or
  - (2) The Ohio state implementation plan emissions limitation, including those with a future compliance date; or
  - (3) The emission rate specified as an enforceable operating permit condition; or
  - (4) The emission rate specified in a permit to install that is enforceable by the state.
- (F) "Applicable laws" means any applicable provisions of Chapters 3704., 3734., 3745., and 6111. of the Revised Code, as amended; rules, regulations, and orders of the Ohio EPA; the Clean Air Act, as amended; the federal Water Pollution Control Act, as amended; and rules and regulations of the administrator of the United States environmental protection agency.
- (G) "Authorized maximum daily waste receipt" means the maximum amount of solid waste a solid waste disposal facility may receive at the gate in any calendar day. The disposal limit shall be expressed in tons per day for facilities utilizing scales or cubic yards per day at the gate for all other facilities. The conversion factor between tons and cubic yards shall be one ton to three cubic yards unless the solid waste is baled, in which case a one-ton to one-cubic-yard conversion factor shall be used.
- (H) "Available information" means, for purposes of identifying control technology options for a major MACT source, information contained in the following information sources as of the date of the MACT determination by the director:
- (1) A relevant proposed regulation, including all

supporting documentation;

- (2) Background information documents for a draft or proposed regulation;
  - (3) Data and information available from the control technology center developed pursuant to section 113 of the Clean Air Act;
  - (4) Data and information contained in the "Aerometric Information Retrieval System" including information in the MACT database;
  - (5) Any additional information that can be expeditiously provided by the administrator; and
  - (6) Any additional information provided by the applicant or others, and any additional information considered available by the director.
- (I) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d) of the Clean Air Act in which the major stationary source or major modification establishing the baseline date would construct or would have an air quality impact equal to or greater than 1 microgram per cubic meter (annual average) of the air pollutant for which the baseline date is established.

Area redesignations under section 107(d) of the Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification that:

- (1) Establishes a baseline date; or
  - (2) Is subject to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166, and would be constructed in the same state as the state proposing the redesignation.
- (J) "Baseline concentration" means that ambient concentration level that exists in the baseline area at the time of the applicable baseline date. A baseline concentration is determined for each air pollutant for which a baseline date is established and shall include: The actual emissions representative of sources in existence on the applicable baseline date; and the allowable emissions of major stationary sources that commenced construction before January 6, 1975 but were not in operation by the applicable baseline date. The following will not be included in the

baseline concentration and will affect the applicable maximum allowable increase(s):

- (1) Actual emissions from any major stationary source on which construction commenced after January 6, 1975; and
  - (2) Actual emissions increases and decreases at any stationary source occurring after the baseline date.
- (K) "Baseline date" means the earliest date after August 7, 1977 that an owner or operator of a major stationary source or major modification subject to 40 CFR 52.21 submits a complete application under that section.

The baseline date is established for each air pollutant for which increments or other equivalent measures have been established if:

- (1) The area in which the proposed major stationary source or major modification would be constructed is designated as attainment or unclassifiable under Section 107(d) of the Clean Air Act for the air pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and
  - (2) In the case of a major stationary source, the air pollutant would be emitted in significant amounts or, in the case of a major modification, there would be a significant net emissions increase of the air pollutant.
- (L) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities, other than preparatory activities, that mark the initiation of the change.
- (M) "Best available control technology" means an emissions limitation (including a visible emissions standard) based upon the maximum degree of reduction for each air pollutant subject to regulation under the Clean Air Act that would be emitted from any proposed major stationary source or major modification that the director, on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such

major stationary source or major modification through application of production processes or available methods, systems and techniques, including fuel combustion techniques for control of such air pollutant. In no event shall application of best available control technology result in emissions of any air pollutant that would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be approved by the director instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means that achieve equivalent results.

