Chapter 3745-17 Particulate Matter Standards

3745-17-01 Definitions.

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of this rule titled "referenced materials."]

(A) Except as otherwise provided in this rule, the definitions in rule 3745-15-01 of the Administrative Code shall apply to this chapter.

(B) As used in Chapter 3745-17 of the Administrative Code:

(1) "Banked condition" means the condition where fuel is burned on the grates of fuel burning equipment at rates which are sufficient to maintain ignition only.

(2) "British thermal unit" or "Btu" means the amount of heat required to raise the temperature of one pound of water from fifty-nine degrees Fahrenheit to sixty degrees Fahrenheit at a constant pressure of one atmosphere.

(3) "Central heater" means a fuel-burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the device is located, by the distribution of air heated by the furnace through ducts or liquid heated in the device and distributed typically through pipes. Unless otherwise specified, these devices include, but are not limited to, residential forced-air furnaces (small and large) and residential hydronic heaters.

(4) "Chip wood fuel" means wood chipped into small pieces that are uniform in size, shape, moisture, density and energy content.

(5) "Facility" means any building, structure, installation, operation, or combination thereof which contains one or more stationary sources of air contaminants. As used in paragraph (D) of rule 3745-17-08 of the Administrative Code, the definition of facility shall not include agricultural activities, such as the tilling of land, the harvesting of crops, the application of fertilizers, pesticides or herbicides, and grain drying, which are conducted on a farm.

(6) "Fireplace" means a wood-burning appliance intended to be used primarily for aesthetic enjoyment and not as a space heater. An appliance is a fireplace if it is in a model line that satisfies one of the following:

(a) The model line includes a safety listing under recognized American or Canadian safety standards, as documented by a permanent label from a nationally recognized certification body affixed on each unit sold, and that said safety listing only allows operation of the fireplace with doors fully open. Operation with any required safety screen satisfies this requirement.

(b) The model line has a safety listing that allows operation with doors closed, has no user-operated controls other than flue or outside air dampers that can only be adjusted to either a fully closed or fully opened position, and either of the following are satisfied:

(i) Appliances are sold with tempered glass panel doors only (either as standard or optional equipment).

(ii) The fire viewing area is equal to or greater than five hundred square inches.

(c) A model line that is clearly positioned in the marketplace as intended to be used primarily for aesthetic enjoyment and not as a room heater, as demonstrated by product literature (including owner's manuals), advertising targeted at the trade or public (including web-based promotional materials) or training materials is presumptively a fireplace model line.

The presumption in this paragraph of this definition can be rebutted by test data from a United States environmental protection agency-approved test laboratory reviewed by a United States environmental protection agency-approved third-party certifier that were generated when operating the appliance with the doors closed, and that demonstrate an average stack gas carbon dioxide concentration over the duration of the test run equal to or less than 5.00 per cent and a ratio of the average stack gas carbon dioxide to the average stack gas carbon monoxide equal to or greater than 15:1. The stack gas average carbon dioxide and carbon monoxide concentrations for the test run shall be determined in accordance with the requirements in CSA B415.1-10 (R2015), clause 6.3, using a sampling interval no greater than one minute. The average stack gas carbon dioxide and carbon monoxide concentrations for purposes of this determination shall be the average of the stack gas concentrations from all sampling intervals over the full test run.

(7) "Fuel" means wood, refuse, natural gas, coke oven gas, petroleum, coal, and any combustible solid, liquid, or gas derived from such materials.

(8) "Fuel burning equipment" means any furnace or boiler, and any appurtenances thereto such as stacks, ducting and similar apparatus, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer, where the products of combustion do not come into contact with process materials.

(9) "Fugitive dust" means particulate matter which is emitted from any source by means other than a stack.

(10) "Fugitive dust source" means any source which emits fugitive dust or which emitted fugitive dust prior to the installation of any control equipment that was installed on or after February 15, 1972.

(11) "Grain elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded, except those located at the following: animal food, pet food or cereal manufacturers; breweries; livestock feedlots; wheat flour, wet corn, dry corn, rice mills; or soybean oil extraction plants.

(12) "Incinerator" means any equipment, machine, device, article, contrivance, structure, or part of a structure used to burn liquid, semi-solid or solid refuse or to process salvageable materials by burning other than by open burning as defined in rule

3745-19-01 of the Administrative Code.

(13) "OEPA" or "Ohio EPA" means the Ohio environmental protection agency.

(14) "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of the background.

(15) "Particulate emissions" or "particulate matter emissions" means particulate matter measurable by one of the following:

(a) The applicable test methods in 40 CFR part 60, appendix A, "Standards of Performance for New Stationary Sources."

(b) Continuous emissions monitoring certified in accordance with 40 CFR part 60, appendix B, performance specification 11, for any owner or operator complying with paragraph (D) or rule 3745-17-03 of the Administrative Code.

(16) "Particulate matter" means any material, except water in uncombined form, that is or has been airborne, and exists as a liquid or a solid at standard conditions.

(17) "Pellet fuel" means refined and densified fuel shaped into small pellets or briquettes that are uniform in size, shape, moisture, density and energy content.

(18) "Pellet stove" (sometimes called pellet heater or pellet space heater) means an enclosed, pellet or chip fuel-burning device capable of and intended for residential space heating or space heating and domestic water heating. Pellet stoves include a fuel storage hopper or bin and a fuel feed system. Pellet stoves include, but are not limited to the following:

(a) Free-standing pellet stoves, which are pellet stoves that are installed on legs or on a pedestal or other supporting base. These stoves generally are safety listed under ASTM E1509-12, UL-1482, ULC S627-00 or ULC ORD-C1482-M1990.

(b) Pellet stove fireplace inserts, which are pellet stoves intended to be installed in masonry fireplace cavities or in other enclosures. These stoves generally are safety listed under ASTM E1509-12, UL-1482, ULC-S628 or ULC ORD-C1482-M1990.

(c) Built-in pellet stoves, which are pellet stoves intended to be recessed into the wall. These stoves generally are safety listed under ASTM E1509-12, UL-127, ULC-S610 or ULC ORD-C1482-M1990.

(19) "Permanent storage capacity" means grain storage capacity which is inside a building, bin or silo.

(20) "$PM_{2.5}$" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured either by a reference method that is based on 40 CFR part 50, appendix L and designated in accordance with 40 CFR part 53 or by an equivalent method designated in accordance with 40 CFR part 53.

(21) "PM_{10}" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured either by a reference method that is based on 40 CFR part 50, appendix J and designated in accordance with 40 CFR part 53 or by an equivalent method designated in accordance with 40 CFR part 53.

(22) "Process weight" means the total weight of all materials introduced into the source operation, including solid fuels, but excluding gaseous fuels and liquid fuels when they are used solely as fuels, and excluding air introduced for the purpose of combustion.

(23) "Reasonably available control measures" means the control technology which enables a particular fugitive dust source to achieve the lowest particulate matter emission level possible and which is reasonably available considering technological feasibility and cost-effectiveness.

(24) "Refuse" means any discarded matter, or any matter which is to be reduced in volume, or otherwise changed in chemical or physical properties, in order to facilitate its discard, removal or disposal.

(25) "Residential forced-air furnace" means a fuel burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the furnace is located, by the distribution of air heated by the furnace through ducts.

(26) "Residential hydronic heater" means a fuel burning device designed to burn wood or wood pellet fuel for the purpose of heating building space and/or water through the distribution, typically through pipes, of a fluid heated in the device, typically water or a water and antifreeze mixture.

(27) "Residential masonry heater" means a factory-built or site-built wood-burning device in which the heat from intermittent fires burned rapidly in the firebox is stored in the refractory mass for slow release to building spaces. Masonry heaters are site-built (using local materials or a combination of local materials and manufactured components) or site-assembled (using factory-built components), solid fuel-burning heating appliances constructed mainly of refractory materials (e.g., masonry materials or soapstone. They typically have an interior construction consisting of a firebox and heat exchange channels built from refractory components, through which flue gases are routed. ASTM E1602-03(2010)e1 provides design and construction information for the range of masonry heaters most commonly built in the United States. The site-assembled models are generally listed to UL-1482.

(28) "Residential wood burning appliances" means wood heaters, residential masonry heaters, residential hydronic heaters, residential forced-air furnaces, fireplace, and central heaters that are designed to burn wood, chip wood or pellet fuel.

(29) "Salvageable material" means any material which is to be reduced in volume, or otherwise changed in chemical or physical properties, in order to facilitate its reuse.

(30) "Single fuel burning unit" means any single, enclosed combustion chamber in which

fuel is burned for the primary purpose of producing heat or power by indirect heat transfer, where the products of combustion do not come into contact with process materials.

(31) "Stack" means any chimney, flue, conduit or duct, including the outlet of any air pollution control equipment, which is arranged to conduct emissions to the ambient air.

(32) "Stand-by fuel burning equipment" means any fuel burning equipment which is used only as a direct substitution for other fuel burning equipment for a limited period due to unpredictable and unavoidable breakdown or failure, or routine scheduled maintenance of such other fuel burning equipment.

(33) "Start-up" means the commencement of firing of fuel burning equipment from a cold, non-fired condition.

(34) "Stationary gas turbine" means an engine that is not self-propelled (although it may be mounted on a vehicle for portability), in which a turbine is driven by expanding hot combustion gases. Such an engine typically consists of an axial-flow air compressor, one or more combustion chambers, and a turbine. A gas turbine employed in a jet engine is not included in this definition.

(35) "Stationary small internal combustion engine" means an engine, other than an engine used to, or intended to, propel any vehicle, with a rated power of less than or equal to six hundred horsepower and in which combustion occurs within one or more cylinders, thereby converting heat energy into mechanical energy that can be used to drive an electric generator or other mechanical equipment.

(36) "Stationary large internal combustion engine" means an engine, other than an engine used to, or intended to, propel any vehicle, with a rated power of greater than six hundred horsepower and in which combustion occurs within one or more cylinders, thereby converting heat energy into mechanical energy that can be used to drive an electric generator or other mechanical equipment.

(37) "Topping-off" means that portion of a ship loading operation at a grain terminal during which the following occurs:

(a) The top portion of a hold (not to exceed twenty-five per cent of the total volume of the hold) is filled with grain.

(b) The control of particulate emissions through the use of tarpaulin covers and associated ventilation and control equipment is impractical or impossible.

(38) "Uncontrolled mass rate of emission" means the total weight rate of particulate emissions which are, or in the absence of control equipment would be, emitted from an air contaminant source when such source is operated at its maximum capacity.

(39) "Wood heater" means an enclosed, wood burning-appliance capable of and intended for residential space heating or space heating and domestic water heating. These

devices include, but are not limited to, adjustable burn rate wood heaters, single burn rate wood heaters, pellet stoves, hydronic heaters and forced-air furnaces. Wood heaters may or may not include air ducts to deliver some portion of the heat produced to areas other than the space where the wood heater is located. Wood heaters include, but are not limited to the following:

(a) Free-standing wood heaters, which are wood heaters that are installed on legs, on a pedestal or suspended from the ceiling. These products generally are safety listed under UL-1482, UL-737 or ULC-S627-00.

(b) Fireplace insert wood heaters, which are wood heaters intended to be installed in masonry fireplace cavities or in other enclosures. These appliances generally are safety listed under UL-1482, UL-737 or ULC-S628.

(c) Built-in wood heaters, which are wood heaters that are intended to be recessed into the wall. These appliances generally are safety listed under UL-1482, UL-737, UL-127 or ULC-S610.

(C) Referenced materials. This chapter includes references to certain matter or materials. The text of the referenced materials is not included in the regulations contained in this chapter. The materials are hereby made a part of the regulations in this chapter. For materials subject to change, only the specific versions specified in the regulation are incorporated. Material is incorporated as it exists on the effective date of this rule. Except for subsequent annual publication of existing (unmodified) Code of Federal Regulation compilations, any amendment or revision to a referenced document is not incorporated unless and until this rule has been amended to specify the new dates.

(1) Availability. The materials reference materials are available as follows:

(a) "Acid Rain Program Continuous Emission Monitoring Systems (CEMS) Field Audit Manual." Information and copies may be obtained by writing to: "US EPA (6204J), Attn: Louis Nichols, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460." This document is also available in electronic format at http://www.epa.gov/airmarkets/participants/monitoring/audit-manual.html. The manual can also be obtained for inspection and copying at most public libraries and "The State Library of Ohio."

(b) American Society for Testing Materials (ASTM). Information and copies of documents may be obtained by writing to: "ASTM International, 100 Bar Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19426-2959." These documents are also available for purchase at http://www.astm.org. ASTM documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(c) "Canadian Standards Association" (CSA). Information and copies of documents may be obtained by writing to: "CSA Group, 178 Rexdale Blvd. Toronto, ON Canada M9W 1R3." These documents are also available for purchase at www.csagroup.org. CSA documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(d) Code of Federal Regulations (CFR). Information and copies may be obtained by writing to: "U.S. government printing office, P.O. Box 979050, St. Louis, MO 63197-9000." The full text of the CFR is also available in electronic format at http;//www.ecfr.gov. The CFR compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(e) Engineering Guides. Information and copies may be obtained by writing to: "Ohio EPA Division of Air Pollution Control, 50 West Town Street, Suite 700, Columbus, OH 43215" or by calling (614) 644-2270. Engineering Guides are also available for downloading at http://www.epa.ohio.gov/dapc/engineer/eguides.aspx.

(f) EPA 340/1-86-010 and EPA 450/3-88-008. Information and copies may be obtained by writing to: "US EPA Office of Air Quality Planning and Standards (OAQPS), TTN EMC Webmaster, Mail Code E143-02, Research Triangle Park, NC 27711". These documents can also be obtained for inspection and copying at most public libraries and "The State Library of Ohio."

(g) "Standard Methods for the Examination of Water and Wastewater." Information and copies may be ordered by writing to: "Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314-1994," or by calling 571-830-1545. This document is also available for ordering at https://www.e-wef.org/Default.aspx?TabId=192&ProductId=17997. A copy of the document is also available for inspection and copying at most public libraries and "The State Library of Ohio."

(h) "Underwriters Laboratories" (UL). Information and copies of documents may be obtained by writing to: "UL, 2600 N.W. Lake Rd., Camas, WA 98607-8542." These documents are also available for purchase at www.ul.com. UL documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(i) "Underwriters Laboratories of Canada" (ULC). Information and copies of documents may be obtained by writing to: "Underwriters Laboratories of Canada, 7 Underwriters Road Toronto, Ontario, Canada M1R 3A9." These documents are also available for purchase at www.canada.ul.com. ULC documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(2) Referenced materials.

(a) 40 CFR 50.6; "National primary and secondary ambient air quality standards for PM_{10};" as published in the July 1, 2016 Code of Federal Regulations.

(b) 40 CFR 60.13; "Monitoring requirements;" as published in the July 1, 2016 Code of Federal Regulations.

(c) 40 CFR part 50, appendix J; "Reference Method for the Determination of

Particulate Matter as PM_{10} in the Atmosphere;" as published in the July 1, 2016 Code of Federal Regulations.

(d) 40 CFR part 50, appendix K; "Reference Method for the Determination for Particulate Matter;" as published in the July 1, 2016 Code of Federal Regulations.

(e) 40 CFR part 50, appendix L; "Reference Method for the Determination of Fine Particulate Matter as $PM_{2.5}$ in the Atmosphere;" as published in the July 1, 2016 Code of Federal Regulations.

(f) 40 CFR part 50, appendix N; "Interpretation of the National Ambient Air Quality Standards for $PM_{2.5}$;" as published in the July 1, 2016 Code of Federal Regulations.

(g) 40 CFR part 51, appendix P; "Minimum Emission Monitoring Requirements;" as published in the July 1, 2016 Code of Federal Regulations.

(h) 40 CFR part 53; "Ambient Air Monitoring Reference and Equivalent Methods;" as published in the July 1, 2016 Code of Federal Regulations.

(i) 40 CFR part 60, appendix A; "Standards of Performance for New Stationary Sources;" as published in the July 1, 2016 Code of Federal Regulations.

(j) 40 CFR part 60, appendix B; "Performance Specifications;" as published in the July 1, 2016 Code of Federal Regulations.

(k) "Acid Rain Program Continuous Emission Monitoring Systems (CEMS) Field Audit Manual" July 16, 2003.

(l) ASTM D240-14; "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter;" approved October 1, 2014.

(m) ASTM D1826-94(2010); "Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter;" approved May 1, 2010.

(n) ASTM D3174-12; "Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal;" approved November 1, 2012.

(o) ASTM D5685-11; "Standard Specification for Fiberglass (Glass-Fiber-Reinforced Thermosetting-Resin) Pressure Pipe Fittings;" approved February 1, 2011.

(p) ASTM E1509-12; "Standard Specification for Room Heaters, Pellet Fuel-Burning Type;" approved October 1, 2012.

(q) ASTM E1602-03(2010)e1; "Standard Guide for Construction of Solid Fuel Burning Masonry Heaters;" approved April 1, 2010.

(r) ASTM E870-82(2013); "Standard Test Methods for Analysis of Wood Fuels;" approved June 1, 2013.

(s) CSA B415.1-10 (R2015); "Performance Testing of Solid-Fuel-Burning Heating Appliances;" approved March 1, 2010.

(t) EPA 340/1-86-010; "Recommended Quality Assurance Procedures Opacity Continuous Emission Monitoring Systems;" February 1986.

(u) EPA 450/3-88-008; "Control of Open Fugitive Dust Sources;" September, 1988.

(v) Engineering Guide #13; "Procedures for EVEL Determinations;" June 20, 1997.

(w) Engineering Guide #15; "Testing Procedure to Establish EVEL's for Identical Sources;" June 20, 1997.

(x) Section 209(C); "Standard Methods for the Examination of Water and Wastewater;" 22nd Edition, published 2012.

(y) UL-127; "Factory-Built Fireplaces;" approved April 21, 2011.

(z) UL-1482; "Solid-Fuel Type Room Heaters;" approved April 25, 2011.

(aa) UL-737; "Fireplace Stoves;" approved march 21, 2011.

(bb) ULC-S610; "Standard for Factory-Built Fireplaces;" approved October 1, 1998.

(cc) ULC-S627-00; "Standard for Space Heaters for Use with Solid Fuels;" approved June 1, 2000.

(dd) ULC-S628; "Standard for Fireplace Inserts;" approved January 1, 1997.

(ee) ULC ORD-C1482-M1990; "Space Heaters for Use With Particulate Solid Fuels;" approved January 1, 1990.

(ff) USEPA method 3a; contained in 40 CFR part 60, appendix A-2; "Determination of Oxygen and Carbon Dioxide Concentrations in Emissions From Stationary Sources (Instrumental Analyzer Procedure);" as published in the July 1, 2016 Code of Federal Regulations.

(gg) USEPA method 3b; contained in 40 CFR part 60, appendix A-2; "Gas analysis for the determination of emission rate correction factor or excess air;" as published in the July 1, 2016 Code of Federal Regulations.

(hh) USEPA method 5; contained in 40 CFR part 60, appendix A-3; "Determination of particulate matter emissions from stationary sources;" as published in the July 1, 2016 Code of Federal Regulations.

(ii) USEPA method 5b; contained in 40 CFR part 60, appendix A-3; "Determination of nonsulfuric acid particulate matter emissions from stationary sources;" as published in the July 1, 2016 Code of Federal Regulations.

(jj) USEPA method 9; contained in 40 CFR part 60, appendix A-4; "Visual Determination of the Opacity of Emissions From Stationary Sources;" as published in the July 1, 2016 Code of Federal Regulations.

(kk) USEPA method 22; contained in 40 CFR part 60, appendix A; "Visual determination of fugitive emissions from material sources and smoke emissions from flares;" as published in the July 1, 2016 Code of Federal Regulations.

(ll) USEPA Performance Specification 1; "Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources;" contained in 40 CFR part 60, appendix B; as published in the July 1, 2016 Code of Federal Regulations.

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3745-17-03 Measurement methods and procedures.

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of rule 3745-17-01 of the Administrative Code titled "referenced materials."]

(A) For purposes of ascertaining, defining, and measuring ambient air quality, $PM_{2.5}$ and PM_{10} shall be measured by the methods specified in paragraphs (B)(20) and (B)(21) of rule 3745-17-01 of the Administrative Code. Such measurements for PM_{10} shall be corrected to standard conditions for purposes of comparing measurements with the ambient air quality standards set forth in rule 3745-25-02 of the Administrative Code.

(B) Emissions test methods and procedures for all new and existing sources.

(1) For the purpose of determining compliance with paragraph (A)(1) of rule 3745-17-07 of the Administrative Code, visible particulate emissions shall be determined according to the following:

(a) ~~Except as provided in paragraph (B)(1)(b) of this rule,~~ USEPA method 9 or continuous opacity monitoring as specified in paragraph (C) of this rule shall be employed.

~~(b) As an alternative to the compliance procedures specified in paragraph (B)(1)(a) of this rule, coal-fired boilers with heat input capacities equal to or greater than two hundred fifty million Btu per hour that are controlled with either baghouses or electrostatic precipitators may determine compliance with the visible particulate emission limitations specified in paragraph (A)(1) of rule 3745-17-07 of the Administrative Code through the use of continuous opacity monitoring data. The continuous opacity monitoring system shall comply with the requirements specified in 40 CFR 60.13 and shall be certified in accordance with "USEPA Performance Specification 1." (The continuous opacity monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.) During each calendar quarter, the permittee shall be deemed in compliance with paragraph (A)(1) of rule 3745-17-07 of the Administrative Code if the following conditions are met:~~

~~(i) The nonexempt opacity values in excess of twenty per cent opacity are less than 1.10 per cent of the six-minute average opacity values. (Exempt opacity values are defined in paragraphs (A)(1)(b), (A)(2), and (A)(3) of rule 3745-17-07 of the Administrative Code.)~~

~~(ii) None of the nonexempt six-minute average opacity values exceeds sixty per cent.~~

~~(iii) The total amount of time, in hours, of exempt and nonexempt opacity values greater than twenty per cent and less than sixty per cent (not including start-up, shutdown, and malfunction exemptions provided in paragraphs (A)(2) and (A)(3) of rule 3745-17-07 of the Administrative Code) does not~~

~~exceed the product of 0.10 times the actual number of hours the emissions unit was in operation during the calendar quarter.~~

~~In the event of a discrepancy between the continuous opacity monitoring data and any observations performed in accordance with paragraph (B)(1)(a) of this rule during the same time period, an evaluation may be performed by the Ohio EPA to assess the accuracy of the continuous opacity monitoring data (which may include an audit of the continuous opacity monitoring system performed in accordance with EPA 340/1-86-010 (recommended quality assurance procedures for opacity continuous emission monitoring systems) and "Acid Rain Program Continuous Emission Monitoring Systems (CEMS) Field Audit Manual" and the validity of the observations performed in accordance with paragraph (B)(1)(a) of this rule. The Ohio EPA may accept and utilize any data or observation it finds credible. The permittee is not precluded from using any credible evidence in defense of any enforcement action that may be initiated by the Ohio EPA.~~

(2) For the purpose of determining compliance with paragraph (B)(2) of rule 3745-17-07 of the Administrative Code, pertaining to visible particulate emissions from coke oven batteries:

(a) Charging operations:

(i) The charging period shall begin when the coal from the charging system starts to enter the oven and shall end when the last charge port lid is replaced. Such charging period shall not include the period of time during which the port lids are reopened in order to sweep spilled coal into the oven.

(ii) The observer shall stand on the topside of the coke oven battery such that a good view of all charge ports of the oven being charged and the charging system is possible. The observer may change position to obtain a clear view of all oven ports, drop sleeves, and hoppers. During the charging period, the observer shall watch all the potential emission sources including the charge ports and the entire charging system. Upon observing the release of any visible particulate emission, an accumulative stopwatch shall be started. The watch shall be stopped when the visible particulate emission stops and shall be restarted when a visible particulate emission reappears. The observer shall continue this procedure for the entire charging period. If visible particulate emissions should occur simultaneously from several points during a charge, the visible particulate emissions shall be timed collectively as one continuous visible particulate emission. Furthermore, visible particulate emissions which may start from one source immediately after those from another source shall be timed as one continuous visible particulate emission. The following visible particulate emissions shall not be timed: steam vapor, visible particulate emissions from burning coal that is spilled on top of the oven or oven lid during charging, visible particulate emissions emitted from any equipment other than the charging system or charging ports, visible particulate emissions from closed standpipes during

charging, visible particulate emissions emitted from coke oven doors which may rise above the battery and which may be windblown across its topside, and visible particulate emissions that drift from the top of the charging system, but have already been timed as a visible particulate emission from the drop sleeve below the hopper. The time recorded on the stopwatch shall represent the total time that visible particulate emissions are observed during a charge. The number of seconds of visible particulate emissions observed for each charge shall be recorded on a data sheet.

(iii) A minimum of six consecutive charges shall be observed and the time in seconds of visible particulate emissions during such charges shall be totalled. If the observations of a set of consecutive charges is interrupted by an event not in the control of an observer, then the data for the interrupted charges shall be discarded and additional charges shall be observed until the total number of consecutive charges equals at least six. For purposes of this paragraph, charges immediately preceding and following any interrupted or discarded charges shall be deemed consecutive.

(b) Offtake piping and charging hole lids:

(i) The observer shall walk down the length of the top of the battery and shall complete the inspection in an expeditious manner consistent with the safety of the observer. When safety conditions permit, the observer will walk near the center of the battery, but may deviate from this path to obtain a better view of any lid or offtake piping system. Separate traverses may be performed for offtake piping and charging hole lids. If the battery has two collector mains, the observer may make two traverses when observing visible particulate emissions from offtake piping. If an observer elects to make two traverses for a battery which has two collector mains, the observer shall inspect one collector main during the first traverse and inspect the other collector main during the second traverse. During each traverse, the observer shall record the time of the beginning and end of each traverse and the identity of any charging hole or offtake piping system having visible particulate emissions.

(ii) Visible particulate emissions from offtake piping shall include emissions from cracks or defects in the piping, emissions from the jointure of the battery to the standpipe, emissions from the standpipe to the gooseneck and gooseneck to the collector main, emissions from the seal between the gooseneck and gooseneck lid, and emissions from opened offtake lids. Visible particulate emissions from charging holes shall include emissions from the seal between the charging hole or stationary jumper pipe lid and its casting, emissions from the charging hole or stationary jumper pipe casting/battery interface, and emissions from opened charging holes or stationary jumper pipe lids. Visible particulate emissions which shall not be included are emissions caused by maintenance work in progress at an oven, emissions caused by the vaporization of wet luting materials, emissions caused by burning or smoldering excess topside coal, and emissions from

charging ports and offtake piping during the charging operation. Visible particulate emissions from open offtake piping and charging holes, from a maximum of three ovens, shall be exempt. Regardless of the number of points from which visible particulate emissions are observed from any one offtake piping system, the maximum entry for any oven with a single offtake system shall be one and the maximum entry for any oven with two offtake piping systems shall be two. The maximum number of charging hole leaks recorded for any oven shall not exceed the number of charging holes on that oven.

(iii) The percentage of charging holes and offtake piping with visible particulate emissions shall be determined by totalling the number of charging holes or offtake piping with visible particulate emissions, including that number of opened charging holes and offtake piping with visible particulate emissions which exceeds the amount which is allowed for three ovens, dividing that number by the total number of observed charging holes or offtake piping on operating ovens, and multiplying the result by one hundred per cent. For purposes of this paragraph, any oven which is not out of service for rebuild or maintenance work that is extensive enough to require the oven to be skipped in the charging sequence shall constitute an operating oven. Further, any opened charging hole or offtake piping lids on operating ovens shall be included as observed charging holes and offtake piping.

(c) Oven doors:

(i) The observer shall observe visible particulate emissions by completely walking around the coke oven battery at a steady distance from a position just outside the pusher machine and quencher car tracks as close to the battery as safety and visibility conditions permit. The observer shall traverse each side of a battery expeditiously, recording the time of the beginning and end of each side traverse, the identity of each door having visible particulate emissions, and the identity of any door not observable during the traverse. A visible particulate emission from an individual door shall be noted on an inspection sheet when an observer determines any visible particulate emissions are occurring from any location on the perimeter of a coke oven door or chuck door. Visible particulate emissions observed at the top of the battery above a specific oven door but not clearly attributable to such door shall not be counted in this procedure. An observer shall observe each oven door only once while scanning the perimeter for any visible particulate emissions. After a brief scan of an oven door, the observer shall move along his/her traverse, checking subsequent doors on the battery in a like manner. If a temporary machine obstruction occurs which blocks the view of a series of ovens, the ovens shall be bypassed and the remaining oven doors on that side of the battery shall be observed. After the traverse of such side of the battery, the bypassed oven doors and only those oven doors, may be reobserved. After completing one side, the observer shall proceed directly to the opposite side of the battery and proceed to perform a like traverse while

repeating the above procedures. A row of two or more continuous batteries may be inspected by observing all of the pusher side doors and then all of the coke side doors.

(ii) The percentage of oven doors with visible particulate emissions shall be determined by totalling the number of doors with visible particulate emissions, dividing that sum by the total number of observed doors on operating ovens, and multiplying the result by one hundred per cent. For purposes of this paragraph, any oven which is not out of service for a rebuild or maintenance work that is extensive enough to require that oven to be skipped in the charging sequence shall constitute an operating oven. Further, any doors that are removed from operating ovens shall constitute unobserved doors.

(d) For any pushing operations, visible particulate emissions shall be determined according to USEPA method 9 with the following modifications:

(i) Paragraph 2.5 ("Data Reduction") of USEPA method 9 shall not be used; and

(ii) Visible particulate emission readings shall be recorded at fifteen-second intervals during each pushing operation observed and the average reading during each such operation shall be determined by summing the opacity readings and dividing this sum by the number of observations during that pushing operation.

(3) For the purpose of determining compliance with paragraphs (B)(1), (B)(3), (B)(7)(a)(i), (B)(7)(b), (B)(7)(c), and (B)(8)(a) to (B)(8)(d) of rule 3745-17-07 of the Administrative Code, paragraphs (C)(3)(c), (D)(3), (F)(4)(c), (I)(1), (L)(3), (O)(1), (P)(2), (V)(4)(c), (W)(2), (X)(2), and (X)(3) of rule 3745-17-12 of the Administrative Code, or with paragraph (D)(4)(a) of rule 3745-17-13 of the Administrative Code, visible emissions of fugitive dust shall be determined according to USEPA method 9 with the following modifications:

(a) For paragraphs (B)(1), (B)(7)(b), (B)(7)(c), (B)(8)(b), (B)(8)(d), and (B)(9) of rule 3745-17-07 of the Administrative Code, the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible emission observations recorded at fifteen-second intervals.

(b) Opacity observations shall be made from a position that provides the observer a clear view of the source and the fugitive dust with the sun behind the observer. A position at least fifteen feet from the source is recommended. To the extent possible, the line of sight should be approximately perpendicular to the flow of fugitive dust and to the longer axis of the emissions. Except as provided in paragraphs (B)(3)(d) and (B)(3)(e) of this rule, opacity observations shall be made for the point of highest opacity within the fugitive dust. Since the highest opacity usually occurs immediately above or downwind of the source, the observer should normally concentrate on the area of the plume close to the source. For purposes of paragraphs (B)(7)(b) and (B)(8)(b) of rule 3745-17-07

of the Administrative Code, observations shall be made where the fugitive dust plume is distinctly separate from the falling material and from the surface of the pile.

(c) [Reserved.]

(d) For paragraphs (B)(7)(a)(i), (B)(8)(a), and (B)(8)(c) of rule 3745-17-07 of the Administrative Code and paragraphs (I)(1), (O)(1), and (P)(2) of rule 3745-17-12 of the Administrative Code:

(i) A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass, using USEPA method 9. The initial observation shall be taken immediately after passage of the first vehicle, at the point of highest opacity within the fugitive dust, and at four feet above the surface of the roadway or parking area. Two additional observations shall be taken at the same point as the initial observation and at five seconds and ten seconds after the initial reading. The same procedure shall be conducted for the next three vehicle passes. If any interruption in observations during any vehicle pass occurs, the observations taken during that vehicle pass shall be discarded and the next vehicle pass shall be observed. For vehicle traffic on top of any material storage pile, the observer may observe passes of the same vehicle or vehicles, at identical of different points atop the pile, in order to obtain readings for four vehicle passes.