- (N) "Best available technology" means any combination of work practices, raw material specifications, throughput limitations, source design characteristics, an evaluation of the annualized cost per ton of air pollutant removed, and air pollution control devices that have been previously demonstrated to the director of environmental protection to operate satisfactorily in this state or other states with similar air quality on substantially similar air pollution sources.
- (O) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or postcombustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, process steam, or industrial products, and that is not in widespread use as of the date of enactment of the Clean Air Act Amendments of 1990.
- (P) "Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the environmental protection agency. The federal contribution for a qualifying project shall be at least twenty percent of the total cost of the demonstration project.
- (Q) "Commence" as applied to construction of a major stationary

source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

- (1) Begun, or caused to begin, a continuous program of actual on-site construction of the major stationary source or major modification, to be completed within a reasonable time; or
  - (2) Entered into binding agreements or contractual obligations (which cannot be canceled or modified without substantial loss to the owner or operator) to undertake a program of actual construction of the major stationary source or major modification to be completed within a reasonable time.
- (R) "Commercial bakery" means an establishment that is primarily engaged in manufacturing fresh or frozen bread, bread-type rolls and "dry" bakery products (e.g. biscuits, crackers, and cookies). This definition does not include establishments that produce bakery products primarily for direct sale on the premises to household consumers.
- (S) "Complete", in reference to an application for a permit, means that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the director from requesting or accepting any additional information.
- (T) "Construct a major MACT source" means:
- (1) Fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit ten tons per year or more of any hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants, or
  - (2) Fabricate, erect, or install, at any developed site a new process or production unit which in and of itself emits or has the potential to emit ten tons per year or more of any hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants, unless the process or production unit satisfies the following criteria:
    - (a) All hazardous air pollutants emitted by the process or production unit that would otherwise be controlled under the requirements of this subpart

will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

- (b) One of the following determinations has been made:
- (i) The director has determined within a period of five years prior to the fabrication, erection, or installation of the process or production unit that the existing control equipment represented the best available control technology (BACT), lowest achievable emission rate (LAER), best available technology (BAT), or mact based on air toxics rules for the category of pollutants which includes those hazardous air pollutants to be emitted by the process or production unit; or
  - (ii) The director determines that the control of hazardous air pollutant emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e. will be equivalent to the level of control that would be provided by a current BACT, LAER, BAT, or air toxic MACT determination);
- (c) The director determines that the percent control efficiency for emissions of hazardous air pollutants from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;
- (d) The director has provided notice and an opportunity for public comment concerning its determination that criteria in paragraphs (t)(2)(a), (t)(2)(b), and (t)(2)(c) of this rule apply and concerning the continued adequacy of any prior LAER, BACT, or air toxic MACT determination;
- (e) If any commenter has asserted that a prior LAER, BACT, or air toxic MACT determination is no longer adequate, the director has determined that the level of control required by that prior determination remains adequate; and
- (f) Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the permitting

authority are predicated, will be construed as applicable requirements under section 504(a) of the Clean Air Act and either have been incorporated into any existing title V permit for the affected facility or will be incorporated into such permit upon issuance.

- (U) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition or modification of an emissions unit) that would result in a change in actual emissions.
- (V) "Control technology" means measures, processes, methods, systems, or techniques, to limit the emission of hazardous air pollutants including, but not limited to, measures that:
- (1) Reduce the quantity of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications;
  - (2) Enclose systems or processes to eliminate emissions;
  - (3) Collect, capture, or treat such pollutants when released from a process, stack, storage or fugitive emissions point;
  - (4) Are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 U.S.C. 7412(h); or
  - (5) Are a combination of paragraphs (v) (1) through (v) (4) of this rule
- (W) "Criteria pollutant" means particulate matter, nitrogen oxides, volatile organic compounds, sulfur dioxide, carbon monoxide, lead or any other air pollutant for which a national ambient air quality standard has been promulgated under section 109 of the Clean Air Act.
- (X) "Disposal system" means a system for disposing of sewage, industrial waste, or other wastes, and includes sewage systems and treatment works.
- (Y) "Distillate oil" means a petroleum product designated as number one fuel oil, number two fuel oil (with less than or equal to 0.5 per cent by weight sulfur), diesel fuel or kerosene by the American petroleum institute.
- (Z) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric

output capacity and more than twenty-five MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

- (AA) "Emissions unit" means each separate operation, or activity that emits or would have the potential to emit any air pollutant subject to regulation under the Clean Air Act. This term does not include operations or activities that emit air pollutants regulated under State law but are not regulated under the Clean Air Act.
- (BB) "Facility" means all of the air contaminant sources that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel and those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the Clean Air Act. Air contaminant sources shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., they have the same two-digit code) as described in the most recent published version "Standard Industrial Classification Manual, 1987."
- (CC) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
- (DD) "Federally enforceable" means all limitations and conditions that are enforceable by the administrator (of the United States environmental protection agency), including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within the Ohio state implementation plan that implements the requirements of the Clean Air Act, any permit requirements designated as federally enforceable established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart (I), including operating permit requirements designated as federally enforceable issued under an USEPA-approved program that is incorporated into the Ohio state implementation plan and expressly requires adherence to any permit issued under such program.
- (EE) "Fugitive emissions" means those emissions that cannot reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

- (FF) "Greenfield site" means a contiguous area under common control that is an undeveloped site.
- (GG) "Hazardous air pollutant" means any air pollutant listed in or pursuant to section 112(b) of the Clean Air Act.
- (HH) "High terrain" means any area having an elevation of nine hundred feet or more above the base of the stack of a stationary source.
- (II) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
- (JJ) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of congress.
- (KK) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emission reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics or non air quality environmental impacts.
- (LL) "Install or "installation" means to begin actual construction, erect, locate or affix any air contaminant source or any treatment works.
- (MM) "List of source categories" means the source category list required by section 112(c) of the Clean Air Act.
- (NN) "Low terrain" means any area other than high terrain.
- (OO) "Lowest achievable emission rate", for any stationary source, means the more stringent rate of emissions based on the following:
- (1) The most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
  - (2) The most stringent emissions limitation that is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions

rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any air pollutant in excess of the amount allowable under applicable new source standards of performance.

- (PP) "MACT determination" means any combination of emission limitations, work practices, raw material specifications, throughput limitations, source design characteristics, and air pollution control devices that achieve the level of hazardous air pollutant control required by paragraph(E) of rule 3745-31-28 of the Administrative Code.
- (QQ) "Major MACT source" means any process or production unit that in and of itself has the potential to emit ten tons per year or more of any single hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants.
- (RR) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase. In determining whether there has been a net emissions increase, fugitive emissions, to the extent quantifiable, shall be considered from only those stationary sources listed in paragraph (SS) (4) of rule 3745-31-01 of the Administrative Code. Any net emissions increase that is considered significant for volatile organic compounds shall be considered significant for ozone. A physical change or change in the method of operation shall not include:
- (1) Routine maintenance, routine repair, and routine replacement;
  - (2) Use of an alternative fuel or raw material by reason of an order under section 2(A) and (B) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
  - (3) Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act;
  - (4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
  - (5) Use of an alternative fuel or raw material by a stationary source that:

- (a) The stationary source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition that was established after December 21, 1976, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 subpart I or 40 CFR 51.166; or
  - (b) The stationary source is approved to use under any permit issued under this ruling;
- (6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition that was established after December 21, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51 subpart I or 40 CFR 51.166;
- (7) Any change in ownership at a stationary source;
- (8) The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the director determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:
- (a) When the director has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that unit in the most recent air quality impact analysis in the area conducted for the purpose of title I, if any, and
  - (b) The Director determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation; or
- (9) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
- (a) The Ohio state implementation plan, and
  - (b) Other requirements necessary to attain and maintain the national ambient air quality

standard during the project and after it is terminated.

(SS) "Major stationary source" means any stationary source or any group of stationary sources that are described in paragraphs (SS) (1) or (SS) (2) of this rule except as restricted under paragraphs (SS) (3) to (SS) (4) of this rule.