(ii) The data reduction and average opacity calculation shall be based upon the average of twelve observations in each data set.

(e) For paragraph (B)(7)(c) of rule 3745-17-07 of the Administrative Code, observations of fugitive dust resulting from a vehicle's movement upon a coal storage pile shall be made at a point no less than one vehicle length from the rear of the vehicle and at an elevation no lower than the maximum height of the vehicle. For purposes of this rule, vehicle length and height shall be based upon the length and height of the vehicle being observed.

(4) For the purpose of determining compliance with paragraphs (B)(4) to (B)(6), (B)(7)(a)(ii), and (B)(7)(d) of rule 3745-17-07 of the Administrative Code, paragraphs (B), (C)(1), (C)(2), (E), (F)(1) to (F)(3), (K), (M)(1), (M)(2), (Q)(1), (S)(4)(b), (U)(1), (U)(2), (V)(1) to (V)(3), (W)(1), (X)(1), (X)(4), (Y)(1) to (Y)(3), and (Z) of rule 3745-17-12 of the Administrative Code, or with paragraph (B) of rule 3745-17-13 of the Administrative Code, visible emissions of fugitive dust shall be determined according to USEPA method 22 with the following modifications:

(a) If the observer's view is obscured and observations shall be terminated prior to completing the necessary or desired observation period, the observer shall clearly note this fact on the observation form. When the observer's view of the source is no longer obscured, the observations shall recommence to complete the observation period.

(b) The observer shall identify on the observation form all interruptions due to rest breaks.

(c) For the purpose of determining compliance with the applicable visible emission limitation, the observations, excluding break periods and periods of obscured vision, shall be considered continuous.

(d) For any roadway or parking area, the observer shall determine the presence and duration of visible particulate matter at the same point of the potential emissions and at a height approximately four feet above the surface of the roadway or parking area.

(5) Visible particulate emission readings other than those referenced in paragraph (B)(4) of this rule shall be determined by observers qualified according to tests and procedures set forth in USEPA method 9.

(6) The director may refuse to accept the results of emission tests conducted pursuant to paragraphs (B)(7) to (B)(10) of this rule which are not conducted with prior review and approval of the test specifications by the director. Test specifications shall be submitted for this purpose at least thirty days before the proposed test date. The director will advise an entity of any deficiencies in the proposed test specifications as expeditiously as practicable so as to minimize any disruption of the proposed testing schedule.

(7) For the purpose of determining compliance with paragraphs (B)(3) and (B)(4) of rule 3745-17-08 of the Administrative Code:

(a) The amount of particulate emissions shall be determined by the test methods specified in paragraph (B)(15) of rule 3745-17-01 of the Administrative Code.

(b) For electric arc furnaces at iron foundries, steel foundries and iron and steel mills, the sampling and measurement of the particulate emissions shall be performed only during those operating intervals commencing with the addition of cold scrap to the furnace and ending with the completion of the tapping of the furnace.

(c) For argon-oxygen decarburization vessels, the sampling and measurement of the particulate emissions shall be performed only during those operating intervals commencing with the pouring of hot metal into the vessel and ending with the completion of the tapping of the vessel.

(d) For basic oxygen furnaces, the sampling and measurement of the particulate emissions shall be performed only during those operating intervals commencing with the addition of hot metal to the furnace and ending with the completion of the tapping of the furnace.

(e) For hot metal transfer operations, the sampling and measurement of the particulate emissions shall be performed only during those operating intervals when hot metal is being poured.

(f) For hot metal desulfurization operations, the sampling and measurement of the particulate emissions shall be performed only during those operating intervals commencing with the initial injection of the desulfurization agent into the hot metal and ending with the completion of the injection process.

(g) For blast furnace casthouses, the sampling and measurement of the particulate emissions shall be performed only during the casting operation, commencing with the opening of the tap hole and ending one minute after the positioning of the mud gun to plug the tap hole.

(h) For pushing operations at coke oven batteries, one point of a probe traverse shall be sampled during each pushing operation and the sampling and measurement of the particulate emissions shall be performed only during those operating intervals commencing with the first movement of the ram and ending with the full extension of the ram plus ten seconds or with the first movement of the quench car, whichever occurs first.

(8) For the purpose of determining compliance with rule 3745-17-09 of the Administrative Code:

(a) The amount of particulate emissions from an incinerator shall be determined by test methods specified in paragraph (B)(15) of rule 3745-17-01 of the Administrative Code. Emission tests shall be conducted at maximum burning capacity of the incinerator.

(b) The maximum burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the director in accordance with good engineering practices. In case of conflict, the determination made by the director shall govern.

(9) For the purpose of determining compliance with rule 3745-17-10 of the Administrative Code and paragraphs (N)(1), (N)(2), (O)(7), (O)(8)(a), (P)(1), (P)(7), and (P)(8) of rule 3745-17-12 of the Administrative Code:

(a) The amount of particulate emissions shall be determined by test methods specified in paragraph (B)(15) of rule 3745-17-01 of the Administrative Code, except that for USEPA method 5 the probe and filter holder heating systems in the sampling train shall be set to provide a gas temperature no greater than three hundred twenty degrees Fahrenheit (one hundred sixty degrees Celsius).

(b) The heat content of fuels shall be determined according to ASTM D5685-11 or ASTM E870-82(2013) for solid fuels, ASTM D240-14 for liquid fuels, and ASTM D1826-94(2010) for gaseous fuels.

(c) The ash content of coal shall be determined according to ASTM D3174-12.

(10) For the purpose of determining compliance with rule 3745-17-11 of the Administrative Code, paragraphs (C)(3)(b), (D)(2), (F)(4)(b), (F)(5), (G), (H), (I)(2) to (I)(14), (I)(16), (I)(17), (I)(19) to (I)(30), (I)(38) to (I)(40), (I)(43), (I)(45), (I)(46),

(I)(48), (J), (L)(2), (M)(3), (N)(3), (N)(4), (O)(3) to (O)(6), (O)(9), (O)(10), (P)(3)(a), (P)(4) to (P)(6), (P)(10), (P)(11), (Q)(2), (R)(1), (S)(1) to (S)(4)(a), (T), (U)(3), (V)(4)(b), and (Y)(4) of rule 3745-17-12 of the Administrative Code, and paragraphs (D)(2), (D)(3), (D)(4)(b) to (D)(4)(d), (D)(5) and (D)(6) of rule 3745-17-13 of the Administrative Code:

(a) The amount of particulate emissions shall be determined by test methods specified in paragraph (B)(15) of rule 3745-17-01 of the Administrative Code.

(b) The controlled mass rate of particulate emissions from sources equipped with control equipment, or the uncontrolled mass rate of particulate emissions from sources not equipped with control equipment, shall be determined by sampling and other measurements made at the air contaminant source or sources prior to the point at which air contaminants are emitted to the ambient air. For sources equipped with control equipment, the uncontrolled mass rate of emission may be determined by either sampling in the stack upstream from the inlet of the control equipment or by the use of other techniques accepted by the director.

(c) For coke quench towers, the concentration of total dissolved solids in the quench water shall be determined according to Section 209(C), "Standard Methods for the Examination of Water and Wastewater," using a drying temperature between one hundred three and one hundred five degrees Celsius. Analyses shall be performed on grab samples of the quench water as applied to the coke. Samples shall be collected at a minimum of five days per week per quench tower and analyzed to report a weekly average concentration for each quench tower. Samples for each week shall be analyzed either:

(i) Separately, with daily concentrations determined and averaged as a weekly average, or

(ii) As one composite sample, with equal volumes of each day's sample combined to form the composite sample.

(C) Continuous emission monitoring requirements for measuring opacity for "Appendix P" facilities.

(1) Except as provided in paragraphs (D) and (E) of this rule, for any air contaminant source subject to 40 CFR part 51, appendix P, "Minimum Emission Monitoring Requirements," shall operate and maintain a continuous opacity monitoring system (COMS) for measuring opacity. The COMS shall comply with all specifications outlined in 40 CFR part 60, appendix B, "Performance Specification 1." The COMS shall be capable of providing external calibration filter access in accordance with Section 5.1.9 of "USEPA Performance Specification 1."

(2) Any owner or operator of a facility that meets the applicability requirements specified in paragraph (C)(1) of this rule shall submit reports to the director of excess emissions for each calendar quarter within thirty days following the end of each calendar quarter. The reports shall include, but not be limited to, the times and values of all six-minute average readings of opacity above the applicable standard,

along with the dates, magnitudes (per cent opacity), reasons (if known), and corrective actions taken (if any). In addition, the reports shall include the dates and times of each period during which the continuous emission monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments.

(D) For any air contaminant source subject to 40 CFR part 51, appendix P, "Minimum Emission Monitoring Requirement" where the use of a COMS would not provide accurate determinations of opacity as described in Section 6.1 of 40 CFR part 51, appendix P, the owner or operator may elect to request, in writing, permission from the director and the administrator to install, calibrate, certify, maintain and operate a CEMS for measuring particulate emissions in lieu of complying with paragraph (C)(1) of this rule. Upon approval of the use of the CEMS by the director and the administrator, the air contaminant source shall comply with the following:

(1) The owner or operator shall install, operate and maintain a CEMS for particulate emissions that meets 40 CFR part 60, appendix B, performance specification 11 and the following:

(a) The owner or operator shall conduct a performance evaluation of the CEMS according to 40 CFR 60.13, performance specification 11, and appendix F, procedure 2.

(b) During each particulate emissions correlation testing run of the CEMS required by performance specification 11, particulate emissions and oxygen or carbon dioxide data shall be collected concurrently by both the CEMS and the performance tests conducted using the following:

(i) For particulate emissions, USEPA method 5 or 5B of 40 CFR part 60, appendix A shall be used.

(ii) For oxygen or carbon dioxide, USEPA method 3A or 3B of 40 CFR part 60, appendix A, shall be used.

(c) Quarterly accuracy determinations and the daily calibration drift tests shall be performed in accordance with 40 CFR part 60, appendix F, procedure 2. Relative response audits shall be performed annually and response correlation audits using one-hour test runs shall be performed every three years.

(2) Each air contaminant source that is equipped with a CEMS for particulate emissions in lieu of using COMS shall comply with a particulate emissions limit of 0.030 pounds of particulate emissions per million British thermal units of heat input, based upon a daily average, and any other mass emission limit that applies.

(3) Compliance with the daily average particulate emission limitation shall be determined by calculating the arithmetic average of all valid CEMS hourly emission rates for particulate emissions for each air contaminant source operating day.

(E) For any air contaminant source subject to 40 CFR part 51, appendix P, "Minimum

Emission Monitoring Requirement" where the use of a COMS would not provide accurate determinations of opacity as described in 40 CFR part 51, appendix P, section 6.1, the owner of operator may elect to request, in writing, approval from the director and the administrator of an alternative monitoring plan for determining compliance with particulate emissions, in lieu of complying with paragraph (C)(1) of this rule. Upon approval of the use of the alternative monitoring plan by the director and the administrator, the air contaminant source shall comply with the following:

(1) The monitoring requirements and ranges of the parameters to be monitored shall be incorporated into the underlying federally enforceable permit-to-install and Title V permit as federally enforceable limits.

(2) The federally enforceable ranges of the parameters to be monitored shall be established such that, during the initial performance testing required under 40 CFR 60.8, performance testing required by permit, or other performance testing as required by law, USEPA method 5B testing shows the air contaminant source is complying with any particulate matter mass limit applicable to the air contaminant source while operating within those ranges.

(3) Each instance where any parameter required to be monitored under the alternative monitoring plan falls outside the federally enforceable ranges is considered a violation of the applicable particulate emissions limit, and shall be reported in quarterly excess emission reports required by the permit. The quarterly excess emission reports shall satisfy 40 CFR 60.7 and the permits and shall include, at a minimum, the following:

(a) The date the parameter was outside of the range.

(b) The time the parameter was outside of the range.

(c) The value of the parameter during the period it was outside of the range.

(d) The cause of the parameter to be outside of the range.

(e) The corrective action taken to bring the parameter back into the federally enforceable range.

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3745-17-04 Compliance time schedules.

(A) Certification and permit application requirements.

(1) Except as otherwise provided in paragraph (A)(2) of this rule, by no later than October 1, 1980, any owner or operator of an air contaminant source subject to paragraph (B)(2) of rule 3745-17-07 of the Administrative Code or of a fugitive dust source subject to paragraph (D) of rule 3745-17-08 of the Administrative Code, as those rules existed on June 18, 1980, shall do either of the following:

(a) Certify in writing to the director that such source is in compliance with paragraph (B)(2) of rule 3745-17-07 of the Administrative Code and paragraph (B) of rule 3745-17-08 of the Administrative Code, as applicable. Such certification shall include: equipment description, Ohio EPA permit application number (if assigned), and all necessary data (consistent with the appropriate permit application appendices) and calculations which confirm the compliance status. The certification shall also include an application for a permit-to-operate such source in accordance with rule 3745-35-02 of the Administrative Code if such source does not possess an effective permit.

(b) Submit an application for a permit-to-operate or an application for a modification to a permit-to-operate in accordance with rule 3745-35-02 of the Administrative Code. Such application shall include a final control plan and a compliance schedule which will bring the source into compliance with paragraph (B)(2) of rule 3745-17-07 of the Administrative Code and paragraph (B) of rule 3745-17-08 of the Administrative Code as expeditiously as practicable but in no event later than the dates specified in paragraph (B) of this rule.

[Comment: Applications requiring submittal prior to June 30, 2008, for sources not subject to the Title V program, were to be submitted in accordance with now rescinded Chapter 3745-35 of the Administrative Code.]

(2) Any owner or operator of an air contaminant source, which is subject to paragraph (D) of rule 3745-17-08 of the Administrative Code, as such rule existed on August 1, 1982, and which is located in Madison township, Sandusky county, Ohio, shall comply with the certification and permit application requirements in paragraph (A)(1) of this rule by no later than October 1, 1982.

(3) Any certification or application required by paragraph (A)(1) of this rule, or any permit issued by the director, may include multiple, similar fugitive dust sources located at a specified facility, if such similar fugitive dust sources fall within one of the following general source categories: storage piles, mineral extraction operations, material handling operations, or roads and parking lots. Where appropriate, the certification, application or permit may specify such similar fugitive dust sources and their associated control measures by their general source categories.

(4) By no later than October 1, 1991, any owner or operator of an air contaminant source subject to rule 3745-17-12 of the Administrative Code, as such rule existed on June 14, 1991, shall comply with the requirements in either of the following:

(a) Certify in writing to the director that such source is in compliance with rule 3745-17-12 of the Administrative Code. Such certification shall include: equipment description, Ohio EPA permit application number, and all necessary data (consistent with the appropriate permit application appendices) and calculations which confirm the compliance status. The certification shall also include an application for a permit-to-operate such source in accordance with rule 3745-35-02 of the Administrative Code if such source does not possess an effective permit.

(b) Submit an application for a permit-to-operate or an application for a modification in accordance with rule 3745-35-02 of the Administrative Code. Such application shall include a final control plan and a compliance schedule which will bring the source into compliance with rule 3745-17-12 of the Administrative Code as expeditiously as practicable, but in no event later than the dates specified in paragraph (B) of this rule.

[Comment: Applications requiring submittal prior to June 30, 2008, for sources not subject to the Title V program, were to be submitted in accordance with now rescinded Chapter 3745-35 of the Administrative Code.]

(5) By no later than January 1, 1992, any owner or operator of an air contaminant source subject to rule 3745-17-13 of the Administrative Code, as such rule existed on December 6, 1991, shall comply with either of the following:

(a) Certify in writing to the director that such source is in compliance with rule 3745-17-13 of the Administrative Code. Such certification shall include: equipment description, Ohio EPA permit application number, and all necessary data (consistent with the appropriate permit application appendices) and calculations which confirm the compliance status. The certification shall also include an application for a permit-to-operate such source in accordance with rule 3745-35-02 of the Administrative Code if such source does not possess an effective permit.

(b) Submit an application for a permit-to-operate or an application for a modification in accordance with rule 3745-35-02 of the Administrative Code. Such application shall include a final control plan and a compliance schedule which will bring the source into compliance with rule 3745-17-13 of the Administrative Code as expeditiously as practicable, but in no event later than the dates specified in paragraph (B) of this rule.

[Comment: Applications requiring submittal prior to June 30, 2008, for sources not subject to the Title V program, were to be submitted in accordance with now rescinded Chapter 3745-35 of the Administrative Code.]

(6) By no later than October 15, 1983, the "Conesville Power Plant" (OEPA premise number 0616000000) or any subsequent owner or operator of the "Conesville Power Plant" facility located at 47201 County Road 273, Conesville, Ohio shall submit an application for a permit-to-operate in accordance with rule 3745-35-02 of the

Administrative Code, as such rule existed on August 1, 1982, for unit four main boiler (OEPA source number B004). Such application shall include a final control plan and a compliance schedule which will bring the source into compliance with paragraph (C)(6) of rule 3745-17-10 of the Administrative Code as expeditiously as practicable but in no event later than the date specified in paragraph (B)(4) of this rule.

(B) Compliance time schedules.

(1) Any owner or operator of an air contaminant source, which is subject to rule 3745-17-07 of the Administrative Code, shall achieve compliance with the requirements by the following deadlines:

(a) For paragraph (A) of rule 3745-17-07 of the Administrative Code, by June 18, 1980.

(b) For paragraphs (B)(2)(b), (B)(2)(c), and (B)(2)(e) of rule 3745-17-07 of the Administrative Code, by December 31, 1982.

(c) For paragraphs (B)(2)(a) and (B)(2)(d)(ii) of rule 3745-17-07 of the Administrative Code, by October 1, 1983.

(d) For paragraphs (B)(3) to (B)(6) of rule 3745-17-07 of the Administrative Code, by June 14, 1991.

(e) For paragraph (B)(7) of rule 3745-17-07 of the Administrative Code, by January 31, 1998.

(2) Except as otherwise provided in paragraph (B)(3) of this rule, any owner or operator of a fugitive dust source, which is subject to paragraph (D) of rule 3745-17-08 of the Administrative Code, shall achieve compliance with paragraph (B) of rule 3745-17-08 of the Administrative Code as expeditiously as practicable, but not later than the deadlines established in the following schedules:

(a) For paragraphs (B)(2), (B)(7) and (B)(8) of rule 3745-17-08 of the Administrative Code, by August 1, 1981.

(b) For paragraph (B)(6) of rule 3745-17-08 of the Administrative Code, by January 1, 1982.

(c) For paragraphs (B)(3) and (B)(4) of rule 3745-17-08 of the Administrative Code and any other reasonably available control measures not specifically described in rule 3745-17-08 of the Administrative Code, by December 31, 1982.

(3) Any owner or operator of an air contaminant source, which is subject to paragraph (D) of rule 3745-17-08 of the Administrative Code and which is located in Madison township, Sandusky county, Ohio, shall achieve compliance with paragraph (B) of rule 3745-17-08 of the Administrative Code as expeditiously as practicable, but not later than the deadlines in the following schedules:

(a) For paragraphs (B)(2), (B)(7) and (B)(8) of rule 3745-17-08 of the Administrative Code, by August 1, 1983.

(b) For paragraph (B)(6) of rule 3745-17-08 of the Administrative Code, by January 1, 1984.

(c) For paragraph (B)(3) of rule 3745-17-08 of the Administrative Code and any other reasonably available control measures not specifically described in rule 3745-17-08 of the Administrative Code, by January 1, 1985.

(4) "Conesville Power Plant" (OEPA premise number 0616000000) or any subsequent owner or operator of the "Conesville Power Plant", 47201 County road 273, Conesville, Ohio shall achieve compliance with paragraph (C)(6)(b) of rule 3745-17-10 of the Administrative Code as expeditiously as practicable, but not later than June 19, 1984.

(5) Any owner or operator of an air contaminant source, which is subject to rule 3745-17-11 of the Administrative Code, shall achieve compliance with the requirements as expeditiously as practicable, but not later than the deadlines established in the following schedules:

(a) For paragraphs (B)(1) to (B)(3) of rule 3745-17-11 of the Administrative Code, by April 15, 1977.

(b) For paragraph (B)(4) of rule 3745-17-11 of the Administrative Code, by June 14, 1991.

(c) For paragraphs (B)(5) and (B)(6) of rule 3745-17-11 of the Administrative Code, by January 31, 1998.

(6) Any owner or operator of an air contaminant source, which is subject to rule 3745-17-12 of the Administrative Code, shall achieve compliance with the requirements as expeditiously as practicable, but not later than the deadlines established in the following schedules:

(a) For paragraphs (C)(3)(c)(i), (F)(3), (G), (M)(3), (N), (O)(3), (P)(5), (P)(6), (R), (S)(4), (U)(3), (V)(3), and, (W) of rule 3745-17-12 of the Administrative Code, by June 14, 1991.

(b) For paragraphs (C)(1), (E), (F)(1), (F)(2), (K), (M)(1), (M)(2), (U)(1), (U)(2), (V)(1), (V)(2), (X)(1), and (Z) of rule 3745-17-12 of the Administrative Code, by August 1, 1992.

(c) For paragraphs (C)(2) and (X)(4) of rule 3745-17-12 of the Administrative Code, by January 1, 1993.

(d) For paragraphs (C)(3)(a), (C)(3)(b), (C)(3)(c)(ii), (D), (F)(4), (F)(5), (H), (L), and (S)(1) to (S)(3), (V)(4), (X)(2), and (X)(3) of rule 3745-17-12 of the Administrative Code, by December 10, 1993.

(e) [Reserved.]

(f) For paragraphs (O)(10), (P)(1), (P)(2), and (P)(10) of rule 3745-17-12 of the Administrative Code, by January 31, 1998.

(g) [Reserved.]

(7) Any owner or operator of an air contaminant source, which is subject to rule 3745-17-13 of the Administrative Code, shall achieve compliance with the requirements as expeditiously as practicable, but not later than the deadlines established in the following schedules:

(a) For paragraph (D)(3) of rule 3745-17-13 of the Administrative Code, by December 6, 1991.

(b) For paragraph (B) of rule 3745-17-13 of the Administrative Code, by November 1, 1992.

(c) For paragraphs (D)(2), (D)(5) and (D)(6) of rule 3745-17-13 of the Administrative Code, by not later than February 1, 2008.

(d) [Reserved.]

(e) For paragraphs (C) and (D)(1) of rule 3745-17-13 of the Administrative Code, by January 31, 1998.

(8) Any owner or operator of a facility, which is subject to paragraph (C)(1) of rule 3745-17-03 of the Administrative Code, shall achieve compliance with the requirements by January 31, 1998.

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Prior Effective Dates: 7/28/75, 9/25/78, 6/18/80, 8/1/82, 10/1/83, 6/14/91, 12/6/91, 11/15/95, 1/31/98, 4/14/03, 2/1/08

3745-17-07 Control of visible particulate emissions from stationary sources.

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of rule 3745-17-01 of the Administrative Code titled "referenced materials."]

(A) Visible particulate emission limitations for stack emissions:

(1) General limitations:

(a) Except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average.

(b) Except as otherwise specified in paragraphs (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack may exceed twenty per cent opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed sixty per cent opacity, as a six-minute average, at any time.

(2) It shall be deemed not to be a violation of this rule where the presence of uncombined water is the only reason for failure of a stack emission to meet this rule.

(3) The visible particulate emission limitations established in paragraph (A)(1) of this rule shall not apply to the following:

(a) The start-up of the following fuel burning equipment:

(i) For any fuel burning equipment which are equipped with baghouses or electrostatic precipitators, until the exhaust gases have achieved a temperature of two hundred fifty degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators, provided that the director may incorporate a higher start-up temperature in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the higher temperature is needed for safety considerations or to prevent damage to the control equipment.

(ii) For any fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, for a period of not more than three hours from the moment of start-up, provided that the director may incorporate a longer start-up time period in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the longer time period is required.

(b) The shutdown of the following fuel burning equipment:

(i) For any fuel burning equipment which are equipped with baghouses or

electrostatic precipitators, after the temperature of the exhaust gases has dropped below two hundred fifty degrees Fahrenheit at the inlet of the baghouses or electrostatic precipitators, provided that the director may incorporate a higher shutdown temperature in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the higher temperature is needed for safety considerations or to prevent damage to the control equipment.

(ii) For any fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, for a period of not more than three hours, provided that the director may incorporate a longer shutdown time period in the permit or variance for such source for which an applicant demonstrates to the satisfaction of the director that the longer time period is required.

(c) The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists.

(d) Intermittent soot-blowing operations (the cleaning of heat transfer surfaces with pressurized air or steam) for fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, provided that the owner or operator of such fuel burning equipment maintains a daily record which clearly documents the date, beginning time and ending time for all intermittent soot-blowing operations.

(e) Salt glazing operations conducted in a gas-fired periodic brick or tile kiln, for a period of not more than two hours during any twenty-one consecutive days of operation of said kiln.

(f) Intermittent ash removal operations (the dumping or pulling of ash) for fuel burning equipment which are uncontrolled or which are equipped solely with mechanical collectors (including mechanical collectors which are equipped with sidestream separators or similar devices) for the control of particulate emissions, provided that the owner or operator of such fuel burning equipment maintains a daily record which clearly documents the date, beginning time and ending time for all intermittent ash removal operations.

(g) The commencement of increased coal firing from a banked condition for fuel burning equipment, for a period not to exceed thirty minutes.

(h) Any air contaminant source which is not subject to any mass emission limitation

in paragraphs (B)(3) and (B)(4) of rule 3745-17-08 of the Administrative Code, or rule 3745-17-09, 3745-17-10 or 3745-17-11 of the Administrative Code.

(i) Any air contaminant source for which an equivalent visible particulate emission limitation has been established by the director pursuant to paragraph (C) of this rule.

(j) The following kiln operations at the facility (OEPA premise number 0372000127) located at 755 Lime Road, Woodville, Ohio, provided that "Martin Marietta Magnesia Specialties, Inc.," or any subsequent owner or operator of such facility, maintains daily records that clearly document the dates, beginning times, and ending times for the operations:

(i) The start-up of any kiln equipped with a baghouse, until the time stone feed to the kiln begins.

(ii) The start-up of any kiln equipped with an electrostatic precipitator, from the time the stone feed to the kiln begins until the time a stable firing condition for the solid fuel is achieved, but not longer than six hours from the time firing with the solid fuel begins.

(iii) The shutdown of any kiln equipped with a baghouse, after the time the temperature of the exhaust gases from the kiln has dropped below two hundred fifty degrees Fahrenheit at the inlet of the baghouse.

For the purposes of this paragraph, "start-up" shall be defined as the point of commencement of firing the kiln until such time as the process is operating in a steady-state condition using its primary fuel. A steady-state condition is present when the throughputs of process material, fuel and combustion air have been stabilized in a manner that demonstrates the combustion process will be consistently complete and safe, with an exhausted combustibles concentration within established safety limits.

(k) Residential wood burning appliances and pellet stoves.

(B) Visible particulate emission limitations for fugitive dust:

(1) Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive dust source shall not exceed twenty per cent opacity as a three-minute average.

(2) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions from the fugitive dust sources associated with a coke oven battery shall comply with the following:

(a) There shall be no visible particulate emissions from any charging operations except for a period of time not to exceed one hundred twenty-five seconds during any five consecutive charges. One charge, which represents the charge with the highest visible particulate emissions value of twenty consecutive

charges observed, may be exempted from this visible particulate emission limitation.

(b) At no time shall there be visible particulate emissions from more than ten per cent of the offtake piping.

(c) At no time shall there be visible particulate emissions from more than five per cent of the charging hole lids.

(d) For visible particulate emissions from oven doors, the following:

(i) [Reserved.]

(ii) At no time shall there be visible particulate emissions from more than ten per cent of the oven doors. Two oven doors, which represent the last oven charged prior to the commencement of visible particulate emission readings performed in accordance with paragraph (B)(2)(c) of rule 3745-17-03 of the Administrative Code, shall be exempted from this visible emission limitation.

(iii) For purposes of this paragraph, an oven door and the associated chuck door on the pusher side of the battery shall be considered as one door.

(e) Visible particulate emissions during any pushing operations shall not exceed an average of twenty per cent opacity read above the battery top. For purposes of this paragraph, the duration of a pushing operation shall commence with the moving (or pushing) of the coke mass from an oven and shall conclude when the quench car enters the quench tower.

(3) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions of fugitive dust from electric arc furnace shop roof monitors, argon-oxygen decarburization shop roof monitors, blast furnace casthouses and sintering operations shall not exceed twenty per cent opacity as a six-minute average.

(4) Except as provided in paragraphs (B)(7), (B)(8), and (B)(11) of this rule, there shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.

(5) Except as provided in paragraphs (B)(7), (B)(8), and (B)(11) of this rule, there shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.

(6) Except as provided in paragraphs (B)(7) to (B)(11) of this rule, there shall be no visible particulate emissions from any material storage pile except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as

determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.

(7) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions from any roadway, parking area, material handling operation, or coal storage pile located at facilities owned or operated by "Buckeye Power, Inc., Cincinnati Gas & Electric Company, The Cleveland Electric Illuminating Company, Columbus Southern Power Company, Dayton Power & Light Company, Ohio Edison Company, Ohio Power Company, and The Toledo Edison Company" or any subsequent owners or operators of such facilities shall not exceed any of the following limitations:

(a) For any paved or unpaved roadway or parking area, the following:

(i) Ten per cent opacity, as determined in Accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code, for the following facilities:

[Reserved.]

(ii) No visible particulate emissions from any paved roadway or parking area, except for a period of time not to exceed six minutes during any sixty-minute observation period, or from any unpaved roadway or parking area, except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code, for all other facilities not identified in paragraph (B)(7)(a)(i) of this rule.

(b) Twenty per cent opacity for any material handling operation (including loading coal into or loading coal out of any coal storage pile), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(c) Twenty per cent opacity from the operation of vehicles on top of any coal storage pile (emissions from the combustion of fuels in such vehicles are not subject to this limitation), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(d) No visible particulate emissions from any coal storage pile due to wind erosion, except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of rule 3745-17-03 of the Administrative Code.

(8) Except as provided in paragraph (B)(11) of this rule, visible particulate emissions from any roadway, parking area, or material storage pile located at iron and steel production facilities owned and operated by "Empire Detroit Steel Company, LTV Steel Company, Republic Engineered Steels, Incorporated, The Timken Company, or USS/KOBE Steel Company" or any subsequent owner or operator of such facilities shall not exceed any of the following limitations:

(a) Ten per cent opacity for any paved or unpaved roadway or parking area, as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(b) Twenty per cent opacity for any material handling operation (including loading coal into or loading coal out of any coal storage pile), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(c) Ten per cent opacity from the operation of vehicles on top of any material storage pile, where such vehicles are employed for the purpose of compacting, grading or transporting materials (emissions from the combustion of fuels in such vehicles are not subject to this limitation), as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(d) Ten per cent opacity from wind erosion of any material storage pile, as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(9) [Reserved.]

(10) [Reserved.]

(11) The visible particulate emission limitations specified in paragraphs (B)(1) to (B)(9) of this rule shall not apply to the following:

(a) Ship loading spouts at grain terminals.

(b) Blasting at mineral extraction operations.

(c) Blowing taps, poling and oxygen lancing of the tap hole and casting operations associated with ferroalloy electric arc furnaces.

(d) Any fugitive dust source which is exempted from paragraph (B) of rule 3745-17-08 of the Administrative Code.

(e) Any fugitive dust source which is not located within the geographical areas specified in appendix A of rule 3745-17-08 of the Administrative Code, unless the director, in accordance with paragraph (A)(2) of rule 3745-17-08 of the Administrative Code, requires the owner or operator to submit and implement a control program which will bring the fugitive dust source into compliance with paragraph (B) of rule 3745-17-08 of the Administrative Code.

(f) The malfunction of any air contaminant source or the malfunction/shutdown of air pollution control equipment associated with any air contaminant source, if the owner or operator of said air contaminant source or air pollution control equipment complies with rule 3745-15-06 of the Administrative Code and none of the conditions listed in paragraph (C) of rule 3745-15-06 of the Administrative Code exists.

(g) Any fugitive dust for which a visible particulate emission limitation has been established in rule 3745-17-12 or 3745-17-13 of the Administrative Code.

(12) It shall be deemed not to be a violation of this rule where the presence of uncombined water is the only reason for failure of a fugitive dust emission to meet this rule.

(C) Equivalent visible particulate emission limitations:

(1) For the purpose of establishing an equivalent visible particulate emission limitation for stack emissions subject to a mass-based, particulate emission limitation, any owner or operator of an air contaminant source which is subject to paragraph (A)(1) of this rule may request the director to determine the average opacity of the emissions from said source during any performance test conducted pursuant to paragraph (B) of rule 3745-17-03 of the Administrative Code. Any such request shall be made in writing at the time the test specifications and procedures are submitted to the director pursuant to paragraph (B)(6) of rule 3745-17-03 of the Administrative Code.

(2) If, upon review of such owner's or operator's written report of the results of the performance test, it is the director's judgment that the air contaminant source is in compliance with all applicable emission limitations for which the performance tests were conducted, but fails to comply with paragraph (A)(1) of this rule, the director shall notify the owner or operator as expeditiously as practicable that he may request the director to establish an equivalent visible particulate emission limitation for the source. Such request shall be made in writing not later than thirty days following receipt of the notification from the director.

(3) Any written request for an equivalent visible particulate emission limitation from an owner or operator of an air contaminant source shall include information which demonstrates the following:

(a) That the performance tests were conducted in accordance with the conditions and procedures accepted by the director pursuant to paragraph (B)(6) of rule 3745-17-03 of the Administrative Code.

(b) That the air contaminant source and any associated air pollution control equipment were operated and maintained in a manner so as to minimize the opacity of the emissions during the performance test.

(4) If an owner or operator of an air contaminant source complies with paragraphs (C)(1) to (C)(3) of this rule, the director may establish an equivalent visible particulate emission limitation for said source in accordance with the procedures described in the Ohio EPA, Division of Air Pollution Control documents entitled "Engineering Guide #13" and "Engineering Guide #15." Any such equivalent visible particulate emission limitation shall be specified in the terms and conditions of the permit, variance or order issued by the director for said source.

(D) Any revision approved by the director in accordance with paragraphs (A)(3)(a)(i),

(A)(3)(a)(ii), (A)(3)(b)(i), and (A)(3)(b)(ii) of this rule shall not revise the federally enforceable requirements of the state implementation plan until approved by the United States environmental protection agency.

Effective: 1/20/2018

Five Year Review (FYR) Dates: 6/1/2017 and 01/20/2023

CERTIFIED ELECTRONICALLY
Certification

01/10/2018
Date

Promulgated Under: 119.03
Statutory Authority: 3704.03(E)
Rule Amplifies: 3704.03(A), 3704.03(E)
Prior Effective Dates: 2/15/72, 6/18/80, 10/1/83, 6/14/91, 1/31/98, 4/14/03, 2/1/08

3745-17-08 Restriction of emission of fugitive dust.

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of rule 3745-17-01 of the Administrative Code titled "referenced materials."]

(A) Applicability:

(1) Except as otherwise specified in paragraph (A)(3) of this rule, paragraph (B) of this rule shall apply to any fugitive dust source which is located within the areas identified in appendix A to this rule. Except as additional time for achieving compliance is provided in paragraph (B) of rule 3745-17-04 of the Administrative Code, any such source shall comply with paragraph (B) of this rule by August 7, 1972 or the date of initial startup of the source, whichever is later.

(2) Notwithstanding the exemptions in paragraph (A)(3) of this rule, paragraph (B) of this rule shall apply to any fugitive dust source regardless of location if, in the director's judgment, probable cause exists to believe that such source is causing or contributing to a violation of rule 3745-15-07 of the Administrative Code. In such cases, the director may require the owner or operator of the fugitive dust source to apply for and obtain an operating permit in accordance with Chapter 3745-77 of the Administrative Code (for sources subject to the Title V permit program) or an a permit-to-install and operate in accordance with Chapter 3745-31 of the Administrative Code (for sources not subject to the Title V permit program), or require the owner or operator to submit and implement a control program which will bring the fugitive dust source into compliance with paragraph (B) of this rule as expeditiously as practicable.

[Comment: Applications requiring submittal prior to June 30, 2008, for sources not subject to the Title V program, were to be submitted in accordance with now rescinded Chapter 3745-35 of the Administrative Code.]

(3) Paragraph (B) of this rule shall not apply to:

(a) Any fugitive dust source which is located at a grain elevator having a permanent storage capacity of less than 2.5 million bushels.

(b) [Reserved.]

(c) Fugitive dust generated from publicly owned roadways and parking lots, provided the fugitive dust is not directly caused by the deposition of materials due to industrial, commercial, or construction activities.

(d) Fugitive dust generated from the tilling and wind erosion of farm land.

(e) Except as otherwise provided in paragraphs (E) and (F) of this rule, fugitive dust generated from any roadway or parking area at the "Mingo Junction Steel Works LLC" or any subsequent owner or operator of the "Mingo Junction Steel

Works LLC" facilities located at South Third street, Steubenville, Ohio (OEPA premise number 0641090010) and at , 540 Commercial ave., Mingo Junction, Ohio (OEPA premise number 0641090010).

(f) Fugitive dust generated from residential wood burning appliances and pellet stoves.

(4) An air contaminant source can be subject to both rule 3745-17-11 of the Administrative Code and this rule if it is a fugitive dust source, as defined in paragraph (B) of 3745-17-01 of the Administrative Code, and also emits, by means of one or more stacks, particulate matter that is subject to a limitation in rule 3745-17-11 of the Administrative Code.

(B) No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne. Such reasonably available control measures shall include, but not be limited to, one or more of the following which are appropriate to minimize or eliminate visible particulate emissions of fugitive dust:

(1) The use of water or other suitable dust suppression chemicals for the control of fugitive dust from the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.

(2) The periodic application of asphalt, oil (excluding any used oil as defined in paragraph (A) of rule 3745-279-01 of the Administrative Code), water, or other suitable dust suppression chemicals on dirt or gravel roads and parking lots, and other surfaces which can cause emissions of fugitive dust.

(3) The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

(a) The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.

(b) The control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack, whichever is less stringent.

(4) For ship loading operations at grain terminals, either of the following:

(a) Except during topping-off periods or during the loading of tween-deckers or tankers, the covering of the hatches and loading spouts with tarpaulin covers, to the extent practicable, and evacuation of the hatches to control equipment which is designed to achieve an outlet emission rate of 0.030 grain of particulate

emissions per dry standard cubic foot of exhaust gases.

(b) The installation and use of control measures such as deadbox or bullet-type loading spouts which are equivalent to or better than the overall control efficiency of the measures described in paragraph (B)(4)(a) of this rule.

(5) The use of adequate containment methods during sandblasting or other similar operations.

(6) The periodic application of water or other suitable dust suppression chemicals, the installation of storage silos, bins or other enclosed structures, or the use of canvas or other suitable coverings, for all materials stockpiles and stockpiling operations, except temporary stockpiles and stockpiling operations for grain and grain products.

(7) The covering, at all times, of open bodied vehicles when transporting materials likely to become airborne.

(8) The paving of roadways and the maintaining of roadways in a clean condition.

(9) The prompt removal, in such a manner as to minimize or prevent resuspension, of earth or other material from paved streets onto which earth or other material has been deposited by trucking or earth moving equipment or erosion by water or other means.

(C) For purposes of determining compliance with paragraph (B) of this rule, the director shall consider a control measure to be adequate if it complies with the following:

(1) The visible particulate emission limitation contained in rule 3745-17-07 of the Administrative Code;

(2) If applicable, the control requirements contained in paragraph (B) of this rule; and

(3) The definition of reasonably available control measures in paragraph (B) of rule 3745-17-01 of the Administrative Code.

(D) Any owner or operator of a facility which contains a fugitive dust source and which is located within any area identified in appendix A to this rule shall submit a certification or application for a permit-to-operate in accordance with paragraphs (A) and (B) of rule 3745-17-04 of the Administrative Code. This paragraph shall not exempt the owner or operator of a fugitive dust source which is not located within an area identified in appendix A to this rule from rule 3745-35-02 or 3745-77-02 of the Administrative Code.

[Comment: Applications requiring submittal prior to June 30, 2008, for sources not subject to the Title V program, were to be submitted in accordance with now rescinded Chapter 3745-35 of the Administrative Code.]

(E) [Reserved.]

(F) [Reserved.]

Effective: 1/20/2018

Five Year Review (FYR) Dates: 6/1/2017 and 01/20/2023

CERTIFIED ELECTRONICALLY
Certification

01/10/2018
Date

Promulgated Under: 119.03
Statutory Authority: 3704.03(E)
Rule Amplifies: 3704.03(A), 3704.03(E)
Prior Effective Dates: 8/7/72, 6/18/80, 3/25/81, 8/1/82, 10/1/83, 6/14/91, 1/31/98, 4/14/03, 2/1/08

APPENDIX A

AREAS OF THE STATE OF OHIO WHERE PARAGRAPHS (B) AND (D) OF RULE 3745-17-08 OF THE ADMINISTRATIVE CODE ARE APPLICABLE

COUNTY	DESCRIPTION OF AREA(S)
Allen	City of Lima (Figure A-1)
Ashtabula	City of Ashtabula; and Ashtabula and Plymouth Townships (Figure A-2)
Belmont	entire county
Butler	Cities of Hamilton, Middletown and New Miami; and Fairfield, Lemon, Madison and St. Clair Townships (Figure A-3)
Carroll	entire county
Clark	Cities of New Carlisle and Springfield (Figure A-4)
Clinton	Cities of Blanchester and Wilmington (Figure A-5)
Columbiana	entire county
Coshocton	Jackson Township (Figure A-6)
Cuyahoga	entire county
Defiance	Richland Township (Figure A-7)
Franklin	City of Columbus (Figure A-8)
Gallia	City of Gallipolis (Figure A-9)
Geauga	Cities of Chardon and Middlefield; and Bainbridge Township (Figure A-10)
Greene	City of Fairborn (Figure A-11)

APPENDIX A (CONTINUED)

COUNTY	DESCRIPTION OF AREA(S)
Hamilton	Cities of Cincinnati, Norwood, Golf Manor, Amberley, Arlington Heights, Reading, Lockland, Evendale, Sharonville, Springdale, Glendale, Woodlawn, Lincoln Heights, Wyoming, Elmwood Place and St. Bernard; and Miami, Whitewater, Delhi and Springfield Townships (Figure A-12)
Henry	City of Napoleon (Figure A-13)
Jackson	City of Jackson (Figure A-14)
Jefferson	entire county
Lake	Cities of Painesville, Willowick, Willoughby Hills, Wickliffe, Eastlake, Madison and Mentor; and Madison, Leroy and Painesville Townships (Figure A-15)
Lawrence	Cities of Ironton and Coal Grove (Figure A-16)
Lorain	Cities of Sheffield, Lorain, Avon and Avon Lake; and Sheffield Township (Figure A-17)
Lucas	Cities of Maumee, Toledo and Oregon; and Washington and Waterville Townships (Figure A-18)
Mahoning	City of Youngstown (Figure A-19)
Medina	entire county
Meigs	City of Racine (Figure A-20)
Miami	City of Piqua; and Concord Township (Figure A-21)
Monroe	entire county
Montgomery	Cities of Dayton, Kettering, Miamisburg, Moraine, Oakwood, Riverside, Trotwood and West Carrollton; and Butler, Jefferson, Harrison, Mad River, Madison, Miami, Washington and Wayne Townships (Figure A-22)
Morgan	Center Township (Figure A-23)
Muskingum	Cities of Philo and Zanesville (Figure A-24)

APPENDIX A (CONTINUED)

COUNTY	DESCRIPTION OF AREA(S)
Noble	City of Caldwell (Figure A-25)
Portage	Cities of Kent and Ravenna (Figure A-26)
Preble	City of Eaton (Figure A-27)
Richland	City of Mansfield; and Madison, Mifflin and Franklin Townships (Figure A-28)
Sandusky	Cities of Gibsonburg and Woodville; and Jackson, Madison, Washington and Woodville Townships (Figure A-29)
Seneca	City of Tiffin (Figure A-30)
Shelby	City of Sidney (Figure A-31)
Stark	Cities of Canton, East Canton and Louisville; village of Meyers Lake; and Canton, Nimishillen, Osnaburg, Perry and Plain Townships (Figure A-32)
Summit	Cities of Akron, Barberton, Cuyahoga Falls, New Franklin and Norton; and Coventry Township (Figure A-33)
Trumbull	Cities of Warren and Niles; and Warren Township (Figure A-34)
Washington	entire county
Wood	City of Perrysburg (Figure A-35)
Wyandot	City of Carey; and Crawford Township (Figure A-36)

Figure A-1

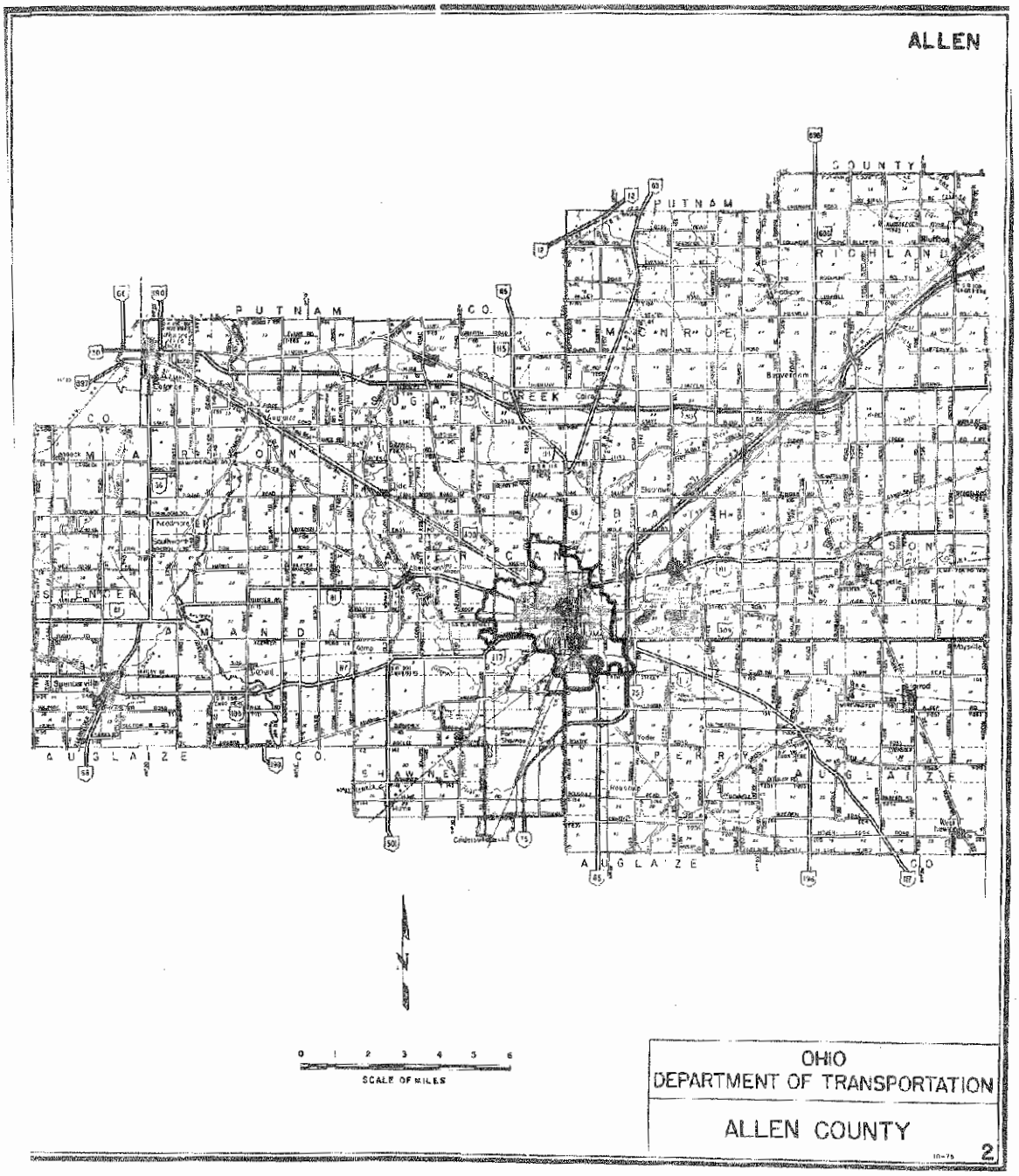

ALLEN
PUTNAM CO.
AUGLAIZE CO.
SCALE OF MILES
0 1 2 3 4 5 6
OHIO
DEPARTMENT OF TRANSPORTATION
ALLEN COUNTY
2

Figure A-2

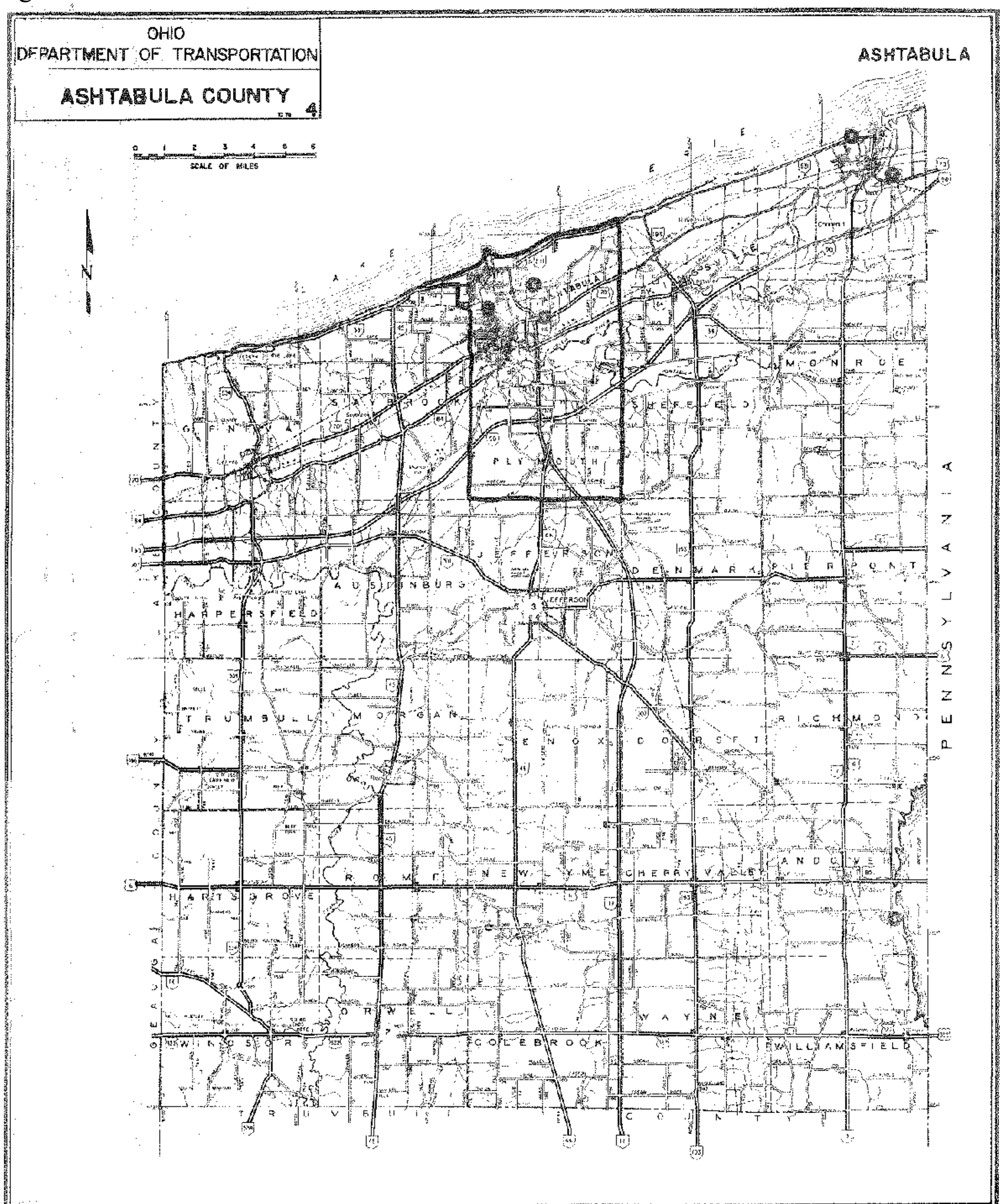

OHIO
DEPARTMENT OF TRANSPORTATION
ASHTABULA COUNTY
ASHTABULA
SCALE OF MILES
PENNSYLVANIA
MONROE
PLYMOUTH
JEFFERSON
AUSTINBURG
HARPERSFIELD
TRUMBULL
MORGAN
RICHMOND
HARTSGROVE
ORWELL
WAYNE
COLEBROOK
WILLIAMSFIELD

Figure A-3

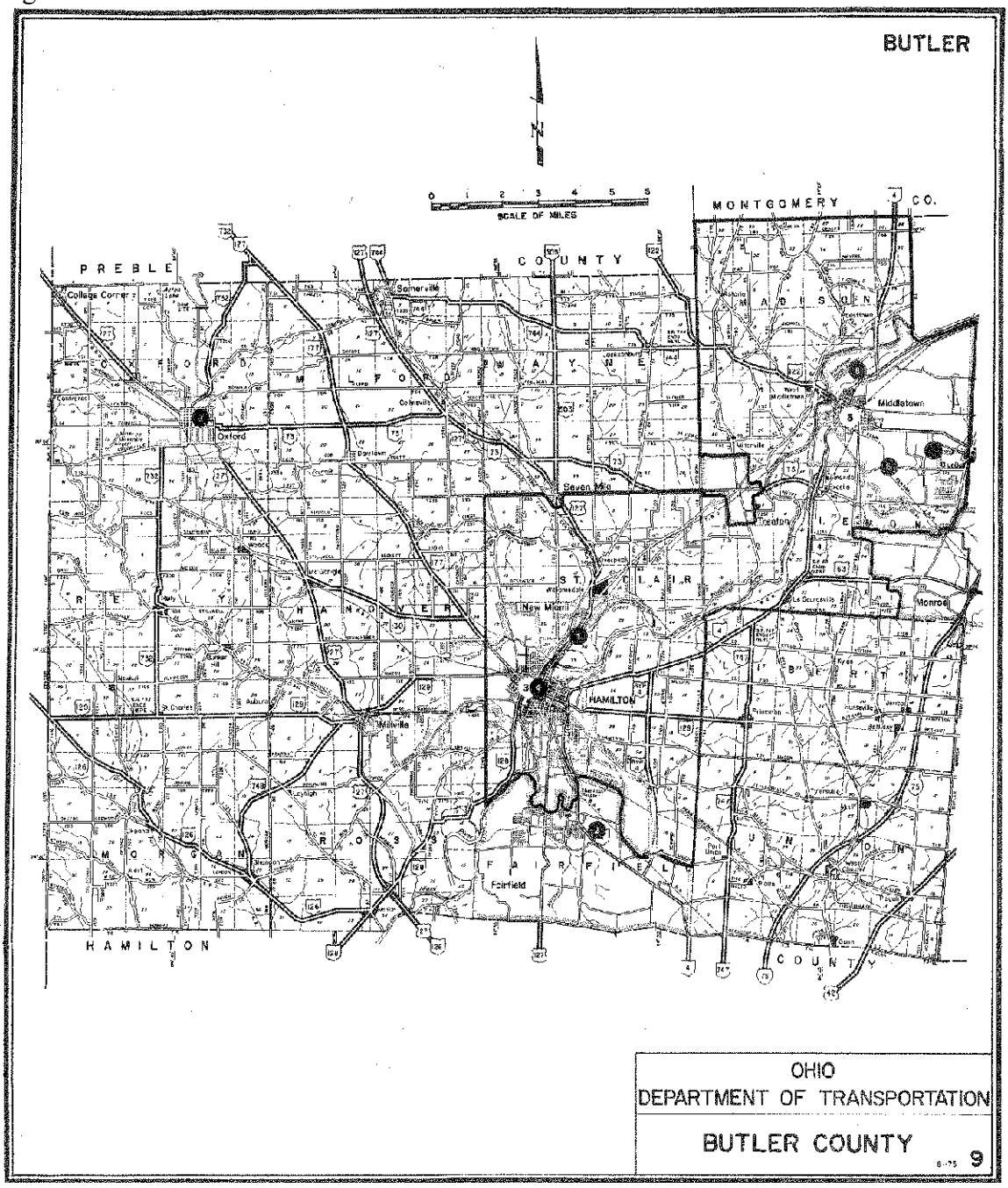
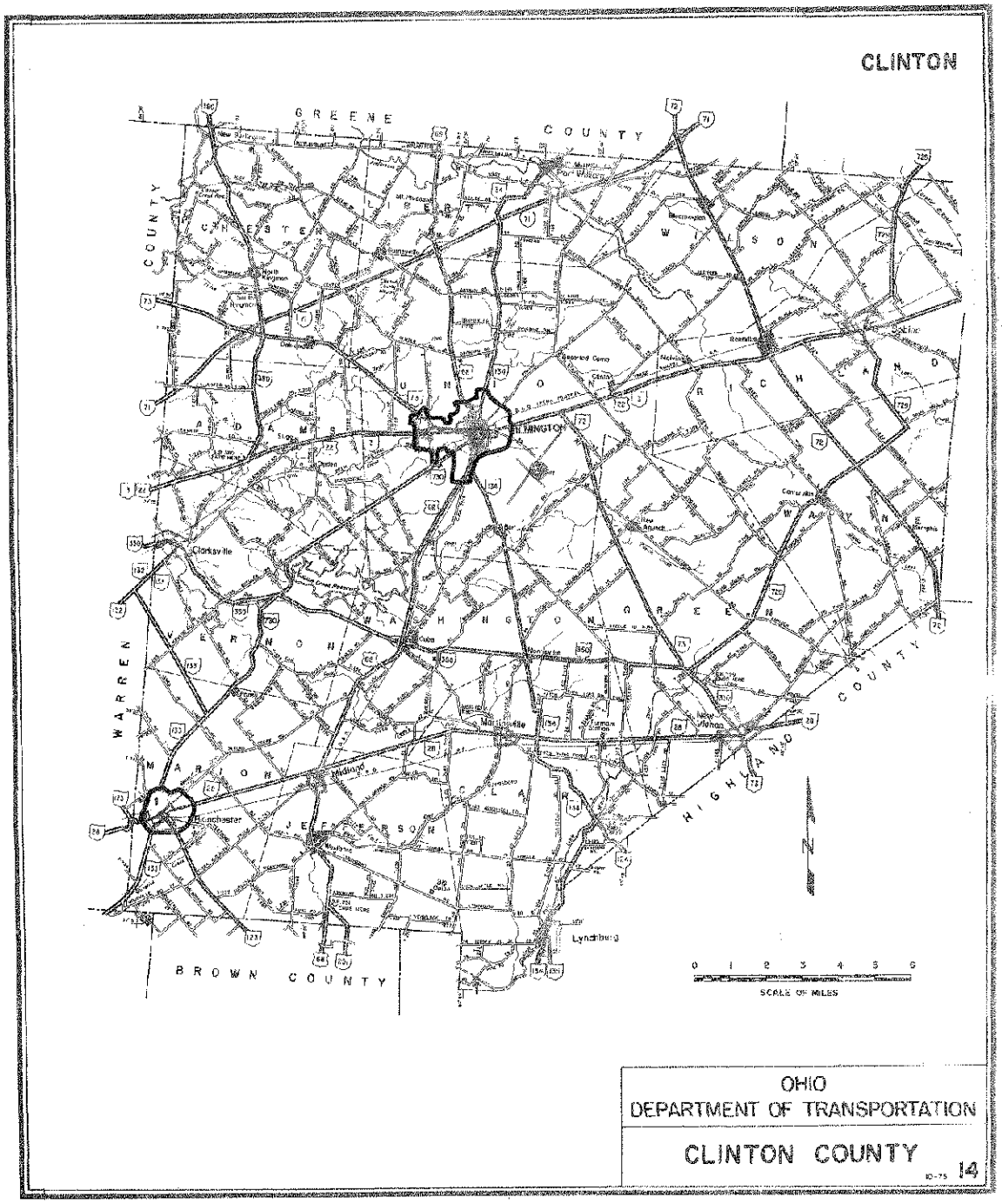

BUTLER
N
0 1 2 3 4 5 5
SCALE OF MILES
MONTGOMERY CO.
PREBLE COUNTY
College Corner
Somerville
Oxford
Seven Mile
Middletown
Monroe
HAMILTON
Millville
Fairfield
HAMILTON COUNTY
OHIO
DEPARTMENT OF TRANSPORTATION
BUTLER COUNTY
6-75 9

Figure A-4


CLARK
CHAMPAIGN
COUNTY
GREENE
COUNTY
MADISON
COUNTY
N
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
CLARK COUNTY
12

Figure A-5


CLINTON
GREENE COUNTY
WARREN COUNTY
HIGHLAND COUNTY
BROWN COUNTY
Clarksville
Wilmington
Midland
Lynchburg
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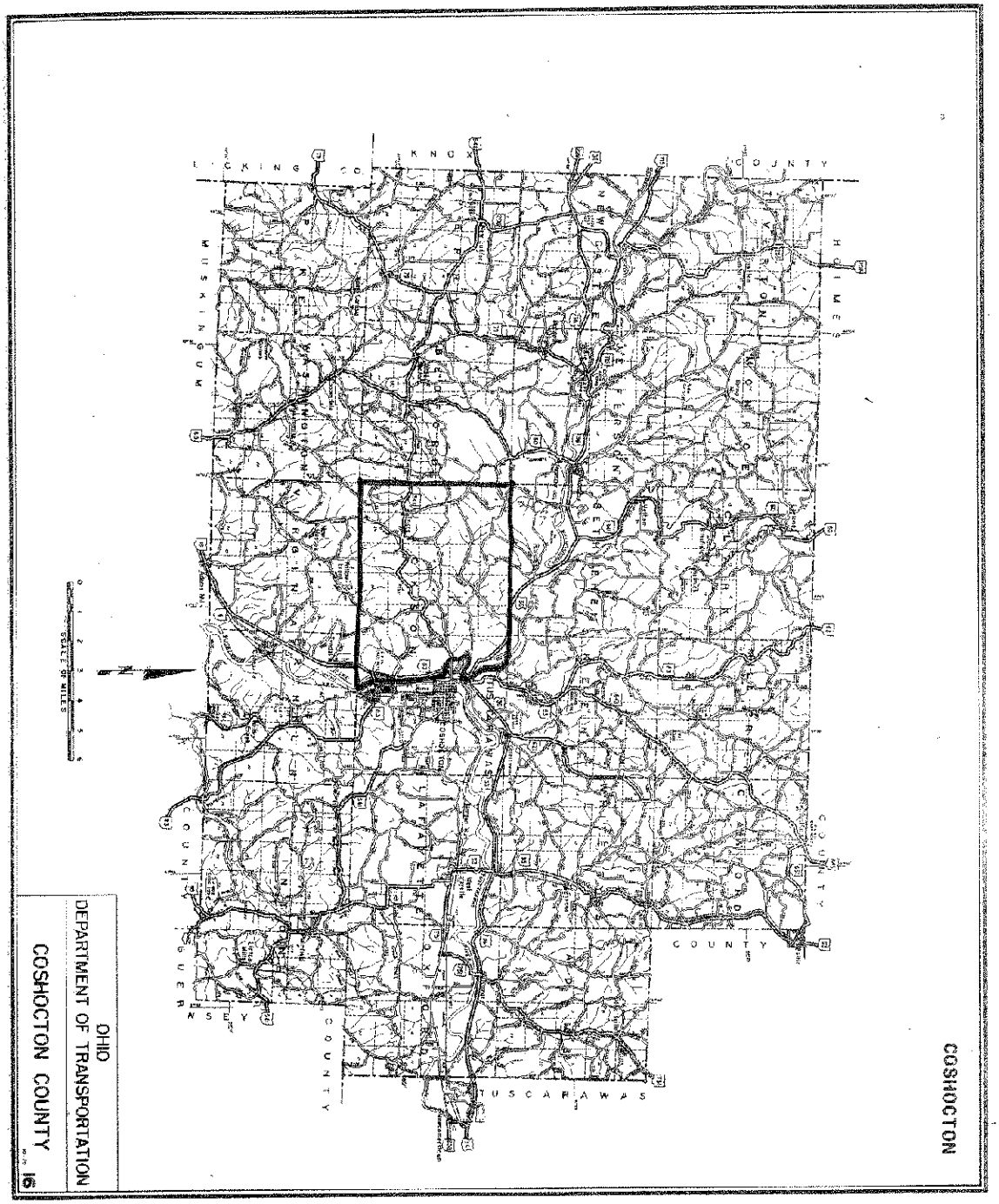
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
CLINTON COUNTY
10-75 14