- (1) For stationary sources located in a nonattainment area for a given regulated air pollutant:

Any stationary source of air pollutants that emits, or has the potential to emit 100 tons per year or more of any air pollutant subject to regulation under the Clean Air Act including lead compounds but excluding other air pollutants regulated due to being listed under section 112 of the Clean Air Act, or

- (2) For stationary sources located in an attainment area for a given regulated air pollutant:

- (a) Any of the following stationary sources of air pollutants that emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Clean Air Act, excluding air pollutants regulated due to being listed under section 112 of the Clean Air Act:

- (i) Fossil fuel-fired steam electric plants of more than two hundred fifty million British thermal units per hour heat input;
- (ii) Coal cleaning plants (with thermal dryers);
- (iii) Kraft pulp mills;
- (iv) Portland cement plants;
- (v) Primary zinc smelters;
- (vi) Iron and steel mill plants;
- (vii) Primary aluminum ore reduction plants;
- (viii) Primary copper smelters;
- (ix) Municipal incinerators capable of charging more than two hundred fifty tons of refuse per day;
- (x) Hydrofluoric, sulfuric or nitric acid plants;
- (xi) Petroleum refineries;
- (xii) Lime plants;
- (xiii) Phosphate rock processing plants;
- (xiv) Coke oven batteries;

- (xv) Sulfur recovery plants;
  - (xvi) Carbon black plants (furnace process);
  - (xvii) Primary lead smelters;
  - (xviii) Fuel conversion plants;
  - (xix) Sintering plants;
  - (xx) Secondary metal production plants;
  - (xxi) Chemical process plants;
  - (xxii) Fossil fuel boilers (or combinations thereof) totaling more than two hundred fifty million British thermal units per hour heat input;
  - (xxiii) Petroleum storage and transfer units with a total storage capacity exceeding three hundred thousand barrels;
  - (xxix) Taconite ore processing plants;
  - (xxv) Glass fiber processing plants; and
  - (xxvi) Charcoal production plants, or
- (b) Notwithstanding the stationary source size specified in paragraph (SS) (2) (a) of this rule, any stationary source that emits, or has the potential to emit, two hundred fifty tons per year or more of any air pollutant subject to regulation under the Clear Air Act, or
- (c) Any physical change that would occur at a stationary source not qualifying under paragraph (SS) of this rule as a major stationary source, if the change would constitute a major stationary source by itself.
- (3) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (4) The fugitive emissions of a stationary source to the extent quantifiable shall not be included in determining for any of the purposes of this rule whether it is a major stationary source, unless the stationary source belongs to one of the following categories of stationary sources:
- (a) Coal cleaning plants (with thermal dryers);
  - (b) Kraft pulp mills;
  - (c) Portland cement plants;
  - (d) Primary zinc smelters;

- (e) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;
- (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
- (j) Petroleum refineries;
- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;
- (x) Glass fiber processing plants;
- (y) Charcoal production plants;
- (z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- (aa) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act.

(TT) "Maximum achievable control technology (MACT) emission limitation for new sources" means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the director, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major MACT source.

(UU) "Maximum uncontrolled emissions" (only used for determining registration status) means the amount of emissions from the air contaminant source in tons per year calculated at the maximum operating capacity of the air contaminant source based upon operating eight thousand seven hundred sixty

hours per year in the absence of control equipment.

(VV) "Modify" or "modification" means:

- (1) Any physical change in, or change in the method of operation of:
  - (a) Any air contaminant source that:
    - (i) Results in an increase in the allowable emissions; or
    - (ii) Results in an increase in emissions of greater than the de minimis levels in rule 3745-15-05 of the Administrative Code of any type of air contaminant not previously emitted; or
    - (iii) Results in the relocation of the air contaminant source to a new facility, including, but not limited to, the movement of any existing air contaminant source from another state, county, or other geographic location; or
    - (iv) Is otherwise defined as a major modification, or is defined as a modification under applicable regulations promulgated by the administrator of the United States environmental protection agency regarding new source performance standards or National Emissions Standards for Hazardous Air Pollutants, or Section 112 of the Clean Air Act.
  - (v) 'Modify' or 'modification' shall not include routine maintenance, routine repair, and routine replacement; use of an alternate fuel or raw material that the source is capable of accommodating and is not expressly prohibited from using under any permit condition or applicable requirement of the federal Clean Air Act; an increase in the hours of operation or in the production rate that is not expressly prohibited under any permit condition or applicable requirement of the Ohio EPA or the federal Clean Air Act.
  - (vi) 'Modify' or 'modification' shall not include pollution control or pollution prevention projects that the director has determined, in

writing, are environmentally beneficial. Environmentally beneficial projects do not include those that cause or contribute to a violation of a national ambient air quality standard, cause or contribute to a violation of an increment per paragraph (B) of rule 3745-31-11 of the Administrative Code, adversely impact a visibility limitation, or are expressly prohibited under any Ohio EPA or federal clean air act permit condition or applicable requirement.