Figure A-6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DEPARTMENT OF TRANSPORTATION
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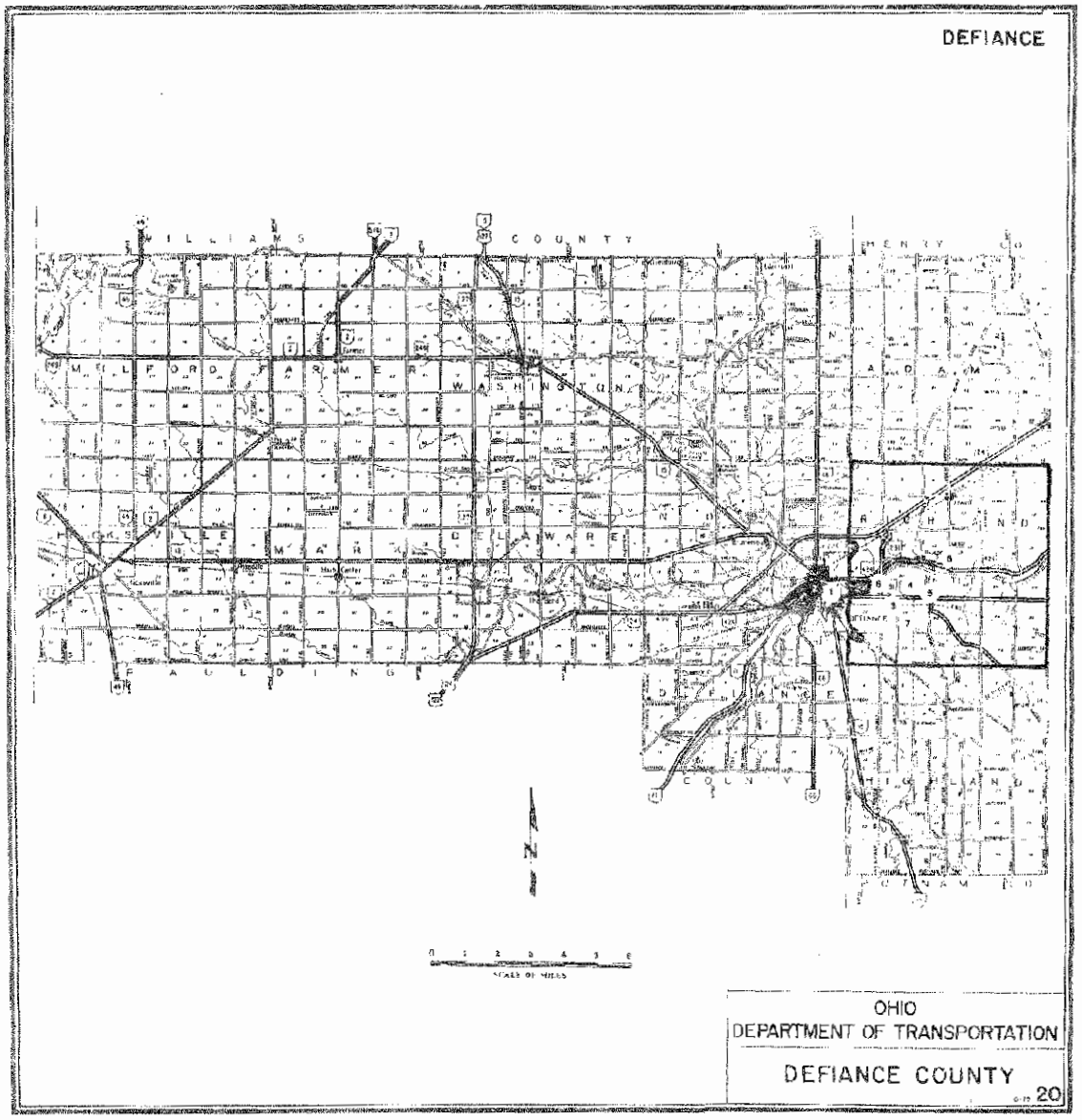
KNOX COUNTY
LICKING COUNTY
MUSKINGUM COUNTY
GUERNSEY COUNTY
TUSCARAWAS COUNTY
SCALE OF MILES

Figure A-7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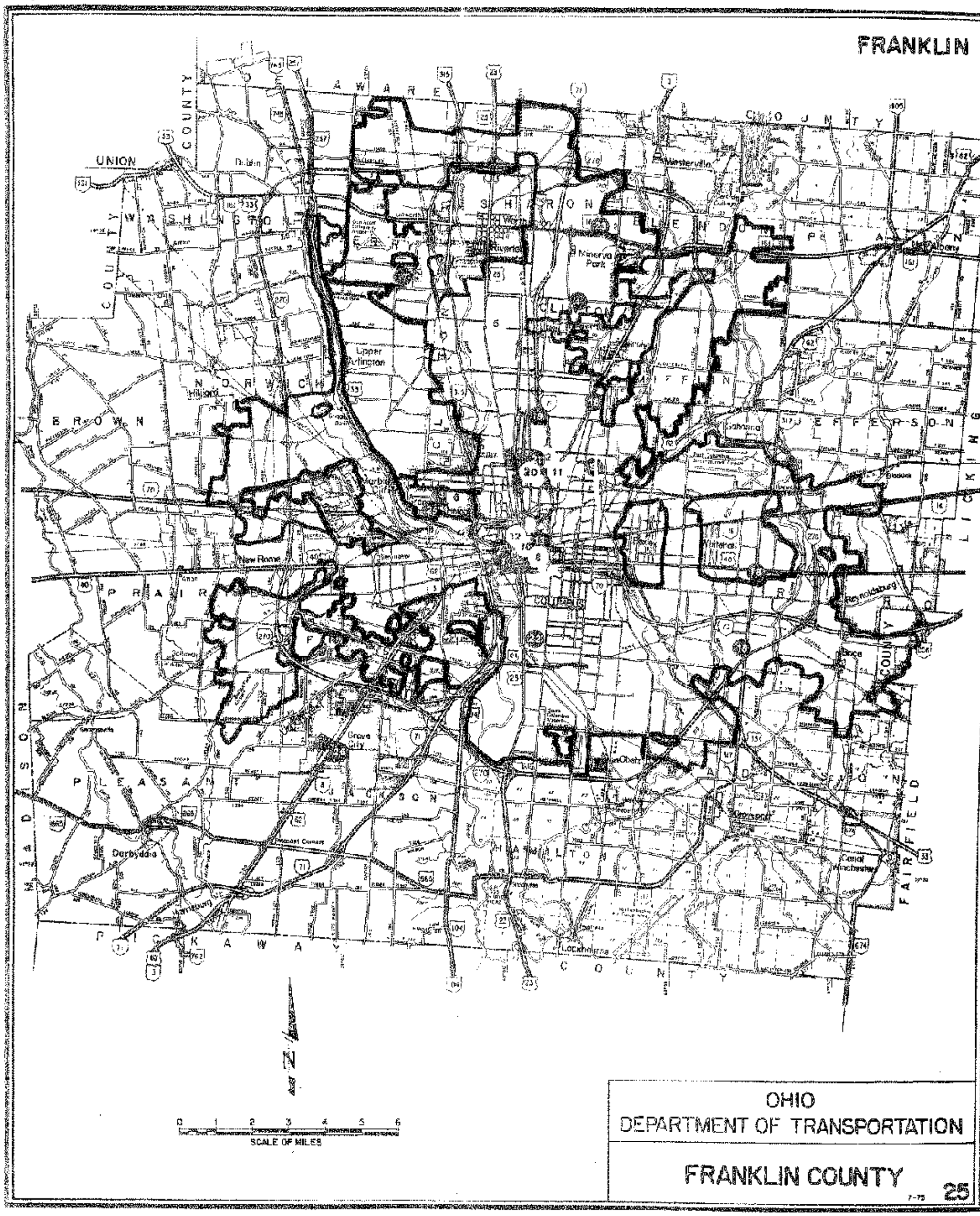
HENRY CO
MILFORD
FARMER
WASHINGTON
DELAWARE
RICHLAND
FAULDING
DEFIANCE
COUNTY
PUTNAM CO
N
OHIO
DEPARTMENT OF TRANSPORTATION
DEFIANCE COUNTY
20

Figure A-8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OHIO
DEPARTMENT OF TRANSPORTATION
FRANKLIN COUNTY
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SCALE OF MILES
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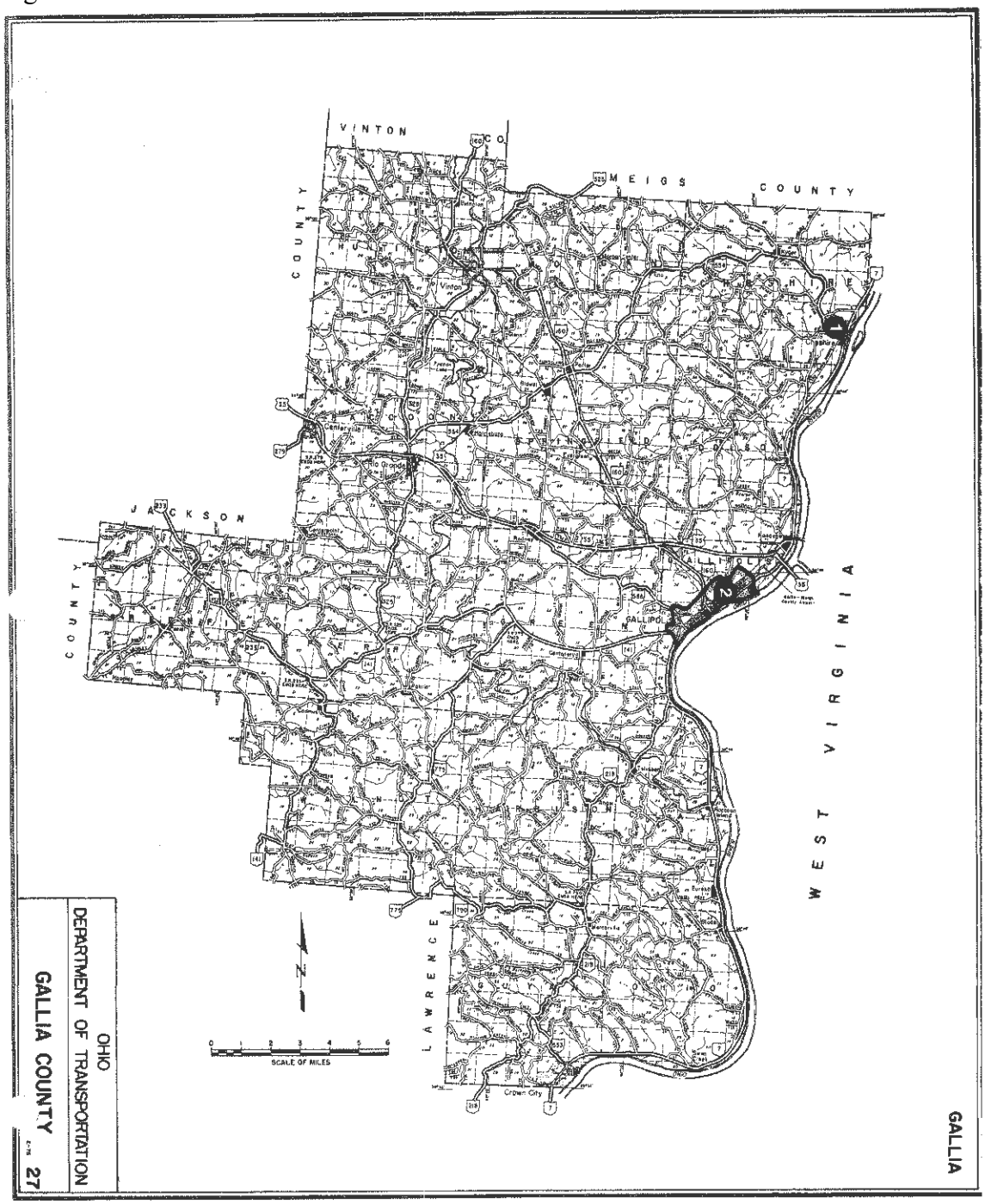
Figure A-9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COUNTY
MEIGS
COUNTY
JACKSON
COUNTY
GALLIPOLIS
WEST VIRGINIA
LAWRENCE
COUNTY
Crown City
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
GALLIA COUNTY
27
GALLIA

Figure A-10

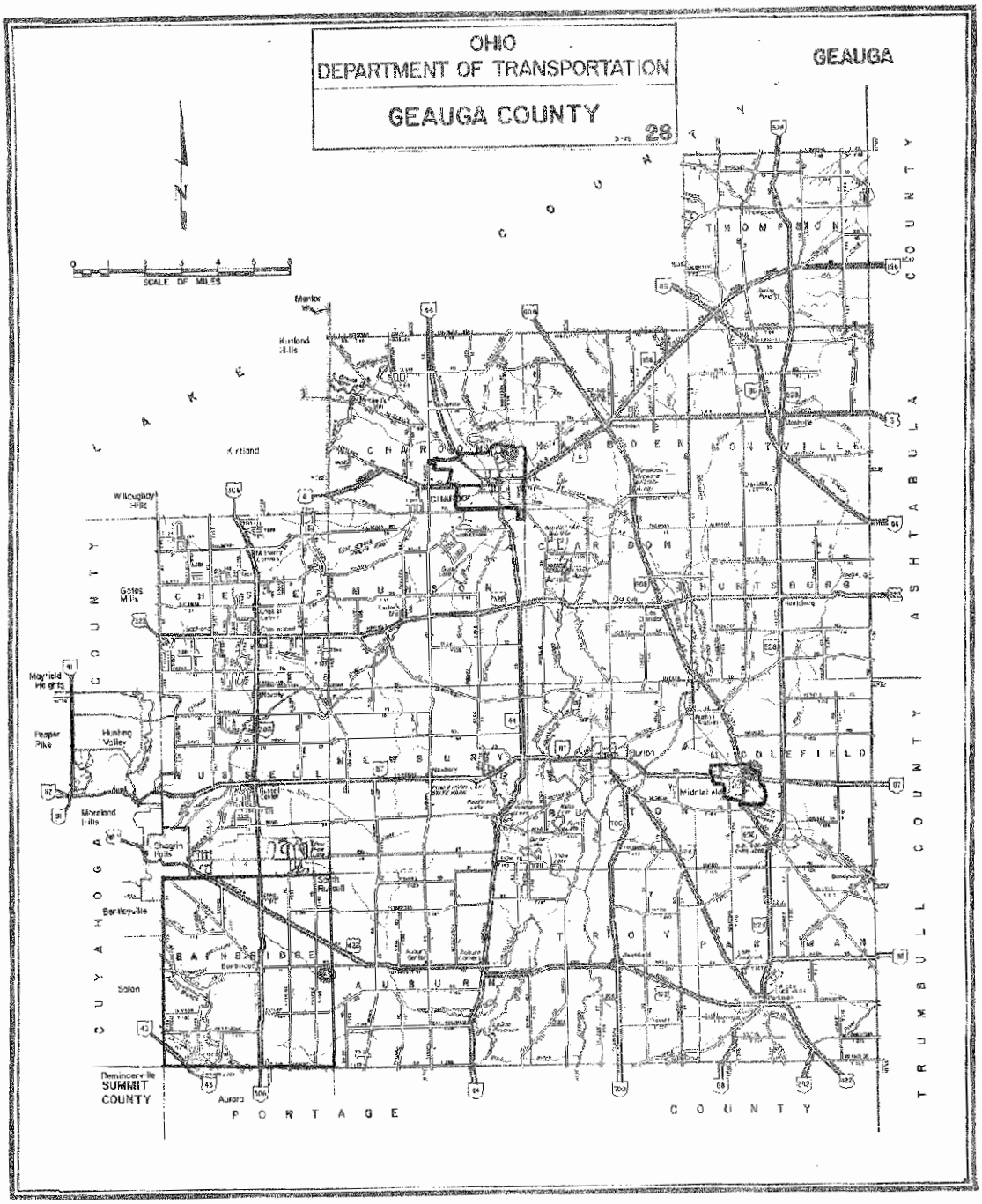
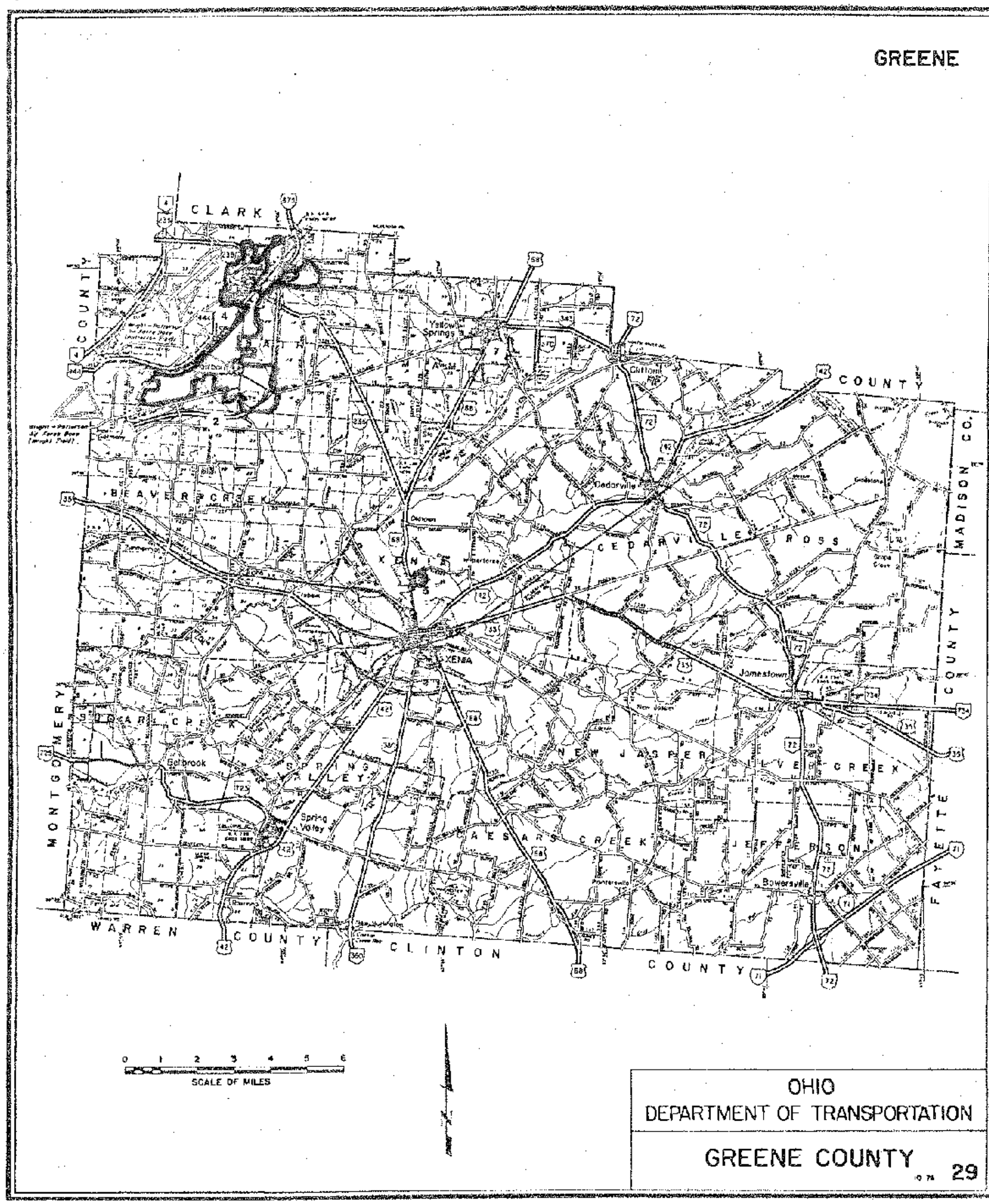

OHIO
DEPARTMENT OF TRANSPORTATION
GEAUGA COUNTY
GEAUGA
SCALE OF MILES
LAKE COUNTY
CUYAHOGA COUNTY
TRUMBULL COUNTY
ASHTABULA COUNTY
PORTAGE COUNTY
SUMMIT COUNTY
CHARDON
MIDDLEFIELD
BAINBRIDGE
AUBURN
TROY
THOMPSON
BURTON
Kirtland
Willoughby Hills
Gates Mills
Mayfield Heights
Hunting Valley
Pepper Pike
Moreland Hills
Bentleyville
Solon
Aurora
Middlefield

Figure A-11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COUNTY
MONTGOMERY
WARREN
COUNTY
CLINTON
COUNTY
FAYETTE
COUNTY
MADISON CO.
BEAVERCREEK
SUGAR CREEK
SPRING VALLEY
CAESARS CREEK
NEW JASPER
SILVERCREEK
JEFFERSON
ROSS
CEDARVILLE
XENIA
Yellow Springs
Clifton
Cedarville
Jamestown
Bowersville
Bellbrook
Spring Valley
0 1 2 3 4 5 6
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
GREENE COUNTY
29

Figure A-12

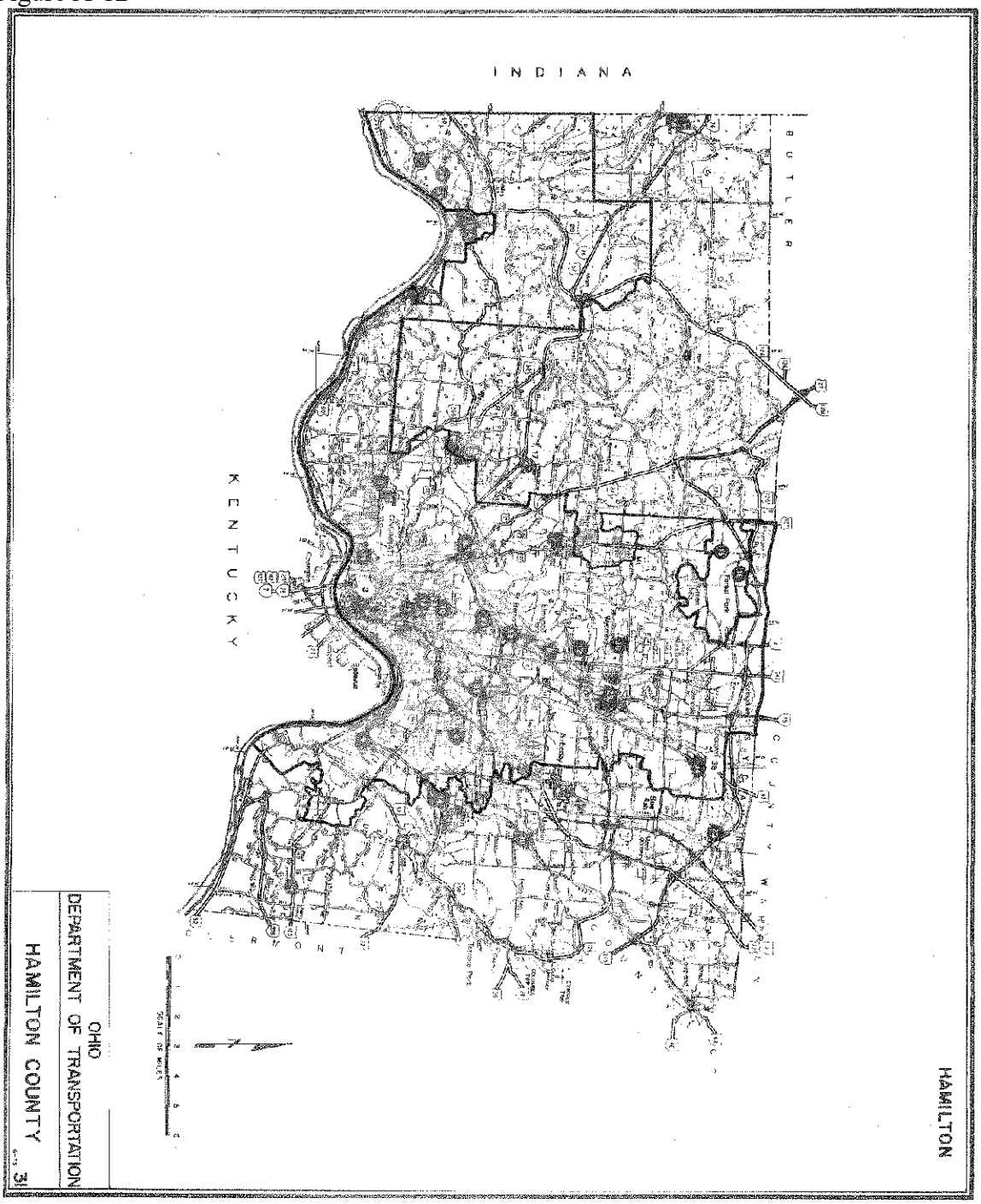
INDIANA
BUTLER
KENTUCKY
HAMILTON
OHIO
DEPARTMENT OF TRANSPORTATION
HAMILTON COUNTY

Figure A-13

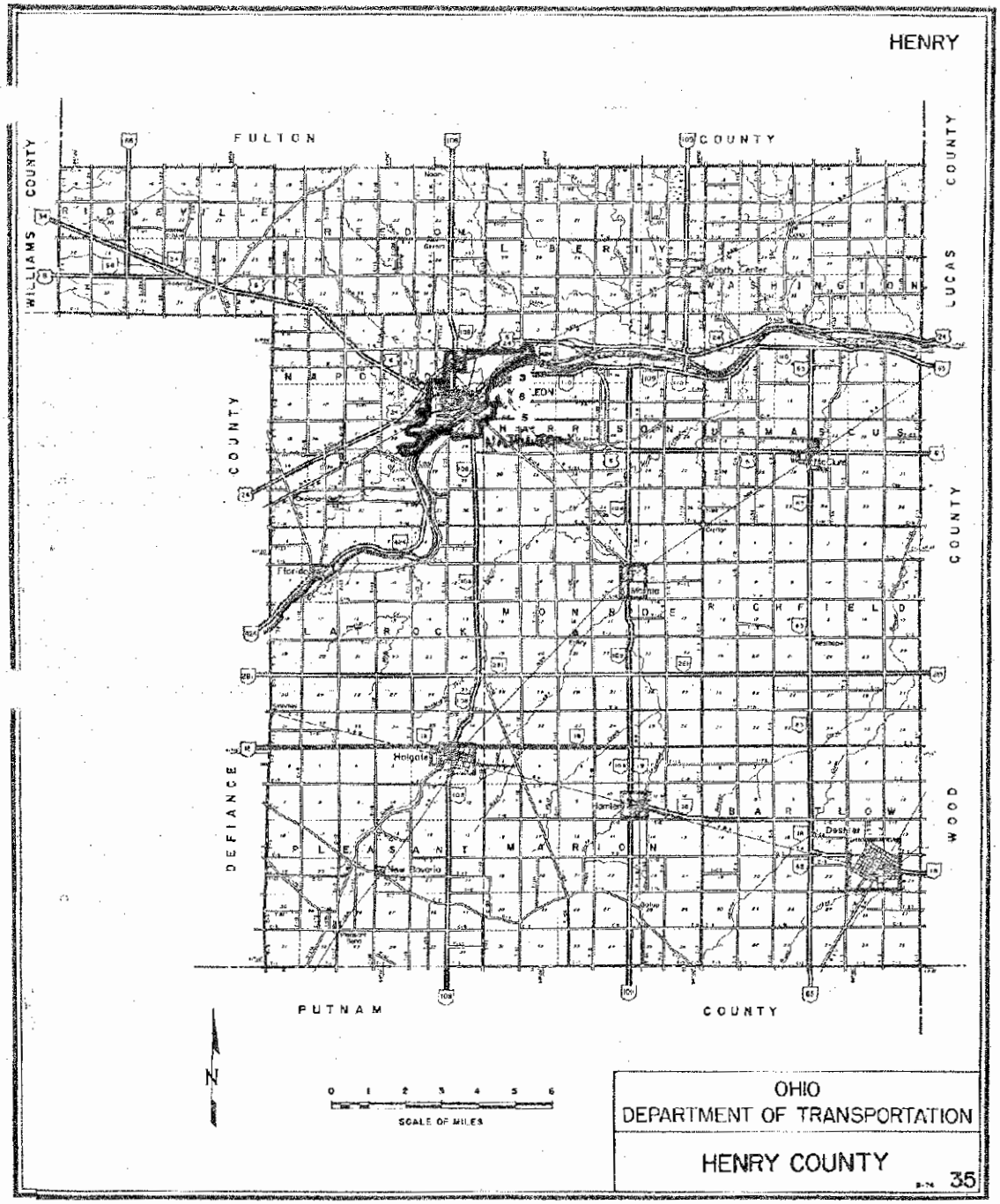
HENRY
FULTON
COUNTY
WILLIAMS COUNTY
LUCAS COUNTY
DEFIANCE COUNTY
WOOD COUNTY
PUTNAM
COUNTY
N
0 1 2 3 4 5 6
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
HENRY COUNTY
35