- (vii) 'Modify' or 'modification' shall not include allowable emission increases due to an alternative emission limit that satisfies the criteria set forth in division (e) of section 3704.03 and is consistent with division (k) of section 3704.036 of the Revised Code.
- (b) Any significant air contaminant source that, for the specific air contaminant or air contaminants for which the air contaminant source is classified as significant, results in an increase in the ambient air quality impact of the air contaminant source greater than the following levels as determined by atmospheric dispersion modeling or by another method acceptable to the director:
  - (i) Carbon monoxide - five hundred seventy-five  $\mu\text{g}/\text{m}^3$ , eight hour average;
  - (ii) Nitrogen dioxide - fourteen  $\mu\text{g}/\text{m}^3$ , twenty-four hour average;
  - (iii) Total suspended particulate - ten  $\mu\text{g}/\text{m}^3$ , twenty-four hour average;
  - (iv) Sulfur dioxide - fifteen  $\mu\text{g}/\text{m}^3$ , twenty-four hour average;
  - (v) Lead - 0.1  $\mu\text{g}/\text{m}^3$ , twenty-four hour average; or
- (c) A treatment works to allow it to process water pollutants:
  - (i) In materially increased quantities; or
  - (ii) Of a materially different character; or
  - (iii) In materially higher concentrations; or

(iv) The addition of new connections to a public sewage system shall not be considered a modification of the sewage system.

(2) A solid waste disposal facility undergoing:

(a) A substantial horizontal or vertical increase in the limits of waste placement as that term is defined in rule 3745-27-01 of the Administrative Code; or

(b) Any substantial increase in the total capacity of the facility; or

[Comment: a reduction to the limits of waste placement or total capacity by itself is generally not considered to be a modification, unless the reduction also results in other substantial changes to the facility such that paragraph (VV) (2) (f) of this rule is applicable.]

(c) A substantial change, which may endanger human health, in:

(i) Technique of waste receipt; or

(ii) Type of waste received; or

(iii) Type of equipment used; or

(d) A change in the authorized maximum daily waste receipt established for the solid waste disposal facility; or

(e) An "environmental improvement" in accordance with paragraph (D) of rule 3745-27-07 of the Administrative Code; or

(f) Any other substantial change of said solid waste disposal facility, unless performed in response to the terms of a permit or order of the Ohio EPA.

(3) An infectious waste treatment facility undergoing:

(a) A substantial change in the waste handling at the facility, including, but not limited to:

(i) Type of waste received; or

(ii) A change in the facility's treatment technology or technologies; or

(b) An increase in the treatment capacity of the

facility. For the purposes of this rule, treatment capacity means the maximum amount of waste permitted by Ohio EPA to be charged into the treatment unit per hour, or the engineered throughput capacity per hour if no such permitted capacity is authorized; or

- (c) Any other substantial change of said infectious waste treatment facility, unless performed in response to the terms of a permit or order of the Ohio EPA.

(WW) "Necessary pre-construction approvals or permits" means those permits or approvals required under federal air pollution control laws and regulations and those air pollution control laws and regulations that are part of the federally approved Ohio state implementation plan.

(XX) "Net emissions increase" means the amount by which the sum of the following, except as limited by paragraph (XX) (3) of this rule, exceeds zero:

- (1) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and
- (2) Any other increases and decreases in actual emissions at the stationary source that are contemporaneous with the particular change and are otherwise creditable.
- (3) The following subparagraphs limit paragraphs (XX) (1) and (XX) (2) of this rule:
  - (a) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs.
  - (b) An increase or decrease in actual emissions is creditable only if the director has not relied on it in issuing a permit for the stationary source under regulations approved pursuant to this rule, if the permit is in effect when the increase in actual emissions from the particular change occurs.
  - (c) An increase or decrease in actual emissions of sulfur dioxide or particulate matter that occurs before the applicable baseline date is creditable

only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

- (d) An increase in actual emissions is counted only to the extent that the new level of actual emissions exceeds the old level.
- (e) A decrease in actual emissions is counted only to the extent that:
  - (i) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
  - (ii) It is federally enforceable at and after the time that actual construction on the particular change begins; and
  - (iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (f) An increase that results from a physical change at a stationary source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular air pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