Figure A-14

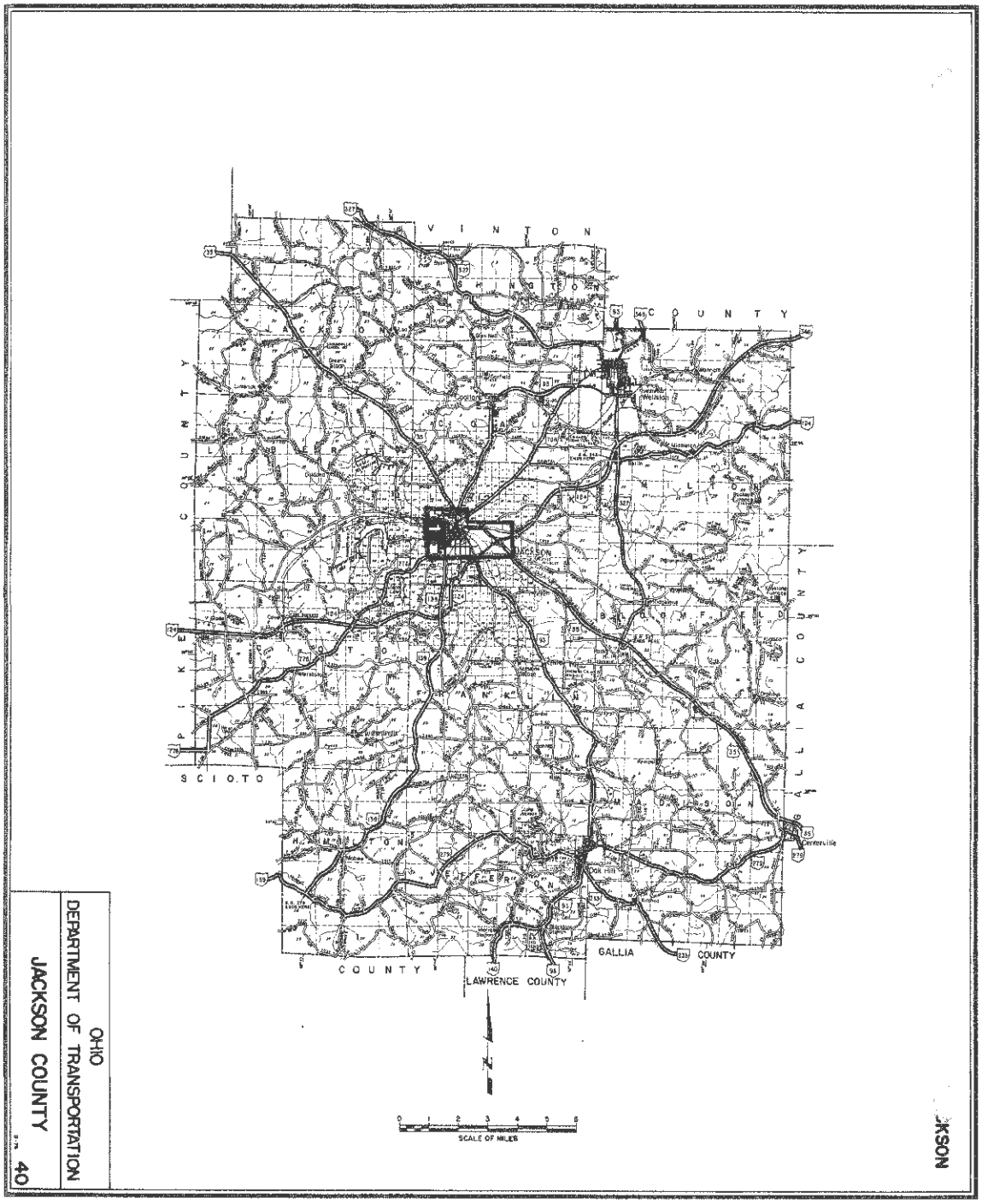
VINTON COUNTY
PIKE COUNTY
SCIOTO
GALLIA COUNTY
COUNTY
LAWRENCE COUNTY
GALLIA COUNTY
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
JACKSON COUNTY
40

Figure A-15

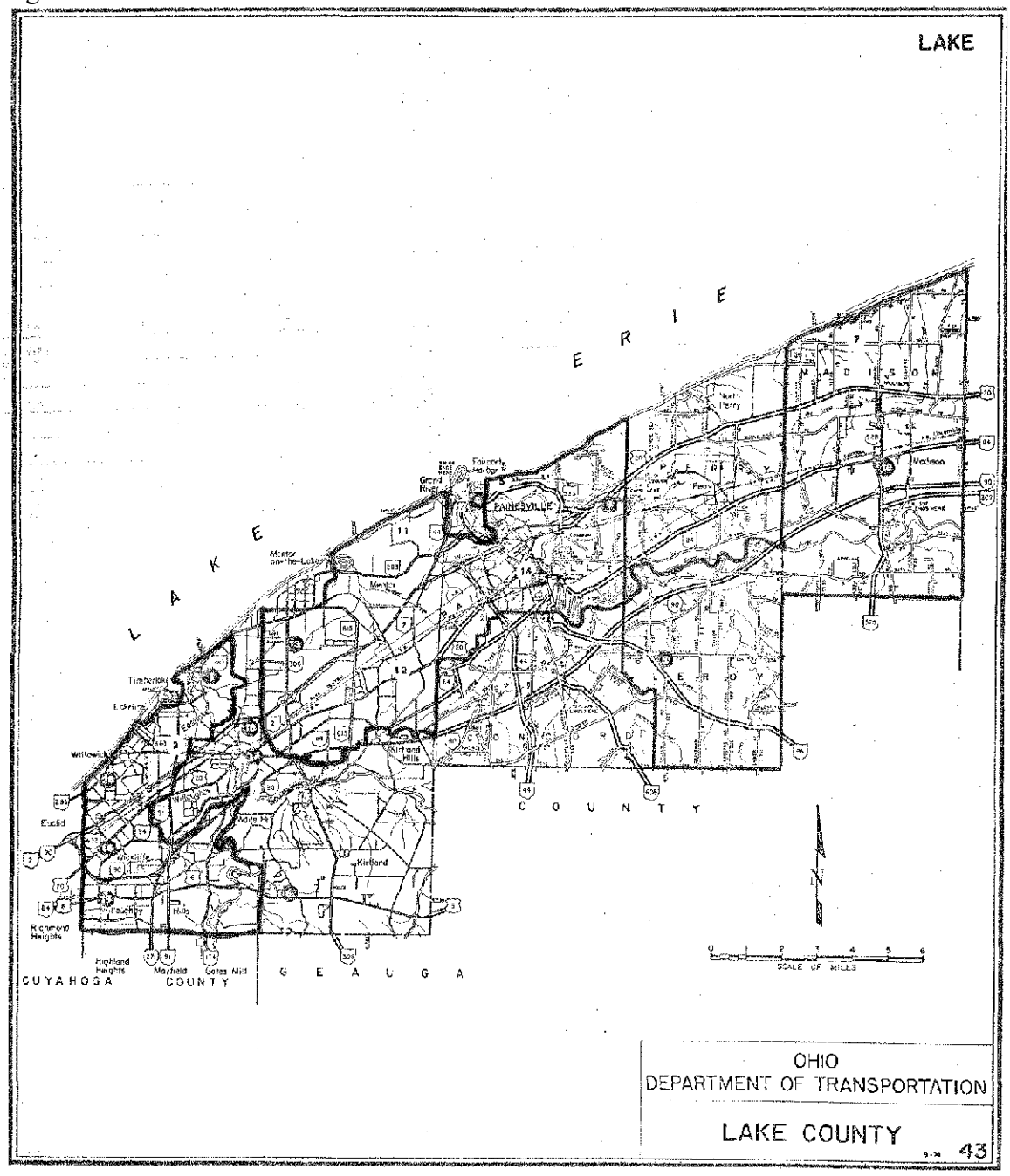
LAKE
LAKE ERIE
PAINESVILLE
Mentor-on-the-Lake
Timberlake
Eastlake
Willowick
Euclid
Wickliffe
Willoughby
Willoughby Hills
Kirtland
Kirtland Hills
Richmond Heights
Highland Heights
Mayfield
Gates Mills
Perry
North Perry
Madison
COUNTY
CUYAHOGA COUNTY
GEAUGA
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
LAKE COUNTY
43

Figure A-16

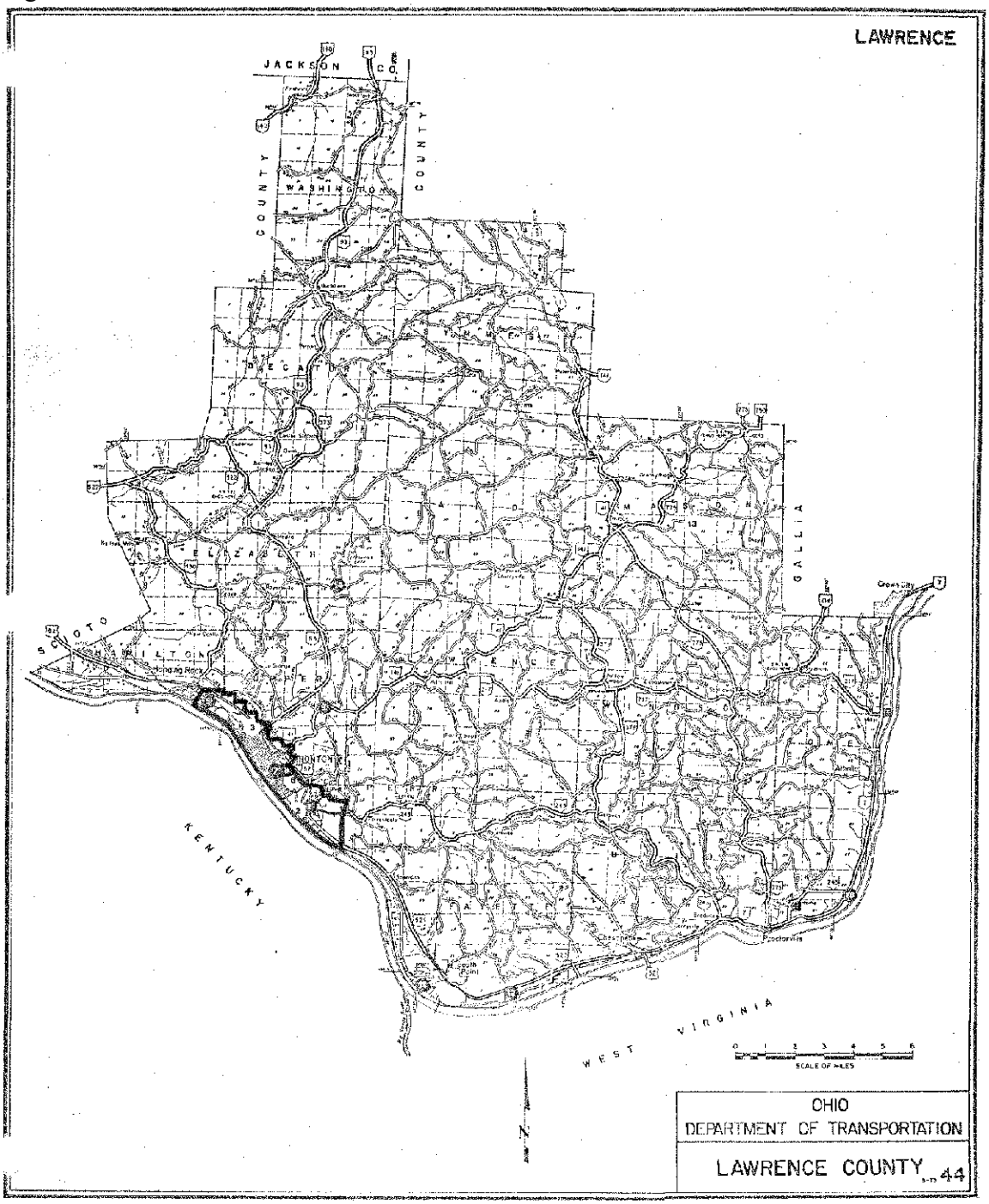
LAWRENCE
JACKSON CO.
COUNTY
COUNTY
GALLIA
SCIOTO
KENTUCKY
WEST VIRGINIA
SCALE OF MILES
N
OHIO
DEPARTMENT OF TRANSPORTATION
LAWRENCE COUNTY
44

Figure A-17

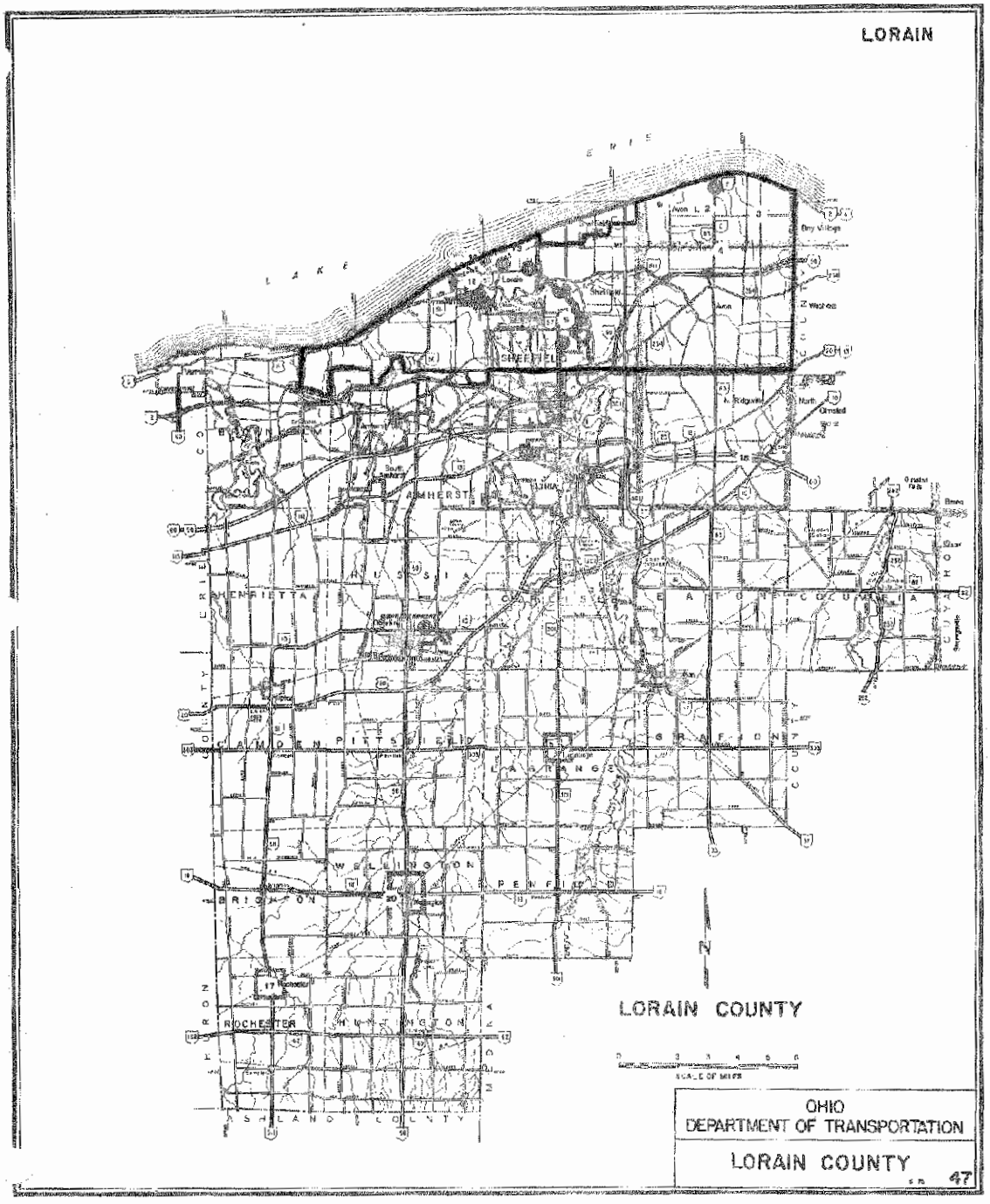
LORAIN
LAKE ERIE
SHEFFIELD
AMHERST
HENRIETTA
RUSSIA
CAMDEN
PITTSFIELD
GRAFTON
LAGRANGE
WELLINGTON
PENFIELD
BRIGHTON
ROCHESTER
HINCKLEY
MEDINA COUNTY
ASHLAND COUNTY
LORAIN COUNTY
N
OHIO
DEPARTMENT OF TRANSPORTATION
LORAIN COUNTY
47

Figure A-18

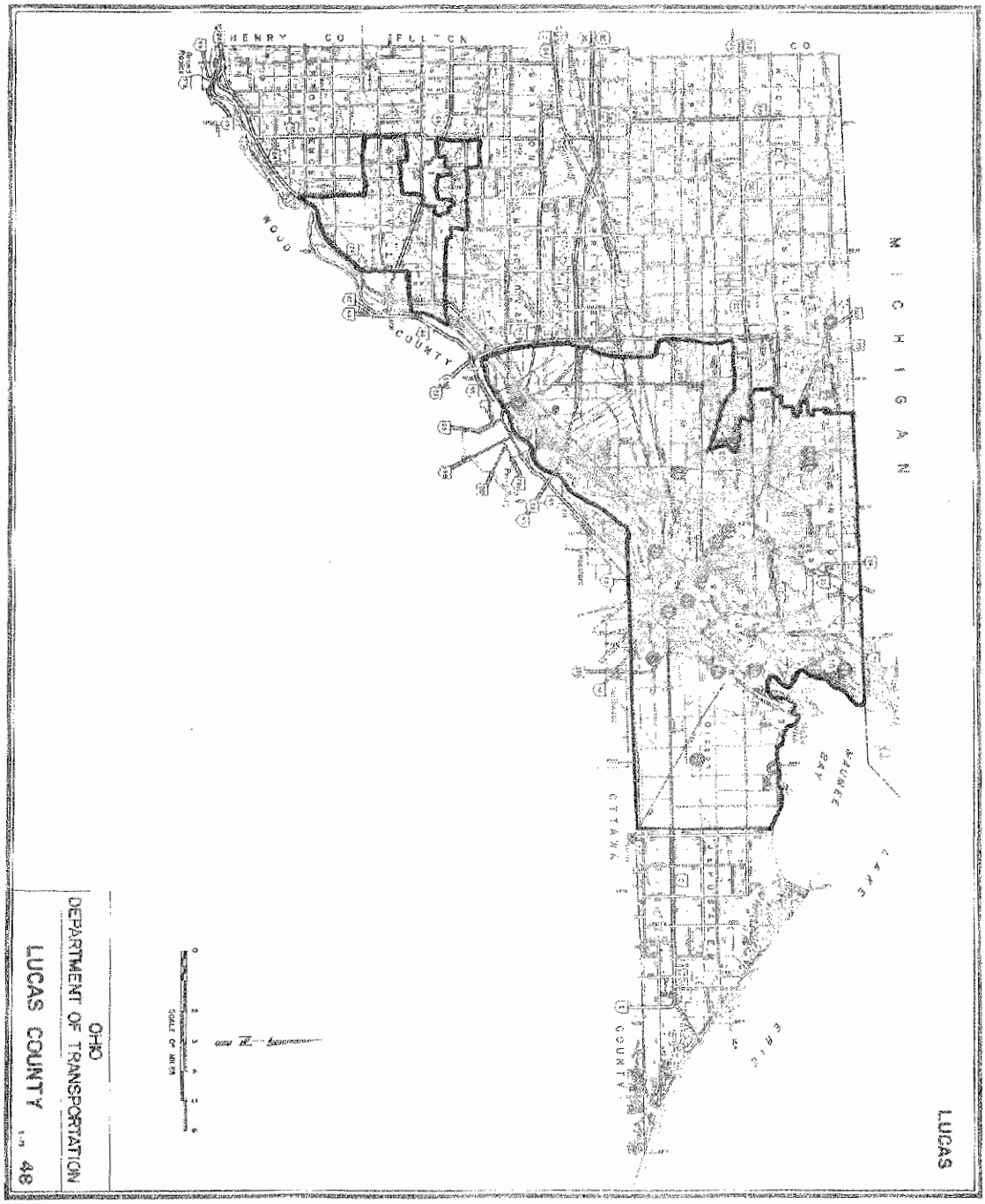
HENRY CO
WOOD
COUNTY
MICHIGAN
OTTAWA
COUNTY
LUCAS
OHIO
DEPARTMENT OF TRANSPORTATION
LUCAS COUNTY
48

Figure A-19

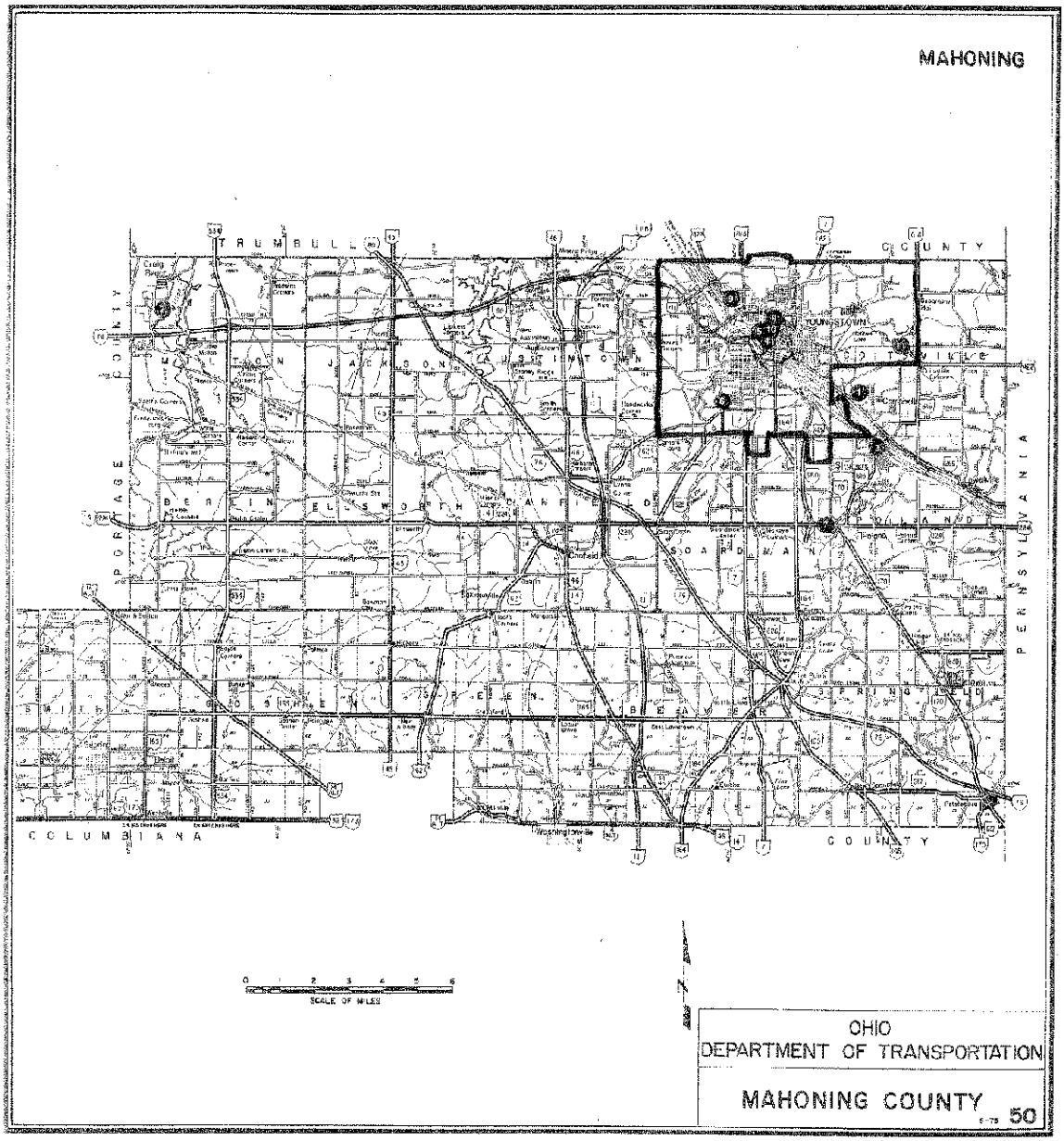
MAHONING
TRUMBULL
COUNTY
PORTAGE
COUNTY
PENNSYLVANIA
COLUMBIANA
COUNTY
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
MAHONING COUNTY
50

Figure A-20

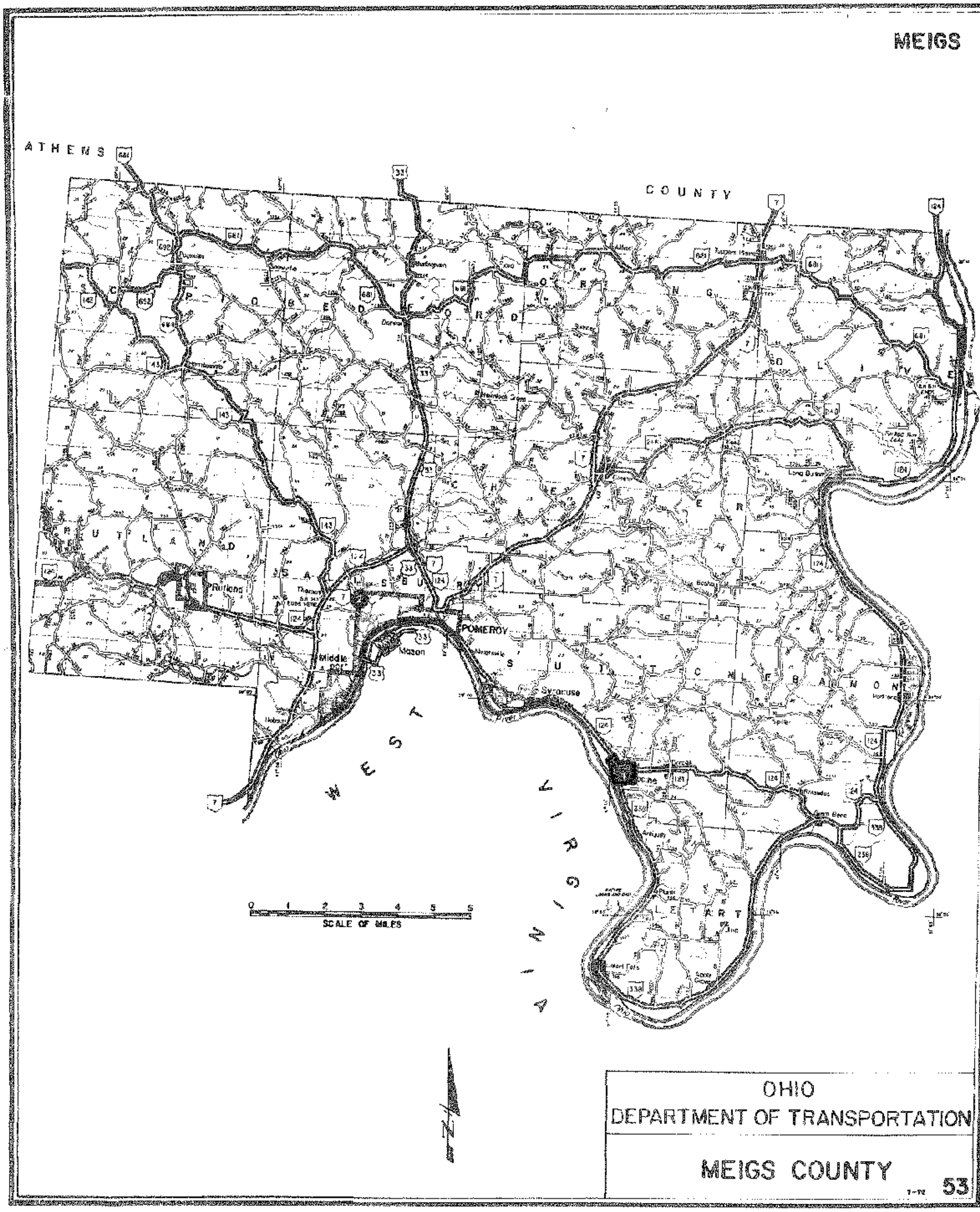
MEIGS
ATHENS COUNTY
POMEROY
Rutland
Mason
Syracuse
WEST VIRGINIA
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
MEIGS COUNTY
53

Figure A-21


MIAMI
SHELBY
COUNTY
DARKE COUNTY
MONTGOMERY
CLARK COUNTY
CHAMPAIGN COUNTY
SPRINGCREEK
BROWN
NEWBERRY
WASHINGTON
STAUNTON
LOSTCREEK
NEWTON
CONCORD
ELIZABETH
UNION
MONROE
BETHEL
Piqua
Troy
Covington
Bradford
Pleasant Hill
Ludlow Falls
Laura
Potsdam
West Milton
Tipp City
Casstown
Fletcher
Conover
Casstown
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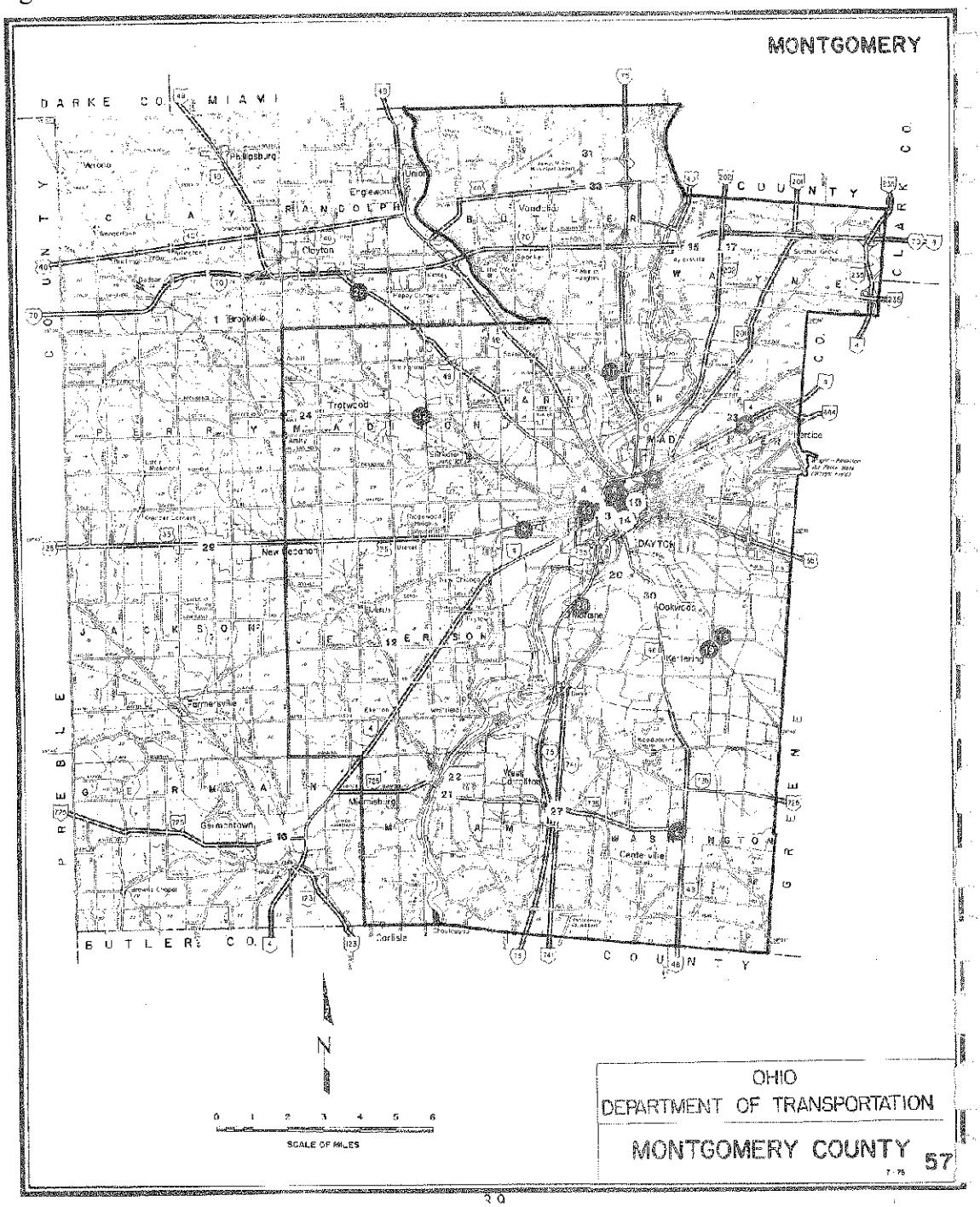
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
MIAMI COUNTY
55