(YY) "New source" means any air contaminant source and/or disposal system for which an owner or operator undertakes a continuing program of installation or modification or enters into a binding contractual obligation to undertake and complete, within a reasonable time, a continuing program of installation or modification, after January 1, 1974, and that at the time of installation or modification, would have otherwise been subject to the provisions of this chapter. The replacement of an entire air contaminant source is considered a new source.

(ZZ) "Ohio state implementation plan" means the plan submitted to and approved by U.S. EPA by the state of Ohio in response to Section 110 of the Clean Air Act.

(AAA) "Organic compounds" means any chemical compound containing carbon, excluding carbon monoxide, carbon

dioxide, carbonic acid, metallic carbides, metallic carbonates, ammonium carbonate, non landfill gas methane and ethane.

- (BBB) "Person" means the federal government or any agency thereof, the state or any agency thereof, any political subdivision, or any agency thereof, or any public or private corporation, individual, partnership, or other entity.
- (CCC) "Pollution control project" means any activity or project at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:
- (1) The installation of conventional or innovative pollution control technology, including but not limited to, advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;
  - (2) An activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including, but not limited to, natural gas or coal reburning, or the cofiring of natural gas and other fuels for the purpose of controlling emissions;
  - (3) A permanent clean coal technology demonstration project conducted under Title II, sec. 101(d) of the further continuing appropriations act of 1985 (sec. 5903(d) of Title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the environmental protection agency; or
  - (4) A permanent clean coal technology demonstration project that constitutes a repowering project.
- (DDD) "Portable source" means an air contaminant source that, in the Director's judgment, is specifically designed to be transferred to a new site as needs warrant.
- (EEE) "Potential to emit" means the maximum capacity of an emissions unit or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the emissions unit or stationary source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on

the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or legally and practicably enforceable by the state. Secondary emissions do not count in determining the potential to emit of a stationary source.

(FFF) "Process or production unit" means any collection of structures and/or equipment that processes, assembles, applies, or otherwise uses material inputs to produce or store a final or intermediate or final product. A single facility may contain more than one process or production unit.

[Comment: the definition of a process or production unit is determined by the intermediate product of a process. For example, at a plant which manufactures fiberglass reinforced plastic boats, the owners wish to add more spray guns to an existing fabrication line to supplement existing spray guns in laminating a particular model of boat hulls. The new spray guns will have a potential to emit greater than 10 tons per year of a single hap. In this example, the fiberglass hull of a boat is an intermediate product in the manufacture of a final product (a boat). The collection of equipment needed to manufacture the intermediate product includes the new spray guns, the existing spray guns, the laminating operation, and other supporting equipment. Because the new spray guns in and of themselves do not produce the intermediate product, they are not in and of themselves a process or production unit, and therefore are not subject to review under rule 3745-31-28 of the Administrative Code. Other examples of the applicability of this definition are found at 61 Fed. Reg. 68391-68392 (December 27, 1996).]

(GGG) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

- (1) Has not been in operation for the two-year period prior to the enactment of the "Clean Air Act Amendments of 1990," and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

- (2) Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than eighty-five percent and a removal efficiency for particulates of no less than ninety-eight percent;
- (3) Is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and
- (4) Is otherwise in compliance with the requirements of the "Clean Air Act."

(HHH) "Reconstruct a major MACT source" means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit ten tons per year or more of any hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants, whenever:

- (1) the fixed capital cost of the new components exceeds fifty percent of the fixed capital cost that would be required to construct a comparable process or production unit; and
- (2) it is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under rule 3745-31-28 of the Administrative Code.

(III) "Repowering" means:

- (1) Replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the secretary of energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- (2) Repowering shall also include any oil and/or gas-

fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the department of energy.

- (3) The Director shall give expedited consideration to permit applications for any source that satisfies the requirements of this rule and is granted an extension under section 409 of the "Clean Air Act".