Figure A-22


MONTGOMERY
DARKE CO.
MIAMI
CLARK CO.
GREENE
PREBLE
BUTLER CO.
COUNTY
Phillipsburg
Union
Englewood
Vandalia
Clayton
Brookville
Trotwood
Dayton
New Lebanon
Moraine
Oakwood
Kettering
Farmersville
Germantown
Miamisburg
Centerville
Carlisle
N
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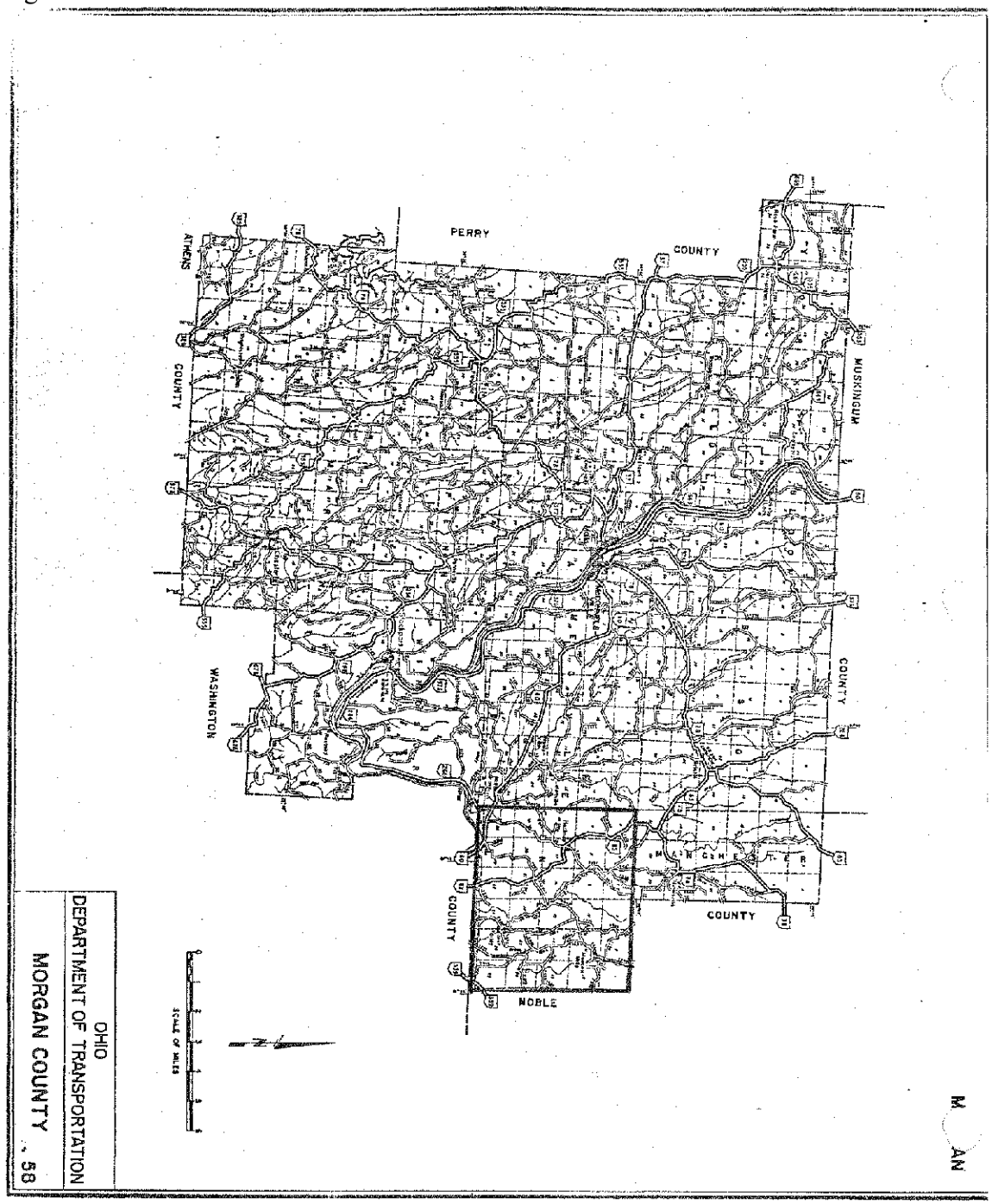
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
MONTGOMERY COUNTY
57

Figure A-23


PERRY
COUNTY
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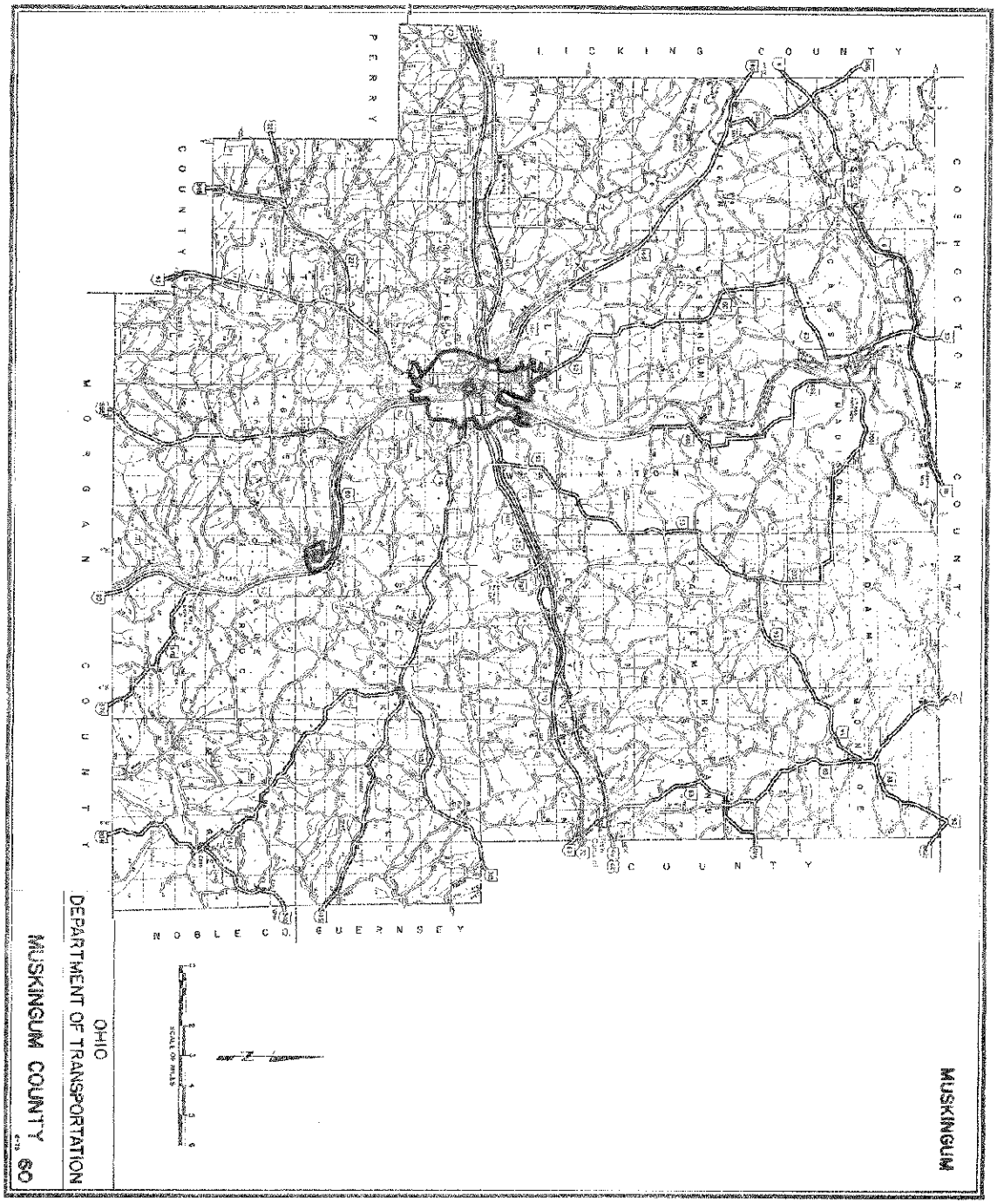
COUNTY
COUNTY
COUNTY
NOBLE
OHIO
DEPARTMENT OF TRANSPORTATION
MORGAN COUNTY
58

Figure A-24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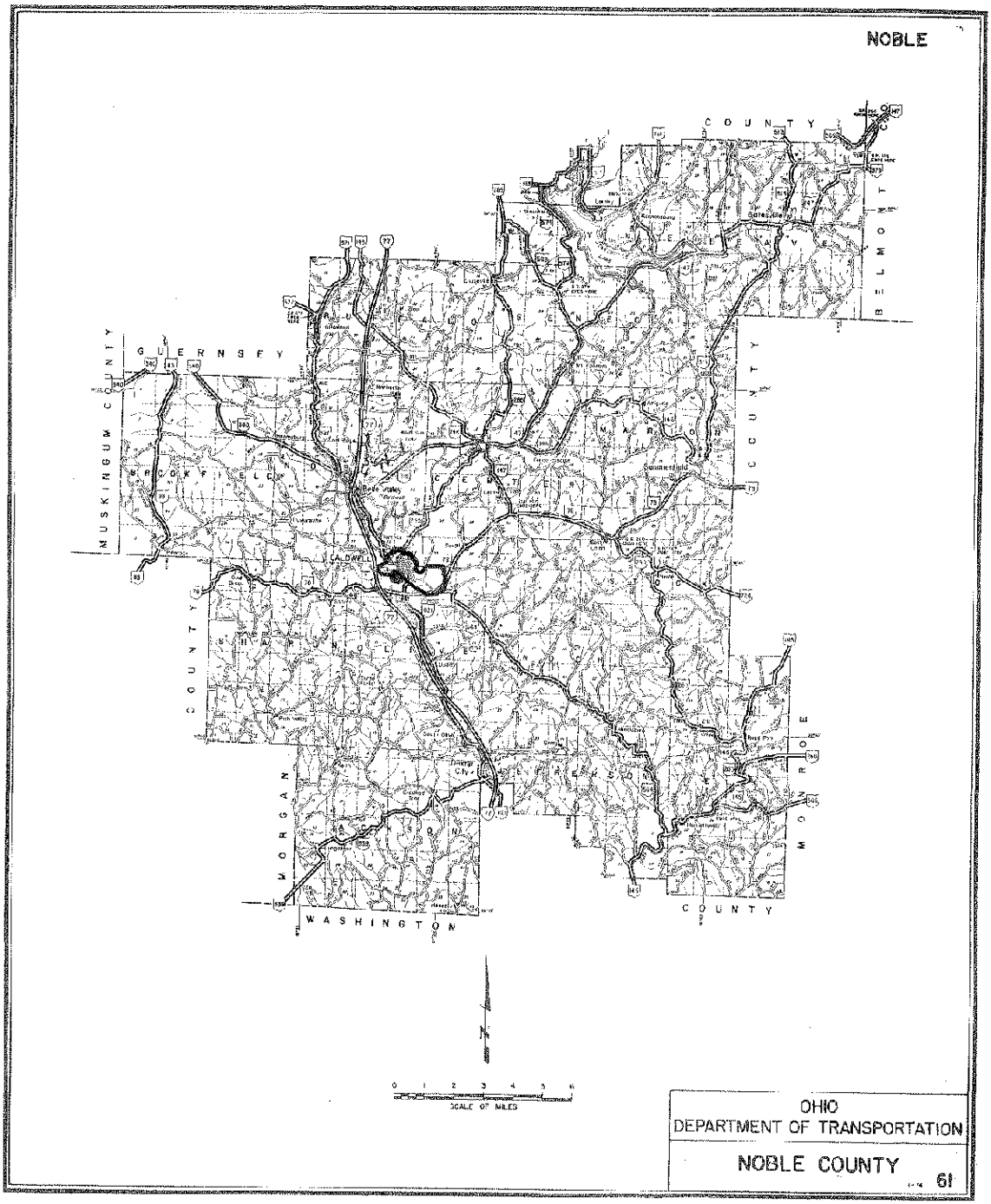
LICKING COUNTY
MORGAN COUNTY
COSHOCTON COUNTY
NOBLE CO.
GUERNSEY
MUSKINGUM
MUSKINGUM COUNTY
OHIO
DEPARTMENT OF TRANSPORTATION
SCALE OF MILES

Figure A-25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COUNTY
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GUERNSEY
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COUNTY
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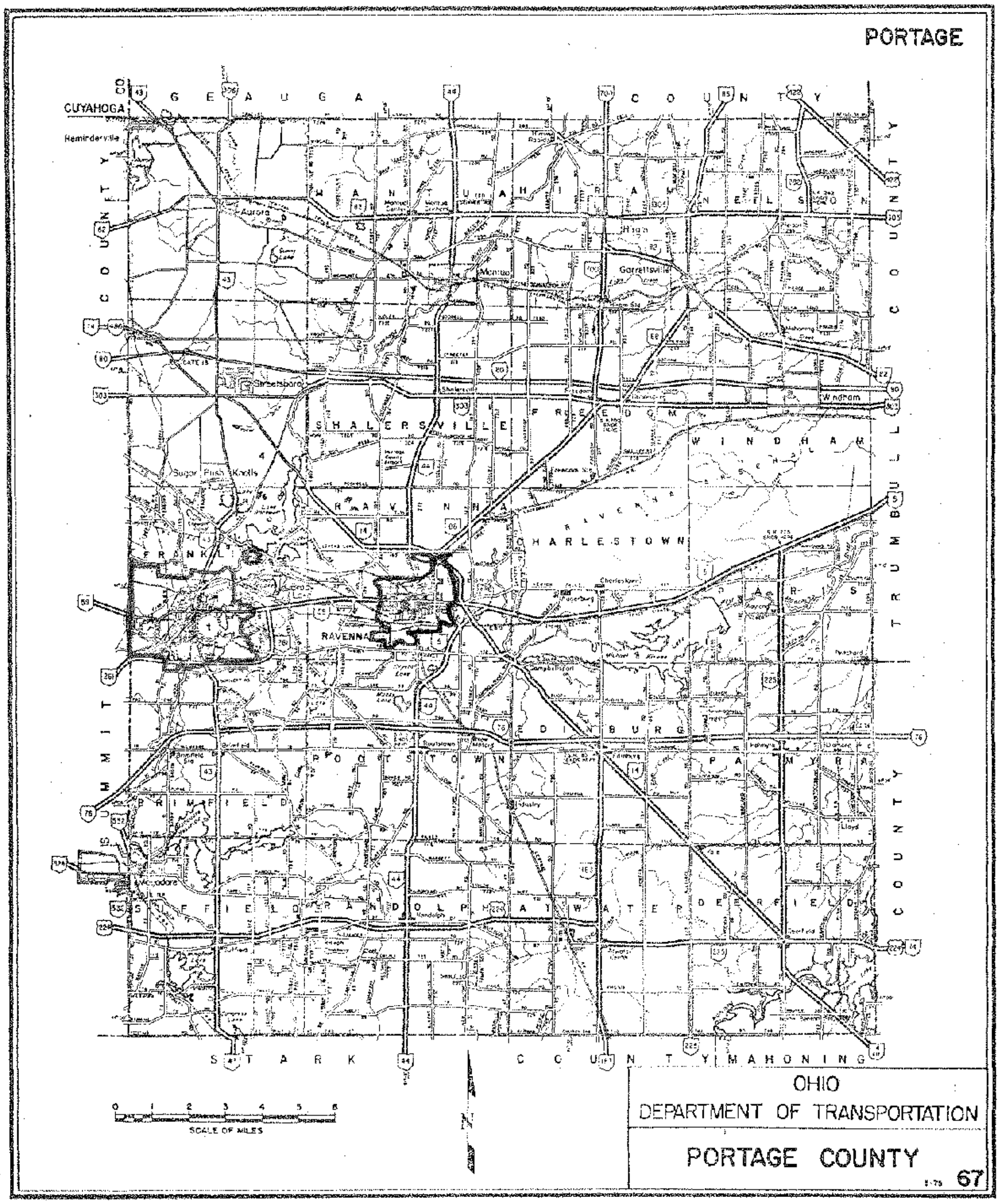
WASHINGTON
COUNTY
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
NOBLE COUNTY
61

Figure A-26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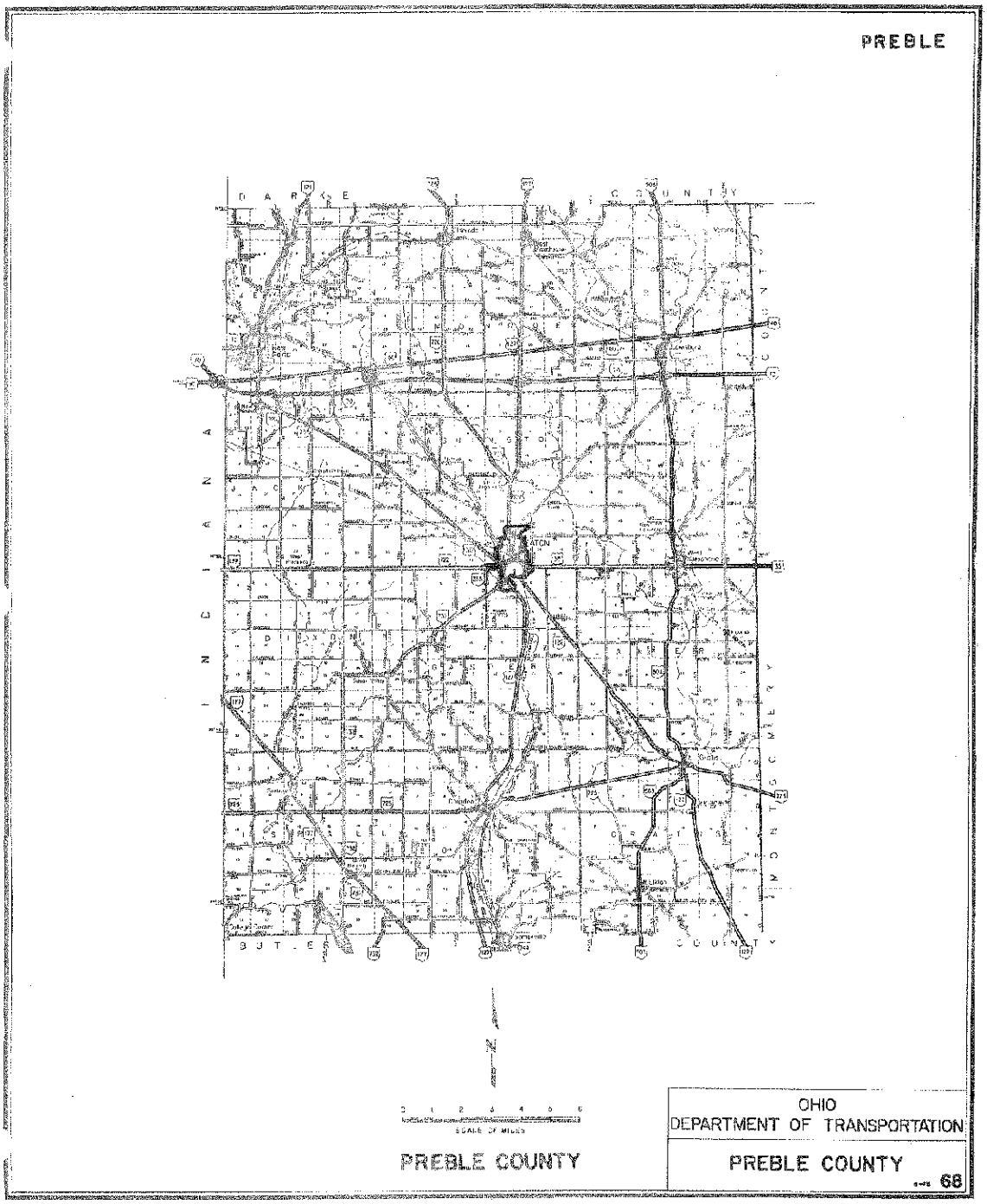
GEAUGA COUNTY
SUMMIT COUNTY
TRUMBULL COUNTY
STARK COUNTY
MAHONING
SHALERSVILLE
FREEDOM
WINDHAM
RAVENNA
CHARLESTOWN
EDINBURG
ROOTSTOWN
PALMYRA
BRIMFIELD
RANDOLPH
ATWATER
DEERFIELD
Aurora
Garrettsville
Windham
Sugar Bush Knolls
SCALE OF MILES
N
OHIO
DEPARTMENT OF TRANSPORTATION
PORTAGE COUNTY
67

Figure A-27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MONTGOMERY COUNTY
BUTLER COUNTY
INDIANA
ETON
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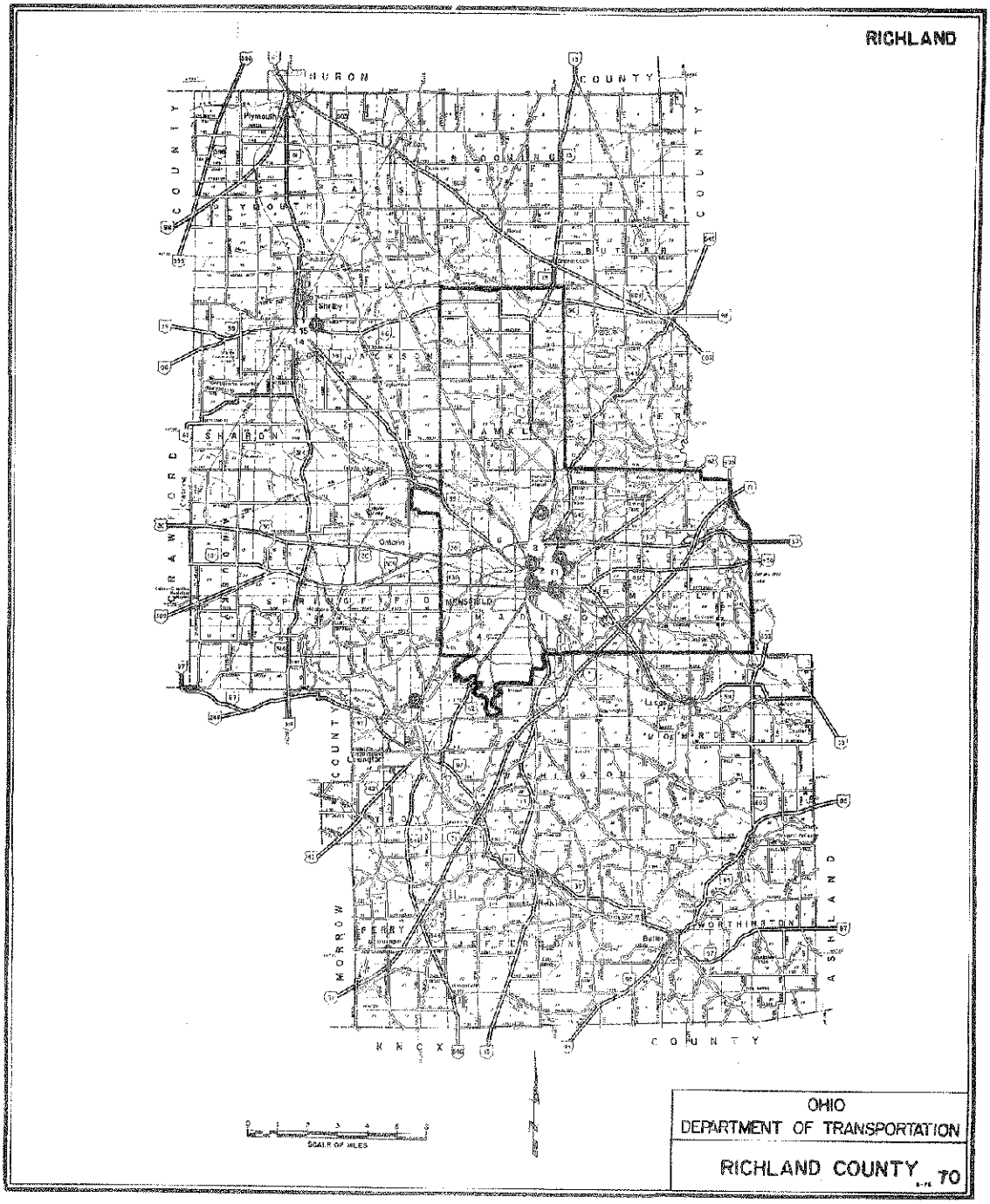
SCALE OF MILES
PREBLE COUNTY
OHIO
DEPARTMENT OF TRANSPORTATION
PREBLE COUNTY
68

Figure A-28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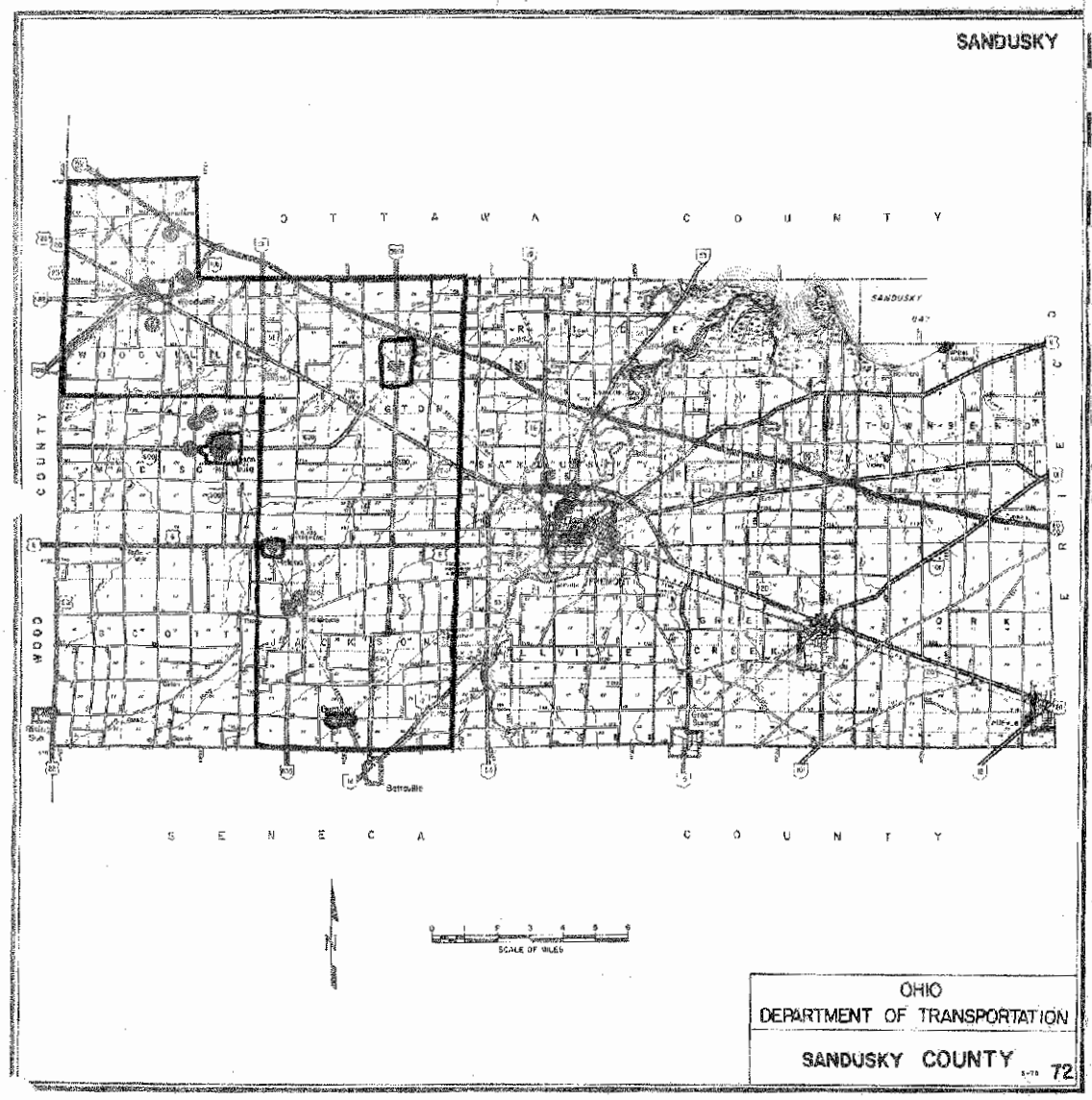
CRAWFORD COUNTY
MORROW COUNTY
KNOX COUNTY
ASHLAND COUNTY
Plymouth
Shiley
Ontario
Mansfield
Lucas
Butler
WORTHINGTON
SHARON
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
RICHLAND COUNTY
TO

Figure A-29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Bettsville
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
SANDUSKY COUNTY
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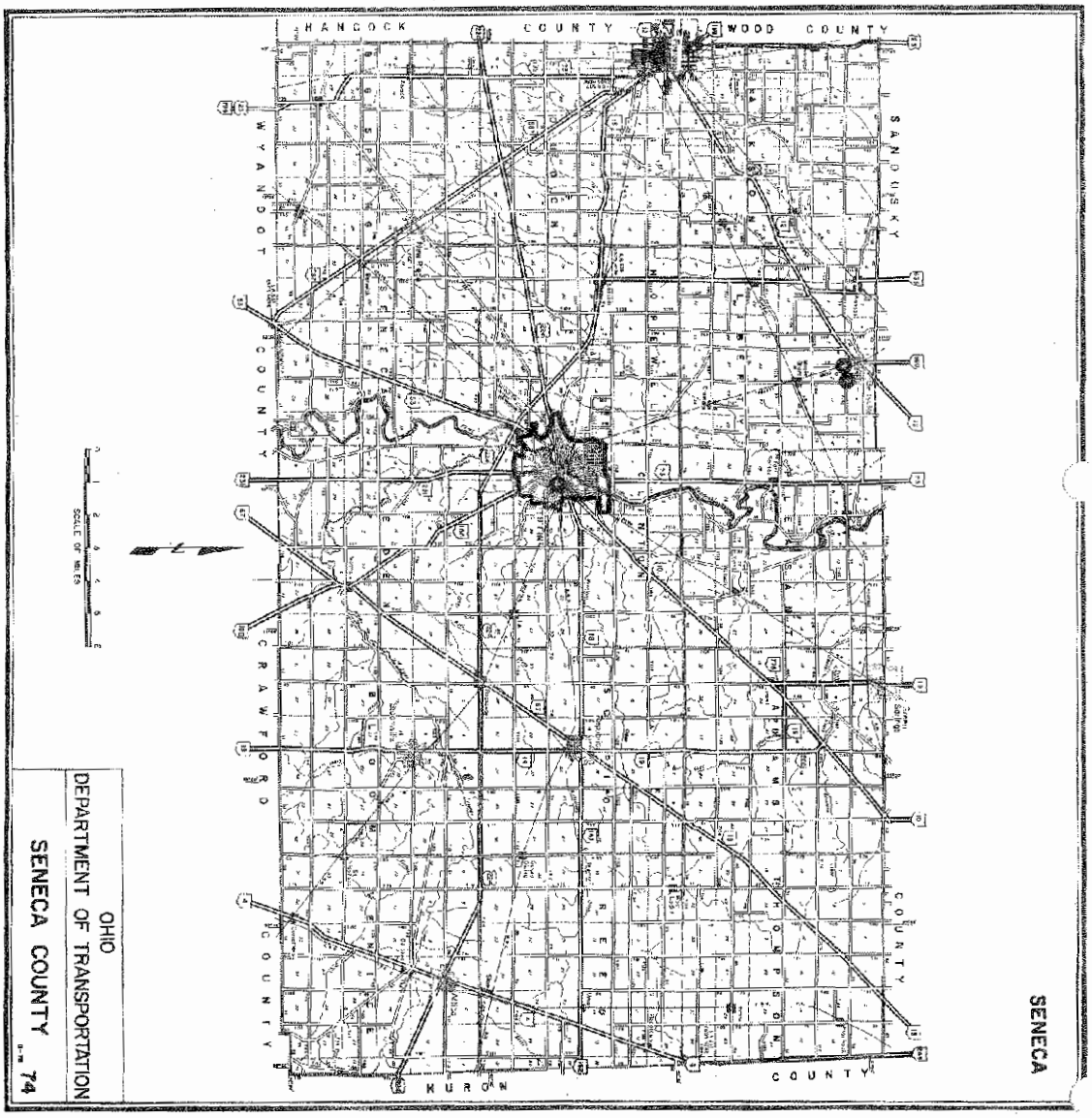
Figure A-30


HANCOCK COUNTY
WOOD COUNTY
SANDUSKY COUNTY
WYANDOT COUNTY
CRAWFORD COUNTY
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HURON COUNTY
SENECA COUNTY
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
SENECA COUNTY
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Figure A-31