(JJJ) "Representative actual annual emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within ten years after that change, where the director determines that such period is more representative of source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting the future emissions the director shall:

- (1) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the state or federal regulatory authorities, and compliance plans under Title IV of the "Clean Air Act"; and
- (2) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and are attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

(KKK) "Research and development activity" means an activity conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such a source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a de minimis manner.

- (LLL) "Secondary emissions" means emissions that occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this rule, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas as the stationary source or modification that causes the secondary emissions. Secondary emissions include emissions from any off-site support operation that would not be constructed or increase their emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions that come directly from a mobile emissions unit, such as emissions from the tailpipe of a motor vehicle, from a train or from a vessel.
- (MMM) "Sewage" means any substance that contains any of the waste products or excrementitious or other discharge from the bodies of human beings or animals.
- (NNN) "Significant air contaminant source" means any air contaminant source that emits:
- (1) Greater than one hundred tons per year of any of the following air contaminants:
    - (a) Particulate emissions; or
    - (b) Sulfur dioxide; or
    - (c) Nitrogen oxides; or
    - (d) Organic compounds; or
  - (2) Greater than one thousand tons per year of carbon monoxide; or
  - (3) Greater than two tons per year of lead.
- (OOO) "Significant" in reference to a net emissions increase or the potential of a stationary source to emit any of the following air pollutants, means a rate of emissions that would equal or exceed any of the following rates:

<u>Air Pollutant</u>	<u>Emissions Rate (Ton/Yr)</u>
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40

Particulate matter	
Less than 10 microns	15
Ozone	
(Volatile organic compounds)	40
Lead (applicable to non attainment areas only)	0.6
Fluorides	
(excluding hydrogen fluoride)	3
Sulfuric acid mist	7
Total reduced sulfur	
(Excluding hydrogen sulfide)	10
Reduced sulfur compounds	
(Excluding hydrogen sulfide)	10

Municipal waste combustor organic (measured as total tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2 grams per year (0.007055 pounds per year).

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year).

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year).

"Significant", in reference to a net emissions increase or the potential of a stationary source to emit an air pollutant subject to regulation under the Clean Air Act, excluding air pollutants regulated due to being listed under section 112 of the Clean Air Act, means that the air pollutant and emissions rate table in paragraph (OOO) of this rule does not list, any emissions rate.

Notwithstanding paragraph (OOO) of this rule, "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification that would be constructed within ten kilometers of a Class I area, and have an impact on such area equal to or greater than one microgram per cubic meter (twenty-four hour average).

(PPP) "Similar source" means a stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major MACT source such that the source could be controlled using the same control technology.

(QQQ) "Solid waste disposal facility" means any site, location, tract of land, installation, or building used for incineration, composting, sanitary landfilling, or

other methods of disposal of solid wastes, and does not include any facility for which a hazardous waste facility installation and operation permit is required by Chapter 3734. of the Revised Code.

- (RRR) "Stationary source" means all of the emissions units that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel and those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the Clean Air Act. Emissions units shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., that have the same two-digit code) as described in the most recent published version "Standard Industrial Classification Manual, 1987."
- (SSS) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the state implementation plan for the state in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (TTT) "Temporary source" means any new source of air contaminants or modification of an air contaminant source, that is subject to a written declaration by the operator to the director that the air contaminant source will cease operation, be relocated, or obtain a new permanent permit to install within two years of the draft of declaration.
- (UUU) " $\mu\text{g}/\text{m}^3$ " or " $\mu\text{g}/\text{cm}$ " means microgram per cubic meter.
- (VVV) "Volatile organic compounds" or "VOC" shall have the same meaning as defined in rule 3745-21-01 of the Administrative Code.
- (WWW) "Water pollutant" means any sewage, industrial waste or other waste, as defined by section 6111.01 of the Revised Code.
- (XXX) "Water-borne" means a material in which the water content of the volatile fraction is at least 95 per cent by weight.

Effective: September 25, 1998

Certification: original signed by Donald R. Schregardus  
Donald R. Schregardus, Director  
Ohio Environmental Protection Agency

September 1, 1998  
Date

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