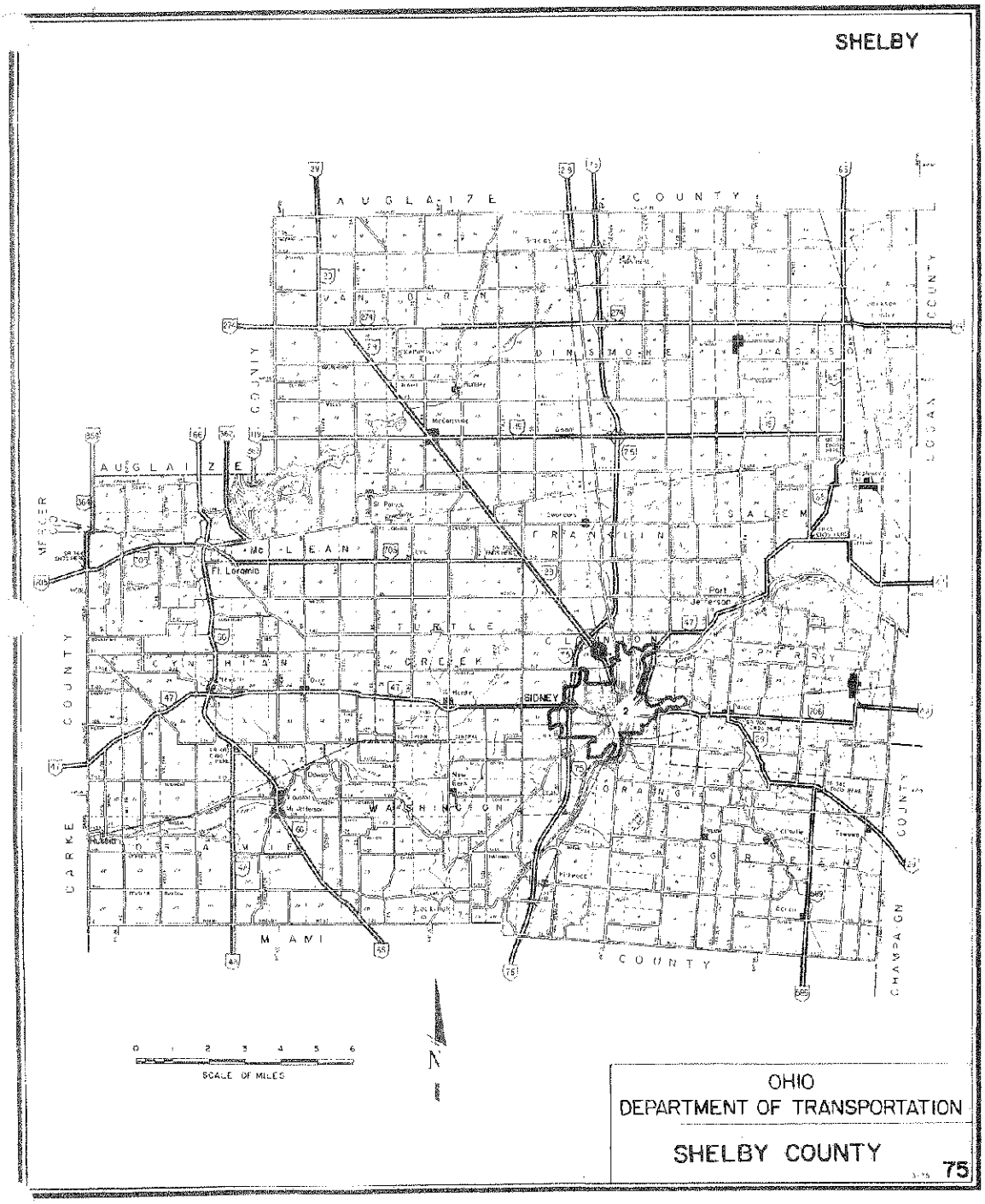
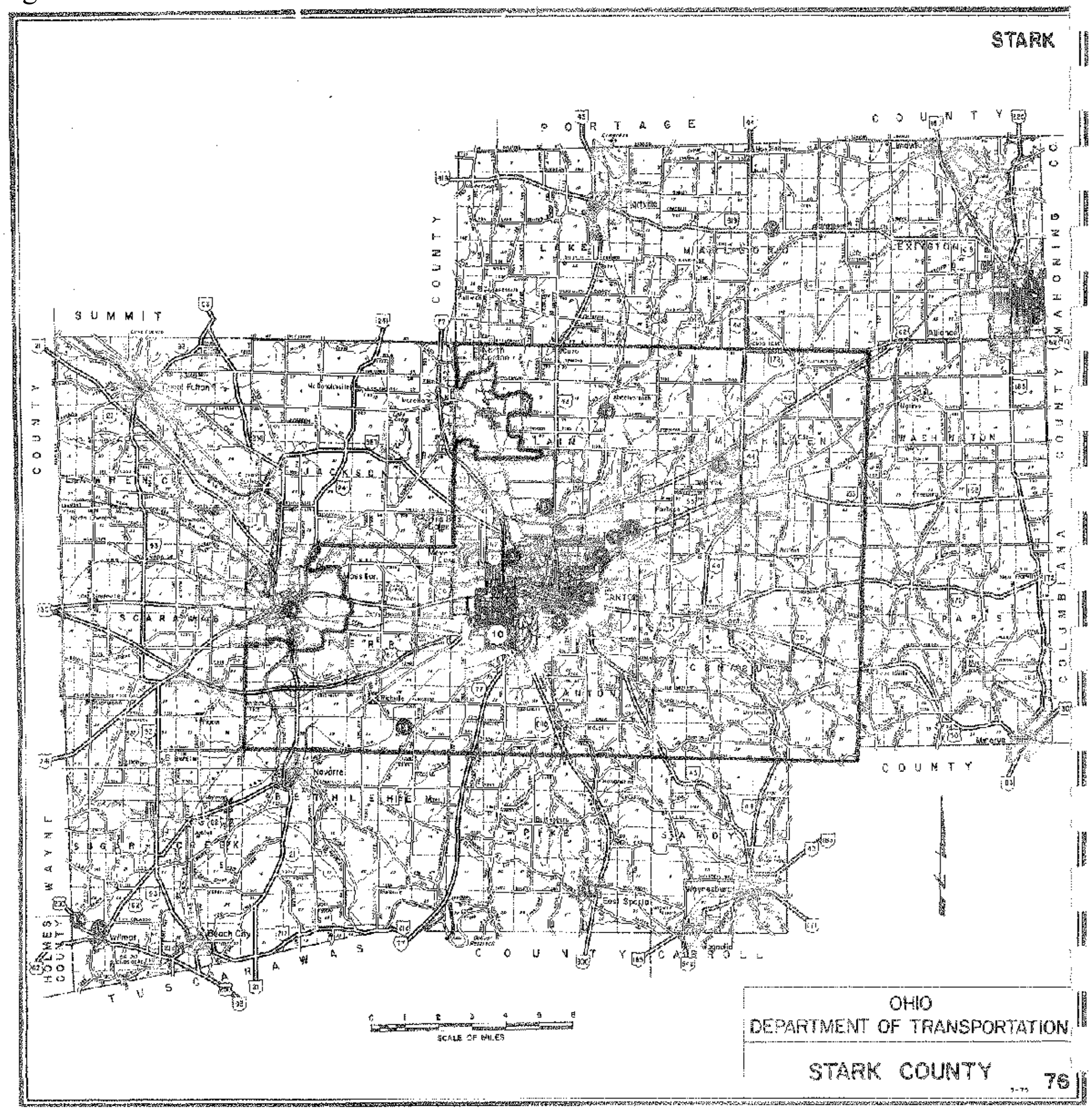

SHELBY
AUGLAIZE COUNTY
LOGAN COUNTY
MERCER COUNTY
CLARKE COUNTY
CHAMPAIGN COUNTY
MIAMI COUNTY
McLEAN
DINSMORE
JACKSON
FRANKLIN
TURTLE CREEK
WASHINGTON
SIDNEY
Ft Loramie
Port
0 1 2 3 4 5 6
SCALE OF MILES
N
OHIO
DEPARTMENT OF TRANSPORTATION
SHELBY COUNTY
75

Figure A-32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PORTAGE COUNTY
SUMMIT
WAYNE COUNTY
HOLMES COUNTY
TUSCARAWAS COUNTY
CARROLL COUNTY
COLUMBIANA COUNTY
MAHONING CO
LAKE
MARLBORO
LEXINGTON
WASHINGTON
JACKSON
CANTON
PARIS
PIKE
SANDY
BETHLEHEM
Navarre
Wilmot
Beach City
SCALE OF MILES
OHIO
DEPARTMENT OF TRANSPORTATION
STARK COUNTY
76

Figure A-33

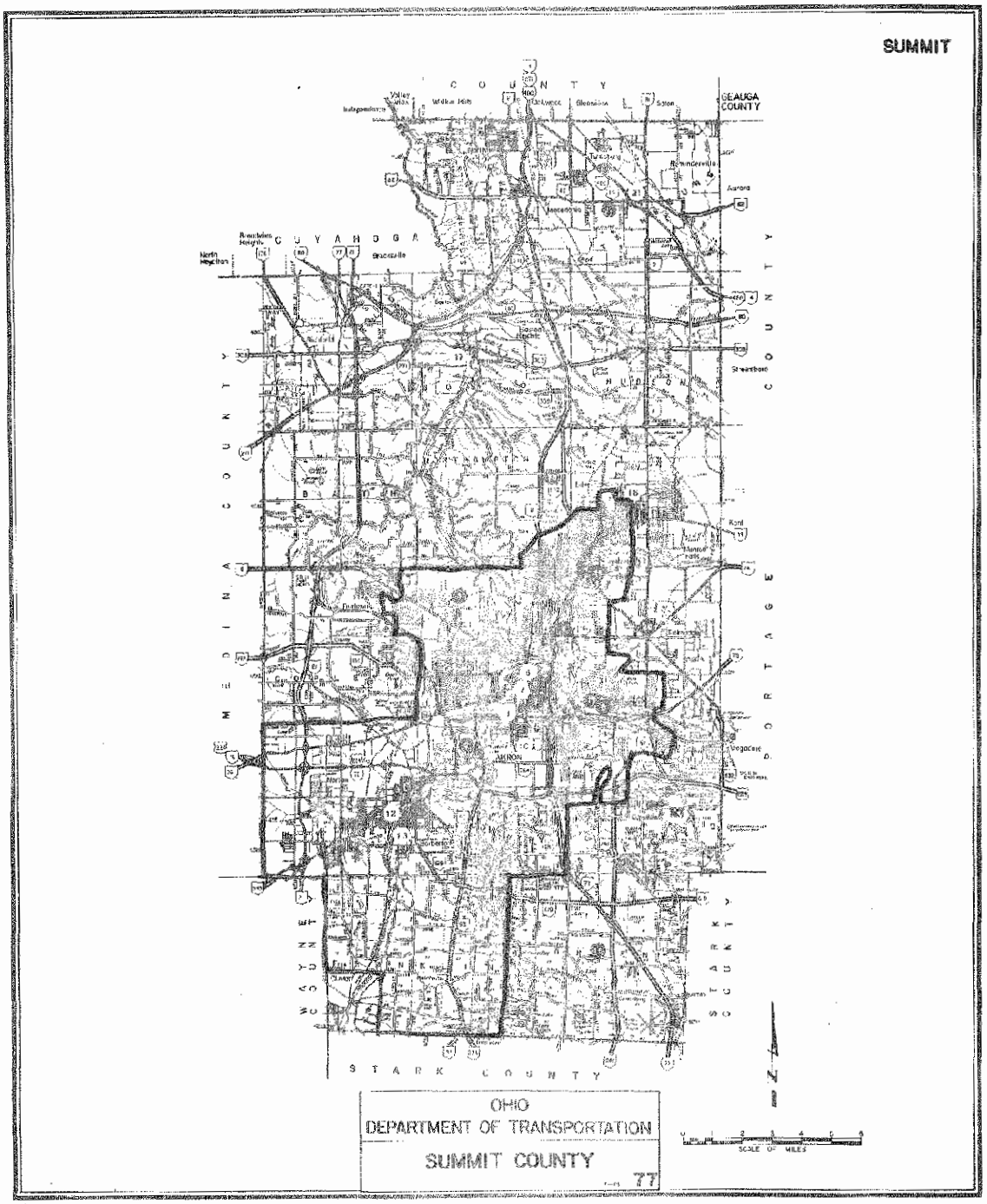

SUMMIT
GEAUGA COUNTY
CUYAHOGA COUNTY
PORTAGE COUNTY
MEDINA COUNTY
WAYNE COUNTY
STARK COUNTY
STARK COUNTY
OHIO
DEPARTMENT OF TRANSPORTATION
SUMMIT COUNTY
77
SCALE OF MILES

Figure A-34

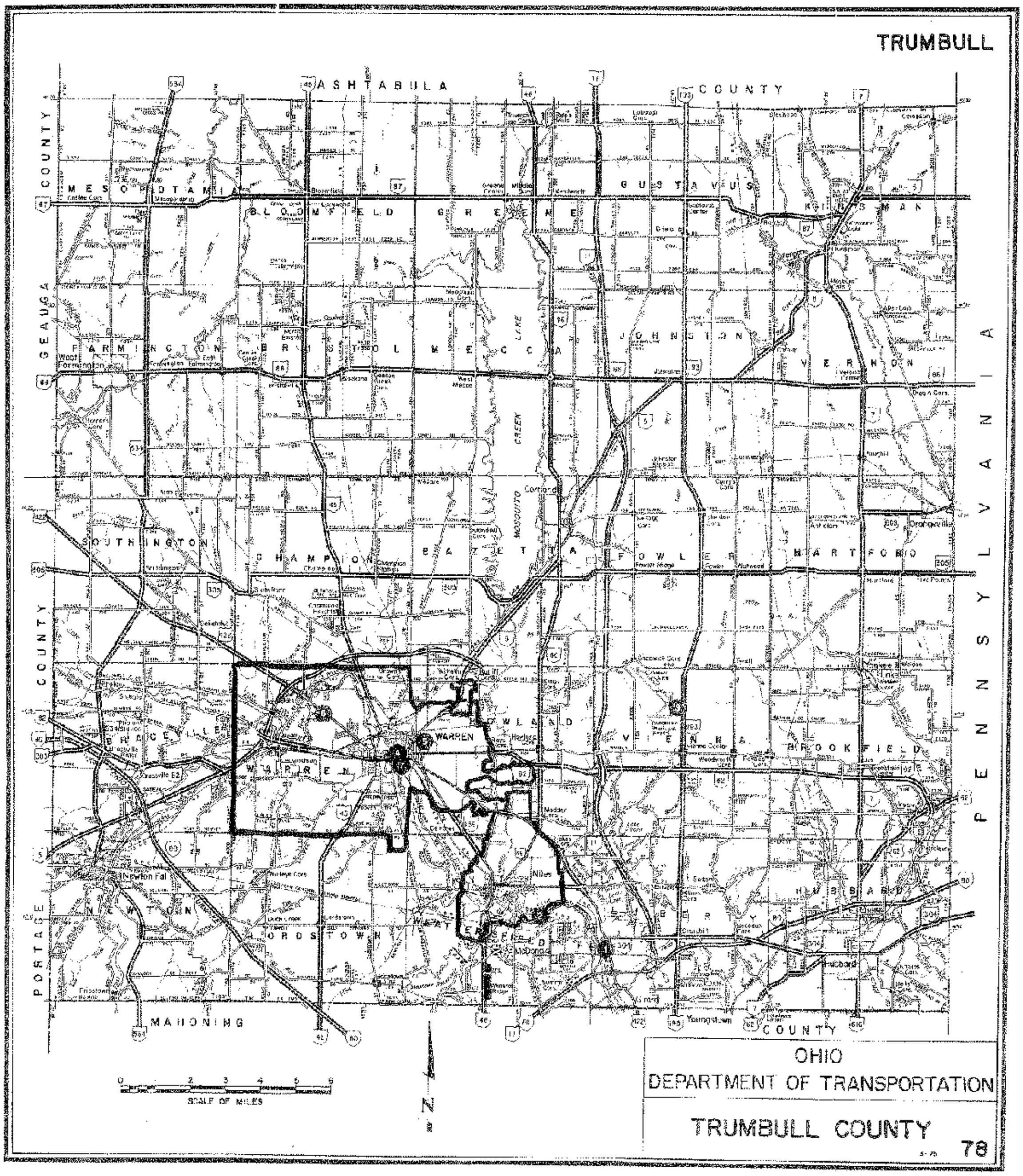

TRUMBULL
ASHTABULA COUNTY
GEAUGA COUNTY
PORTAGE COUNTY
MAHONING COUNTY
PENNSYLVANIA
WARREN
OHIO
DEPARTMENT OF TRANSPORTATION
TRUMBULL COUNTY
78
SCALE OF MILES
N

Figure A-35

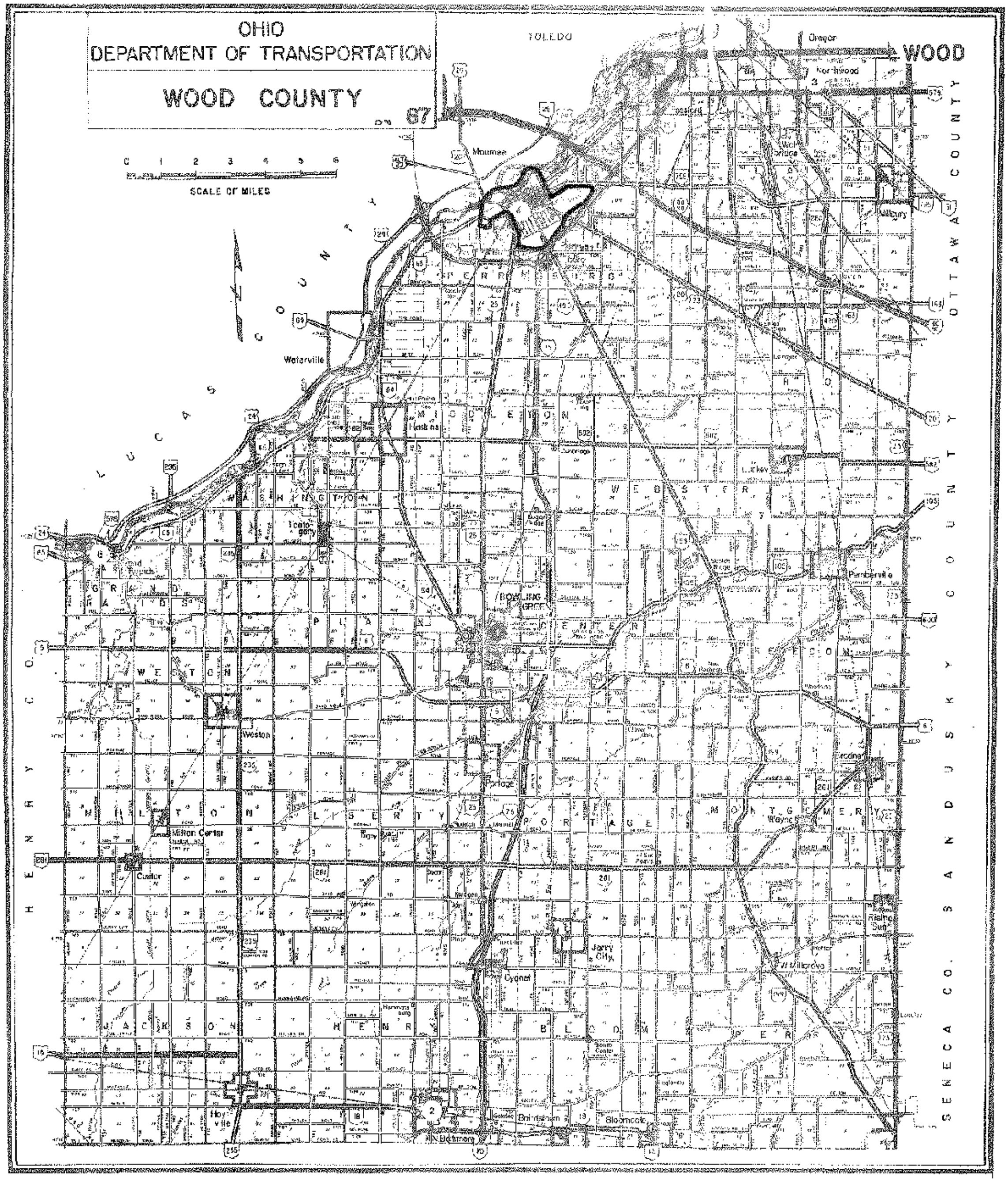
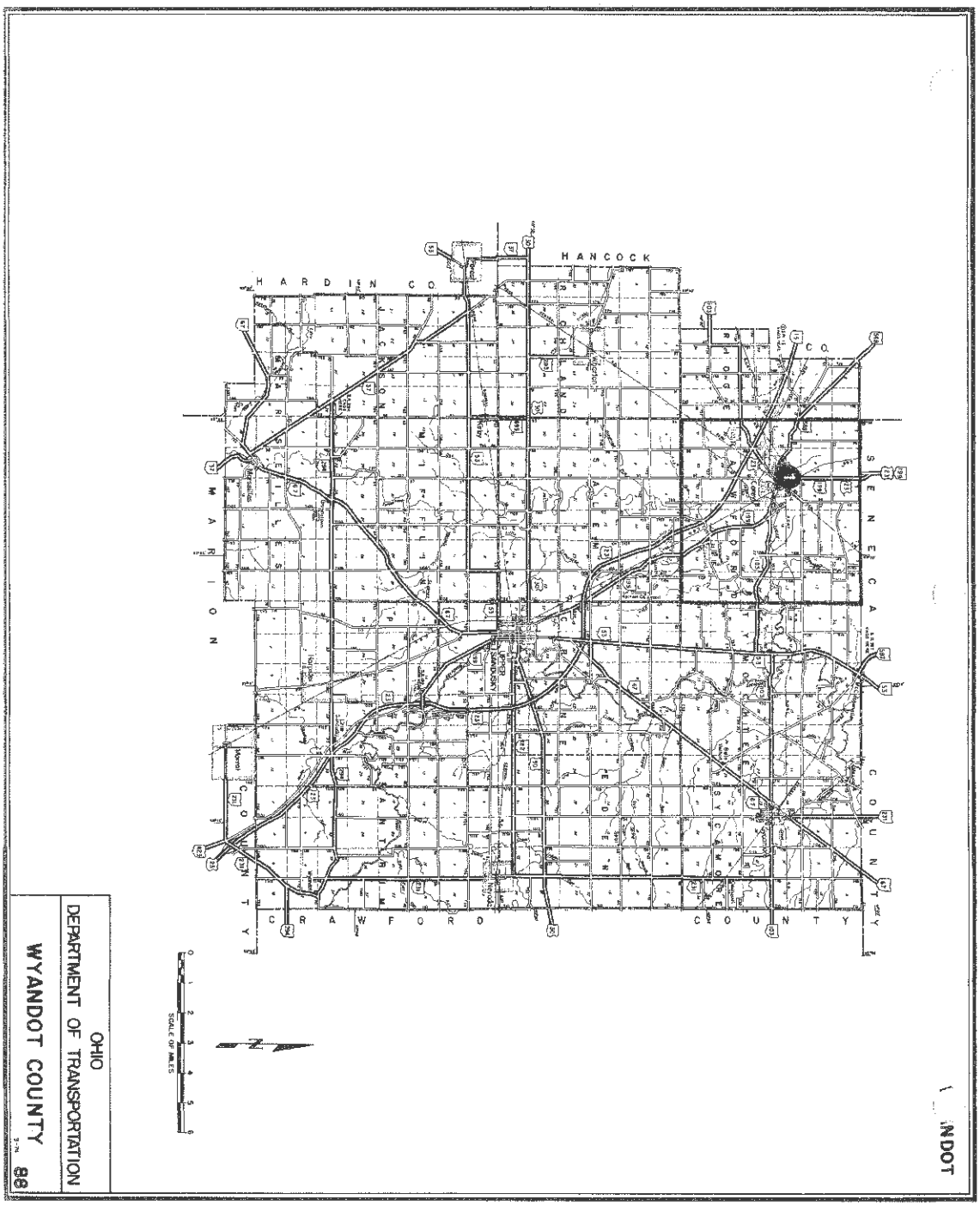

OHIO
DEPARTMENT OF TRANSPORTATION
WOOD COUNTY
SCALE OF MILES
TOLEDO
WOOD
LUCAS COUNTY
OTTAWA COUNTY
SANDUSKY COUNTY
SENECA CO.
HENRY CO.
Maumee
Waterville
Northwood
Oregon
Millbury
Weston
Milton Center
Custar
Cygnet
Jerry City
Pemberville
Bloomdale
Bairdstown
Hoytville
BOWLING GREEN

Figure A-36


HANCOCK
HARDIN CO.
CRAWFORD COUNTY
OHIO
DEPARTMENT OF TRANSPORTATION
WYANDOT COUNTY
88
ODOT

3745-17-09 Restrictions on particulate emissions and odors from incinerators.

(A) General provisions.

(1) This rule shall apply to any incinerator except those regulated under Chapter 3745-75 of the Administrative Code.

(2) For the purposes of this rule, the total of the capacities of all incinerators which are united either physically or operationally shall be considered as the incineration capacity.

(B) Emission limitation.

No person shall cause, suffer, or allow to be emitted into the ambient air from any incinerators, particulate emissions in the exhaust gases in excess of either of the following:

(1) 0.10 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged, for incinerators having incineration capacities equal to or greater than one hundred pounds per hour.

(2) 0.20 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged for incinerators having incineration capacities less than one hundred pounds per hour.

(C) Design-operation requirements.

Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

Effective: 1/20/2018

Five Year Review (FYR) Dates: 6/1/2017 and 01/20/2023

CERTIFIED ELECTRONICALLY
Certification

01/10/2018
Date

Promulgated Under: 119.03
Statutory Authority: 3704.03(E)
Rule Amplifies: 3704.03(A), 3704.03(E)
Prior Effective Dates: 2/15/72, 6/18/80, 10/1/83, 7/9/91, 2/1/08

3745-17-10 Restrictions on particulate emissions from fuel burning equipment.

(A) This rule applies to installations in which fuel, including any product or by-product of a manufacturing process, is burned for the primary purpose of producing heat or power by indirect heat transfer.

(B) For purposes of this rule the actual heat input shall be the aggregate heat content of all fuels whose products of combustion emanate from a single fuel burning unit. The maximum capacity shall be the equipment manufacturer's or designer's guaranteed maximum heat input, whichever is greater. Unless otherwise specified in paragraphs (B)(1) to (B)(4) of this rule, the total heat input of all fuel burning units on a plant or premises which are united either physically or operationally shall be the total of the maximum capacities for all such units. The total heat input shall be used for determining the maximum allowable amount of particulate emissions per million Btu of actual heat input from any single fuel burning unit.

(1) Any new or existing fuel burning equipment which is fired only with gaseous fuels or number two fuel oil and which is physically or operationally united with other fuel burning equipment on a plant or premises shall not be included by the director for purposes of determining the total heat input and maximum allowable particulate emissions per million Btu of actual heat input for such other fuel burning equipment. The maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuels, excluding blast furnace gas or number two fuel oil shall be 0.020 pound per million Btu of actual heat input. The maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with blast furnace gas or any mixture of blast furnace gas with other gaseous fuels or number two fuel oil shall be 0.040 pound per million Btu of actual heat input.

(2) Stand-by fuel burning equipment which is physically or operationally united with other fuel burning equipment on a plant or premises shall be exempted by the director for purposes of determining total heat input and maximum allowable particulate emissions per million Btu of actual heat input for such other fuel burning equipment. Except as provided in paragraph (B)(1) of this rule, the total heat input for such other fuel burning equipment shall be used for determining the maximum allowable amount of particulate emissions per million Btu of actual heat input for any stand-by fuel burning equipment.

(3) Derating of fuel burning equipment.

(a) For purposes of this paragraph, fuel burning equipment shall include, where appropriate, all equipment on a plant or premises which are united either physically or operationally.

(b) Upon request, the director may specify the total heat input for fuel burning equipment at a derated value which is less than the total maximum capacity of such equipment if, in the director's judgment, the equipment will not be operated so that the actual heat input exceeds the derated value. Any owner or operator

requesting derating of fuel burning equipment shall demonstrate to the director, with such steam charts, records of fuel consumption and fuel quality, and other data as are necessary, that the actual heat input from the equipment will not exceed the derated total heat input value.

(c) The terms and conditions of any permit, variance, or order for equipment which has been granted a derated total heat input value shall prohibit the operation of such equipment at a level in excess of the derated total heat input value. The director may include in any such permit, variance, or order requirements for the monitoring and reporting of the actual heat input of the equipment.

(d) Any derating of fuel burning equipment approved by the director shall not revise the federally enforceable requirements of the state implementation plan until approved by the United States environmental protection agency.

(4) Fuel burning equipment which constitutes a new source and is physically or operationally united with existing fuel burning equipment on a plant or premises shall not be included by the director for purposes of determining total heat input and maximum allowable particulate emissions per million Btu of actual heat input for such existing fuel burning equipment. Except as may be provided in paragraphs (B)(1) or (B)(2) of this rule, the total heat input for the new and existing fuel burning equipment shall be used for determining the maximum allowable amount of particulate emissions per million Btu of actual heat input for the new fuel burning equipment.

(C) Emission limitations.

(1) Except as provided in paragraph (B)(1) of this rule (as it pertains to gaseous fuels and number two fuel oil) and paragraphs (C)(3) to (C)(7) of this rule, any owner or operator of fuel burning equipment which is located within the following counties shall operate said equipment so that the particulate emissions do not exceed the allowable emission rate specified by "Curve P-1" of "Figure I" in the appendix to this rule: Adams, Allen, Ashtabula, Athens, Belmont, Brown, Butler, Clark, Clermont, Clinton, Columbiana, Coshocton, Cuyahoga, Darke, Defiance, Delaware, Fairfield, Franklin, Gallia, Geauga, Greene, Hamilton, Henry, Jackson, Jefferson, Lake, Lawrence, Licking, Lorain, Lucas, Madison, Mahoning, Medina, Meigs, Miami, Monroe, Montgomery, Morgan, Muskingum, Noble, Perry, Pickaway, Portage, Preble, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Union, Warren, Washington, Wyandot and Wood.

(2) Except as provided in paragraph (B)(1) of this rule (as it pertains to gaseous fuels and number two fuel oil) and paragraph (C)(7) of this rule, any owner or operator of fuel burning equipment which is located within the following counties shall operate said equipment so that the particulate emissions do not exceed the allowable emission rate specified by "Curve P-2" of "Figure I" in the appendix to this rule: Ashland, Auglaize, Carroll, Champaign, Crawford, Erie, Fayette, Fulton, Guernsey, Hancock, Hardin, Harrison, Highland, Hocking, Holmes, Huron, Knox, Logan, Marion, Mercer, Morrow, Ottawa, Paulding, Pike, Putnam, Tuscarawas, Van Wert, Vinton,

Wayne and Williams.

(3) [Reserved.]

(4) [Reserved.]

(5) [Reserved.]

(6) The "Conesville Power Plant."

(a) Prior to achieving compliance with the emission limitation specified in paragraph (C)(6)(b) of this rule, the "Conesville Power Plant" (OEPA premise number 0616000000) or any subsequent owner or operator of the "Conesville Power Plant, 47201 County road 273, Conesville, Ohio" shall not cause or permit the particulate emissions from unit 4 main boiler (OEPA source number B004) to exceed a maximum of 0.43 pound of particulate emissions per million Btu actual heat input.

(b) In accordance with the compliance schedule established in paragraph (C)(4) of rule 3745-17-04 of the Administrative Code, the "Conesville Power Plant" (OEPA premise number 0616000000) or any subsequent owner or operator of the "Conesville Power Plant, 47201 County road 273, Conesville, Ohio" shall not cause or permit the particulate emissions from unit 4 main boiler (OEPA source number B004) to exceed a maximum of 0.10 pound of particulate emissions per million Btu actual heat input.

(7) Alternative emission requirements for small coal-fired fuel burning equipment which is used exclusively for space heating purposes.

(a) Any owner or operator of coal-fired fuel burning equipment, which has an individual maximum capacity of equal to or greater than one million Btu per hour and less than twenty million Btu per hour and which is used exclusively for space heating purposes, may choose to immediately comply with all the following requirements in lieu of paragraph (C)(1) or (C)(2) of this rule:

(i) The coal received for use in the fuel burning equipment has an ash content of less than 8.0 per cent by weight and a heat content of greater than thirteen thousand Btu per pound (ash content and heat content shall be determined on a dry basis in accordance with the procedures specified in paragraph (B)(9) of rule 3745-17-03 of the Administrative Code).

(ii) The use of flyash reinjection in the coal-fired fuel burning equipment is prohibited.

(iii) The coal-fired fuel burning equipment employs an overfire air system which is designed, maintained and operated in accordance with good engineering practice and which minimizes visible particulate emissions from the fuel burning equipment.

(iv) Except as otherwise provided in paragraph (A)(3) of rule 3745-17-07 of the

Administrative Code, the visible particulate emissions from the coal-fired fuel burning equipment comply with paragraph (A)(1) of rule 3745-17-07 of the Administrative Code. No coal-fired fuel burning equipment which is subject to the alternative emission requirements of this rule shall be eligible for an equivalent visible particulate emission limitation pursuant to paragraph (C) of rule 3745-17-07 of the Administrative Code.

(v) The coal-fired fuel burning equipment is operated and maintained in a manner which will optimize combustion efficiency and minimize visible particulate emissions.

(vi) During January and July of each year, the owner or operator shall submit reports to the director which document the quality and quantity (on a dry basis) of each shipment of coal received during the previous six calendar months for the coal-fired fuel burning equipment and which demonstrate compliance with paragraph (C)(7)(a)(i) of this rule. Data provided by the coal supplier may be used for these semi-annual reports if such data are accurate and representative of the quality and quantity of each shipment of coal received for the fuel burning equipment.

(b) Any owner or operator of coal-fired fuel burning equipment who chooses to comply with paragraph (C)(7)(a) of this rule in lieu of paragraph (C)(1) or (C)(2) of this rule shall notify the director in writing. The written notification shall include sufficient information and commitments to demonstrate compliance with paragraph (C)(7)(a) of this rule. If the information and commitments are adequate to demonstrate compliance with paragraph (C)(7)(a) of this rule on a continuing basis, the alternative emission requirements shall be specified in the terms and conditions of the permit to operate or variance issued for the source.

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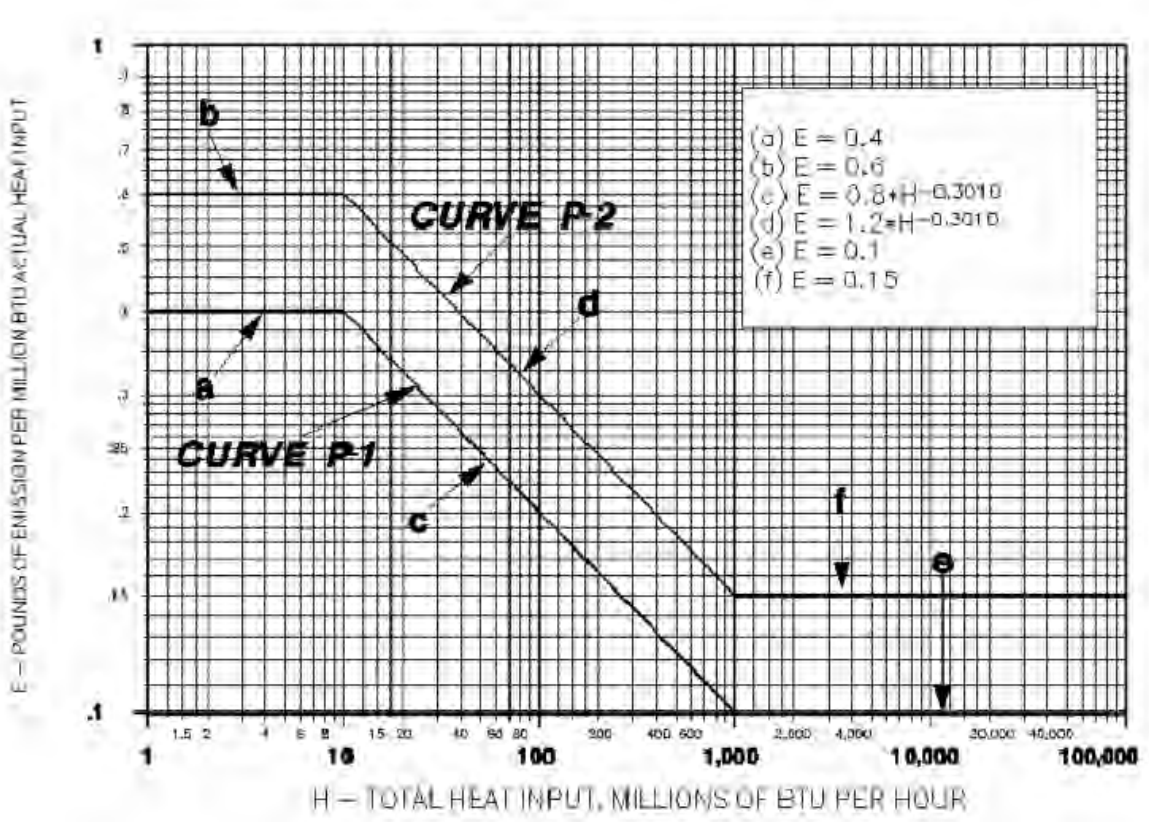
Appendix

FIGURE 1



3745-17-11 Restrictions on particulate emissions from industrial processes.

(A) General provisions:

(1) This rule applies to any operation, process, or activity which releases or may release particulate emissions into the ambient air except the following:

(a) The burning of fuel for the primary purpose of producing heat or power by indirect heating in which the products of combustion do not come into direct contact with process materials.

(b) The burning of refuse.

(c) The processing of salvageable material by burning.

(d) The loading of ships and the drying of grain at grain elevator operations.

(e) Salt glazing in a gas-fired periodic brick or tile kiln, for a period of not more than two hours during any twenty-one consecutive days of operation of said kiln.

(f) The generation of fugitive dust which the director has determined is subject to rule 3745-17-08 of the Administrative Code.

(g) Any such operation, process, or activity which is subject to a particulate emission limitation contained in rule 3745-17-12 or 3745-17-13 of the Administrative Code.

(h) Surface coating processes that apply only dip coatings, roll coatings, flow coatings, or brush coatings.

(i) Surface coating processes that use less than five gallons of coatings per day that are not exempt under paragraphs (A)(1)(h), and (A)(1)(j) to (A)(1)(l) of this rule, provided the owner or operator maintains coating usage and application method records, coating purchase records, or production records that clearly demonstrate the actual coating usage is less than five gallons per day.

(j) Surface coating processes (e.g., for sealers, adhesives, and deadeners) that employ airless spray and bead-type (extrusion) application methods.

(k) Surface coating processes that employ hand-held cup spray guns.

(l) Surface coating processes for which the owner or operator demonstrates to the satisfaction of the director that, due to the large size of the item being coated, it is technically infeasible or economically unreasonable (in terms of cost-effectiveness) to employ an enclosure (or hooding) and control device for the control of the particulate emissions (any such exemption approved by the director shall be approved by the United States environmental protection agency as a revision of the state implementation plan).

(m) Jet engine test cells and stands.

(n) Residential wood burning appliances and pellet stoves.

(2) Emission restriction requirements for sources, which are not subject to paragraph (B)(4), (B)(5), (B)(6) or (C) of this rule or which are not exempted under paragraph (A)(1) of this rule, are specified in "Figure II" and in "Table I" in the appendix to this rule. "Figure II" in the appendix to this rule relates uncontrolled mass rate of emission (abscissa) to maximum allowable mass rate of emission (ordinate). A source complies with "Figure II" in the appendix to this rule if its particulate emission rate, even during operation at the maximum capacity of the source, is always equal to or less than the allowable mass rate of emission of particulate matter (A) based upon the uncontrolled mass rate of emission (U). "Table I" in the appendix to this rule relates process weight of materials introduced into any specific process (at its maximum capacity) that may result in particulate emissions to maximum allowable mass rate of emission. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels when they are used solely as fuels and combustion air will not. A source complies with "Table I" in the appendix to this rule if its rate of particulate emission, even during operation at the process weight rate (P) which reflects the maximum capacity of the source, is always equal to or less than the allowable rate of particulate emission specified by the appropriate equation appearing at the bottom of "Table I" in the appendix to this rule and incorporating the process weight rate (P) which reflects the maximum capacity of the source. Except as otherwise indicated in paragraphs (A)(2)(a) to (A)(2)(c) of this rule, the more stringent of the two requirements shall apply.

(a) "Figure II" in the appendix to this rule shall not apply to any of the following:

(i) Any source where the uncontrolled mass rate of emission cannot be ascertained.

(ii) Any source with an uncontrolled mass rate of emission of less than ten pounds per hour.

(iii) Any fluid catalytic cracking unit at a petroleum refinery.

(b) "Table I" in the appendix to this rule shall not apply to any of the following:

(i) Any source where the process weight rate cannot be ascertained.

(ii) Any source which is located within the counties specified in paragraphs (B)(2) and (B)(3) of this rule, except as provided in paragraph (A)(2)(c) of this rule.

(c) "Table I" in the appendix to this rule shall apply to any fluid catalytic cracking unit at a petroleum refinery.

(3) For purposes of "Figure II" in the appendix to this rule, the total uncontrolled mass rate of emission from all similar process units at a plant, such units being united either physically or operationally, or otherwise located in close proximity to each other, shall be used for determining the maximum allowable mass rate of particulate

emissions that pass through a stack or stacks from all such units.

(4) For purposes of "Table I" in the appendix to this rule, process weight per hour is the total weight of all materials introduced into any single, specific process (at its maximum capacity) that may cause any emission of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels when they are used solely as fuels and combustion air will not. For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight for a given period of time by the number of hours in that period. For fluid catalytic cracking units at petroleum refineries, "process weight" shall mean the total weight of recirculated catalyst and cold catalyst introduced into the catalyst regenerator.

(5) An air contaminant source can be subject to both rule 3745-17-08 of the Administrative Code and this rule if it is a fugitive dust source, as defined in paragraph (B) of 3745-17-01 of the Administrative Code, and also emits, by means of one or more stacks, particulate matter that is subject to a limitation in rule 3745-17-08 of the Administrative Code.

(B) Emission limitations:

(1) Except as specified in paragraph (B)(4), (B)(5), (B) (6) or (C) of this rule, any owner or operator of a source of particulate emissions which is located within the following counties shall operate said source so that the particulate emissions do not exceed the allowable emission rate specified by "curve P-1" of "Figure II" or by "Table I" in the appendix to this rule, whichever is applicable under paragraph (A)(2) of this rule: Adams, Allen, Ashtabula, Athens, Belmont, Brown, Butler, Clark, Clermont, Clinton, Columbiana, Coshocton, Cuyahoga, Darke, Defiance, Delaware, Fairfield, Franklin, Gallia, Geauga, Greene, Hamilton, Henry, Jackson, Jefferson, Lake, Lawrence, Licking, Lorain, Lucas, Madison, Mahoning, Medina, Meigs, Miami, Monroe, Montgomery, Morgan, Muskingum, Noble, Perry, Pickaway, Portage, Preble, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Union, Warren, Washington, Wyandot and Wood.

(2) Except as otherwise provided in paragraph (B)(4), (B)(5) or (C) of this rule, any owner or operator of a source of emissions which is located within the following counties shall operate said source so that the particulate emissions do not exceed the allowable emission rate specified by "curve P-2" of "Figure II" in the appendix to this rule: Ashland, Auglaize, Carroll, Champaign, Crawford, Fulton, Guernsey, Hancock, Hardin, Harrison, Holmes, Knox, Logan, Marion, Mercer, Morrow, Paulding, Putnam, Tuscarawas, Van Wert, Wayne and Williams.

(3) Except as otherwise provided in paragraph (B)(4), (B)(5) or (C) of this rule, any owner or operator of a source of particulate emissions which is located within the following counties shall operate said source so that the particulate emissions do not

exceed the allowable emission rate specified by "curve P-3" of "Figure II" in the appendix to this rule: Erie, Fayette, Highland, Hocking, Huron, Ottawa, Pike and Vinton.

(4) Any owner or operator of a stationary gas turbine shall not cause or permit the particulate emissions from the turbine's exhaust to exceed 0.040 pound per million Btu of actual heat input.

(5) Any owner or operator of a stationary internal combustion engine shall not cause or permit the particulate emissions from the engine's exhaust to exceed the following:

(a) 0.310 pound per million Btu of actual heat input for a stationary small internal combustion engine.

(b) 0.062 pound per million Btu of actual heat input for a stationary large internal combustion engine.

(6) The "ArcelorMittal Cleveland LLC" (OEPA premise number 1318001613) or any subsequent owner or operator of the "ArcelorMittal Cleveland LLC" facility located at 3060 Eggers avenue, Cleveland, Ohio shall not cause or permit the particulate emissions from the 84-inch hot strip mill reheat furnaces (OEPA source numbers P046 to P048) to exceed 19.8 pounds per hour per furnace.

(C) Requirements for surface coating processes:

(1) Any surface coating process not exempt under paragraphs (A)(1)(h) to (A)(1)(l) of this rule shall be controlled by a dry particulate filter, waterwash, or equivalent control device or devices.

(2) Any surface coating process not exempt under paragraphs (A)(1)(h) to (A)(1)(l) of this rule shall follow all of the following work practices:

(a) The owner or operator shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the control devices with any modifications deemed necessary by the owner or operator during the time period in which the control devices are utilized.

(b) The owner or operator shall operate the control devices in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the owner or operator.

(c) The owner or operator shall conduct periodic inspections of the control devices to determine whether the devices are operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the owner or operator. The periodic inspections of each control device shall be performed at a frequency that is based upon the recommendation of the manufacturer of the control device, and the owner or operator shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, not less than

once each calendar year the owner or operator shall conduct a comprehensive inspection of the control device while the emissions unit is shut down and perform any needed maintenance and repair for the control device to ensure that it is able to routinely operate in accordance with the manufacturer's recommendations.

(d) The owner or operator shall document each inspection of a control device by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection.

(e) In the event that the control devices are not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the owner or operator, the control devices shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The owner or operator shall maintain documentation of those periods when the control devices are not operating in accordance with such requirements.

(f) Any documentation required under paragraphs (C)(2)(d) and (C)(2)(e) of this rule shall be maintained for not less than five years.

(g) Any documentation required under paragraphs (C)(2)(a) to (C)(2)(e) of this rule shall be maintained at the facility and shall be made available to Ohio EPA upon request.

(3) Any surface coating process with a permit-to-install or permit-to-install and operate issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.

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APPENDIX

TABLE I AND FIGURE II

TABLE I

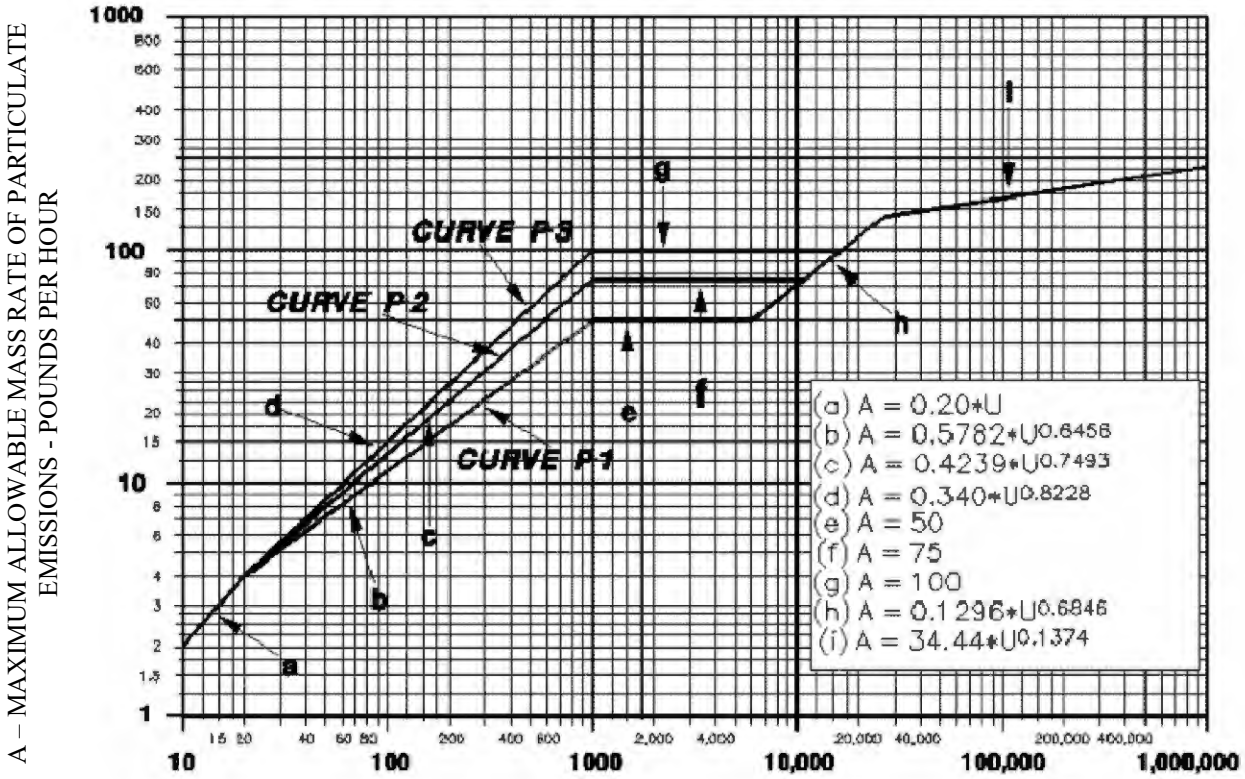
Allowable Rate of Particulate Emissions Based
On Process Weight At Maximum Capacity (P)

Process Weight Rate At Maximum Capacity (P)		Allowable Rate Of Particulate Emission (E)
Lb/hr	Tons/hr	Lb/hr
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1,000	0.50	2.58
1,500	0.75	3.38
2,000	1	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96
4,000	2	6.52
5,000	2.50	7.58
6,000	3	8.56
7,000	3.50	9.49
8,000	4	10.4
9,000	4.50	11.2
10,000	5	12.0
12,000	6	13.6

Process Weight Rate At Maximum Capacity (P)		Allowable Rate Of Particulate Emission (E)
Lb/hr	Tons/hr	Lb/hr
16,000	8	16.5
18,000	9	17.9
20,000	10	19.2
30,000	15	25.2
40,000	20	30.5
50,000	25	35.4
60,000	30	40.0
70,000	35	41.3
80,000	40	42.5
90,000	45	43.6
100,000	50	44.6
120,000	60	46.3
140,000	70	47.8
160,000	80	49.0
200,000	100	51.2
1,000,000	500	69.0
2,000,000	1,000	77.6
6,000,000	3,000	92.7

The allowable rate of particulate emission (E) for process weight rates (P) not specifically listed in this table shall be obtained by use of the following equations: For $0 < P \leq 0.05$, $E = 0.551$; for $0.05 < P \leq 30$, $E = 4.10(P)^{0.67}$; and for $P > 30$, $E = 55.0(P)^{0.11} - 40.0$.

FIGURE II


A – MAXIMUM ALLOWABLE MASS RATE OF PARTICULATE EMISSIONS - POUNDS PER HOUR
1000
800
600
400
300
200
150
100
80
60
40
30
20
15
10
8
6
4
3
2
1.5
1
CURVE P-3
CURVE P-2
CURVE P-1
a
b
c
d
e
f
g
h
i
(a) A = 0.20*U
(b) A = 0.5782*U^0.6456
(c) A = 0.4239*U^0.7493
(d) A = 0.340*U^0.8228
(e) A = 50
(f) A = 75
(g) A = 100
(h) A = 0.1296*U^0.6846
(i) A = 34.44*U^0.1374
10
100
1000
10,000
100,000
1,000,000
U – UNCONTROLLED MASS RATE OF EMISSION – POUNDS PER HOUR

3745-17-12 Additional restrictions on particulate emissions from specific air contaminant sources in Cuyahoga county.

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of rule 3745-17-01 of the Administrative Code titled "referenced materials."]

(A) Compliance with the emission limitations and control requirements specified in this rule shall be achieved in accordance with the time schedules contained in rule 3745-17-04 of the Administrative Code.

(B) [Reserved.]

(C) The "Cuyahoga Materials" (OEPA premise number 1318006023) or any subsequent owner or operator of the "Cuyahoga Materials" facility located at 2929 Rockefeller avenue, Cleveland, Ohio shall comply with all the following:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the crushed concrete storage piles (OEPA source number F002), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(3) For the concrete processing operations (OEPA source numbers F003 and F004), the following:

(a) All of the particulate emissions from source F004 shall either be vented to a baghouse or controlled by a wet suppression system.

(b) If a baghouse is employed to control source F004, the total combined particulate emissions from all stacks associated with source F004 shall not exceed 2.4 pounds per hour.

(c) Visible particulate emissions of fugitive dust from source F003, and from source F004 if a wet suppression system is employed, shall not exceed the following:

(i) For the screening and conveying operations subject to permit to install number 13-1430, as issued on September 11, 1985, five per cent opacity as a six-minute average.

(ii) For all other operations, ten per cent capacity as a six-minute average.

(D) The "Boyas Excavating, Incorporated" (OEPA premise number 1318007300) or any subsequent owner or operator of the "Boyas Excavating, Incorporated" facility located at 2929 Broadway avenue, Cleveland, Ohio shall comply with all the following control requirements for particulate matter from the sand and gravel processing operation (OEPA source number F001):

(1) All of the particulate emissions from this operation shall either be vented to a baghouse or controlled by a wet suppression system.

(2) If a baghouse is employed, the total combined particulate emissions from all stacks shall not exceed 1.2 pounds per hour.

(3) If a wet suppression system is employed, visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute average.

(E) The "Boyas Excavating, Incorporated" (OEPA premise number 1318578710) or any subsequent owner or operator of the "Boyas Excavating, Incorporated" facility located at 11311 Rockside road, Valley View, Ohio shall not cause or permit any visible particulate emissions, except for a period of time not to exceed three minutes during any sixty-minute observation period, from the unpaved roadways and parking areas (OEPA source number F001).

(F) The "Cuyahoga Concrete Hummell Rd Plant" (OEPA premise number 1318122676) or any subsequent owner or operator of the facility located at 17251 Hummel road, Brook Park, Ohio shall comply with all the following:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the paved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(3) For the cement transfer system associated with the concrete block manufacturing plant (OEPA source number F003), there shall be no visible particulate emissions.

(4) For the aggregate handling operation associated with the concrete block manufacturing plant (OEPA source number F003):

(a) All of the particulate emissions from this operation shall either be vented to a baghouse or controlled by a wet suppression system.

(b) If a baghouse is employed, the total combined particulate emissions from all stacks shall not exceed 0.12 pound per hour.

(c) If a wet suppression system is employed, visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute average.

(5) For the wet concrete batching operation (OEPA source number F004), the particulate emissions shall not exceed 0.17 pound per hour.

(G) The "Cleveland Trinidad Paving Company" (OEPA premise number 1318001799) or any subsequent owner or operator of the "Cleveland Trinidad Paving Company" facility located at 3601 Trumbull avenue, Cleveland, Ohio shall comply with all the following emission limitations for particulate matter:

(1) For asphalt plant number 1 (OEPA source number P901), the particulate emissions shall not exceed 26.3 pounds per hour.

(2) For asphalt plant number 2 (OEPA source number P902), the particulate emissions shall not exceed 9.3 pounds per hour.

(H) The "Cuyahoga Foundry Company" (OEPA premise number 1318171954) or any subsequent owner or operator of the "Cuyahoga Foundry Company" facility located at 4530 East 71st street, Cuyahoga Heights, Ohio shall not cause or permit the particulate emissions from the casting shakeout operation (OEPA source number F002) to exceed 0.32 pound per hour.

(I) [Reserved.]

(J) [Reserved.]

(K) The "Harval, Incorporated" (OEPA premise number 1318005960) or any subsequent owner or operator of the "Harval, Incorporated" facility located at 1971 Carter road, Cleveland, Ohio shall not cause or permit any visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period, from the unpaved roadways and parking areas (OEPA source number F001).

(L) The "Independence Excavating Incorporated" (OEPA premise number 1318225730) or any subsequent owner or operator of the "Independence Excavating Incorporated" facility located at 4905 Warner road, Garfield Heights, Ohio shall comply with all the following control requirements for particulate matter from the concrete processing operation (OEPA source number F003):

(1) All of the particulate emissions from this operation shall either be vented to a baghouse or controlled by a wet suppression system.

(2) If a baghouse is employed, the total combined particulate emissions from all stacks shall not exceed 0.87 pound per hour.

(3) If a wet suppression system is employed, visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute average.

(M) The "Lake Erie Asphalt Products Company" (OEPA premise number 1318220278) or any subsequent owner or operator of the "Lake Erie Asphalt Products Company" facility located at 8200 Old Granger road, Garfield Heights, Ohio shall comply with all the following emission limitations for particulate matter:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the paved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(3) For the asphaltic concrete plant (OEPA source number P901), the particulate emissions shall not exceed 6.0 pounds per hour.

(N) The "Lincoln Electric Company" (OEPA premise number 1318202137) or any subsequent owner or operator of the "Lincoln Electric Company" facility located at 22801 St. Clair Avenue, Cleveland, Ohio shall comply with all the of following:

(1) [Reserved.]

(2) [Reserved.]

(3) [Reserved.]

(4) For the rotary flux kilns A to C (OEPA source numbers P902 to P904), the particulate emissions shall not exceed 2.4 pounds per hour from each kiln.

(O) The "ArcelorMittal Cleveland" (OEPA premise number 1318001613) or any subsequent owner or operator of the "ArcelorMittal Cleveland" facility located at 3060 Eggers avenue, Cleveland, Ohio shall comply with all the following:

(1) [Reserved.]

(2) [Reserved.]

(3) For the hot metal reladling, desulfurization, slag raking, and ladle transfer operations (OEPA source number F209), the total particulate emissions from the baghouse serving this source shall not exceed 21.0 pounds per hour.

(4) [Reserved.]

(5) [Reserved.]

(6) [Reserved.]

(7) [Reserved.]

(8) [Reserved.]

(9) [Reserved.]

(10) For the numbers 94 and 95 basic oxygen furnace vessels at the number 2 shop (OEPA source numbers P925 and P926), the total particulate emissions from all of the stacks of the electrostatic precipitator serving such sources shall not exceed 39.8 pounds per hour.

(11) [Reserved.]

(P) The "ArcelorMittal Cleveland" (OEPA premise number 1318001613) or any subsequent owner or operator of the "ArcelorMittal Cleveland" facility located at 3060 Eggers avenue, Cleveland, Ohio shall comply with all the following:

(1) For boilers A to C (OEPA source numbers B001 to B003), the particulate emissions

shall not exceed 0.086 pound per million Btu of actual heat input from each boiler.

(2) For the paved and unpaved roadways and parking areas - east and west side (OEPA source number F001), visible particulate emissions shall not exceed five per cent opacity, as determined in accordance with paragraph (B)(3) of rule 3745-17-03 of the Administrative Code.

(3) [Reserved.]

(4) [Reserved.]

(5) For the stove stacks associated with blast furnaces C-5 and C-6 (OEPA source numbers P903 and P904), the particulate emissions shall not exceed 11.7 pounds per hour from each source.

(6) For the charging and tapping operations associated with the numbers 1 and 2 basic oxygen furnace vessels at the number 1 shop (OEPA source numbers P905 and P906) and the hot metal desulfurization and hot metal transfer station (OEPA source number F011), the particulate emissions from the stack of the secondary emission control baghouse serving such sources shall not exceed 10.3 pounds per hour.

(7) [Reserved.]

(8) [Reserved.]

(9) [Reserved.]

(10) For the number 1 and 2 basic oxygen furnace vessels at the number 1 shop (OEPA source numbers P905 and P906), the particulate emissions from the suppressed combustion systems serving these sources shall not exceed 15.0 pounds per hour from each system.

(11) [Reserved.]

(12) [Reserved.]

(13) [Reserved.]

(Q) [Reserved.]

(R) The "Meech Foundry, Incorporated" (OEPA premise number 1318224005) or any subsequent owner or operator of the "Meech Foundry, Incorporated" facility located at 4730 Warner road, Garfield Heights, Ohio shall comply with all the following control requirements for particulate matter and recordkeeping requirements:

(1) For the cupola furnace (OEPA source number P901), the particulate emissions shall not exceed 10.8 pounds per hour.

(2) For the inoculation operation associated with the cupola furnace (OEPA source number P901), the operating hours shall not exceed 0.1 hour during any calendar day.

(3) For the iron pouring and cooling operation associated with the cupola furnace (OEPA source number P901), the operating hours shall not exceed 3.0 hours during any calendar day.

(4) Daily records shall be maintained for the operations identified in paragraphs (R)(2) and (R)(3) of this rule to document compliance with the specified hourly operating restrictions.

(S) The "Ohio Aluminum Industries, Incorporated" (OEPA premise number 1318226416) or any subsequent owner or operator of the "Ohio Aluminum Industries, Incorporated" facility located at 4840 Warner road, Garfield Heights, Ohio shall comply with all the following:

(1) For the sand handling operation associated with the sand reclamation process (OEPA source number F001), the particulate emissions shall not exceed 0.90 pound per hour.

(2) For the mold making operation associated with the sand reclamation process (OEPA source number F001), the particulate emissions shall not exceed 0.0055 pound per hour.

(3) For the casting shakeout operation associated with the sand reclamation process (OEPA source number F001), the particulate emissions shall not exceed 0.016 pound per hour.

(4) For the cleaning and finishing process (OEPA source number P901), the following:

(a) The total combined particulate emissions from the control equipment shall not exceed 0.11 pound per hour.

(b) There shall be no visible particulate emissions from the cleaning room.

(T) [Reserved.]

(U) The "Kokosing Materials Plant 519" (OEPA premise number 0142000095 or any subsequent owner or operator of the "Kokosing Materials Plant 519" facility located at 13700 McCracken road, Cleveland, Ohio shall comply with all the following:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the paved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(3) For the asphaltic concrete plant (OEPA source number P901), the particulate emissions shall not exceed 6.0 pounds per hour.

(V) The "Standard Slag Company" (OEPA premise number 1318002662) or any subsequent

owner or operator of the "Standard Slag Company" facility located at Campbell road and Harvard avenue, Cleveland, Ohio shall comply with all the following control requirements for particulate matter:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the paved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(3) For the slag storage piles (OEPA source number F002), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(4) For the slag processing operations (OEPA source number F005):

(a) All of the particulate emissions from this operation shall either be vented to a baghouse or controlled by a wet suppression system.

(b) If a baghouse is employed, the total combined particulate emissions from all stacks shall not exceed 4.9 pounds per hour.

(c) If a wet suppression system is employed, visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute average.

(W) The "Stein, Incorporated" (OEPA premise number 1318003929) or any subsequent owner or operator of the "Stein, Incorporated" facility located at 3100 East 45th street, Cleveland, Ohio shall comply with both the following:

(1) For the slag storage piles (OEPA source number F005), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(2) For the slag processing operations (OEPA source numbers F006 and F007), visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute average.

(X) The "Stein, Incorporated" (OEPA premise number 1318005076) or any subsequent owner or operator of the "Stein, Incorporated" facility located at 3341 Jennings road, Cleveland, Ohio shall comply with all the following emission limitations for particulate matter:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the slag unloading operation (OEPA source number F002), visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute

average.

(3) For the slag processing operation (OEPA source number F003), visible particulate emissions of fugitive dust shall not exceed ten per cent opacity as a six-minute average.

(4) For the slag storage piles (OEPA source number F004), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(Y) [Reserved.]

(Z) If any unpaved roadways and parking areas, or portions thereof, identified in paragraphs (C)(1), (E), (K), and (X)(1) of this rule are paved, the paved portions of the roadways and parking areas shall be subject to a limitation of no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

Effective: 1/20/2018

Five Year Review (FYR) Dates: 6/1/2017 and 01/20/2023

CERTIFIED ELECTRONICALLY
Certification

01/10/2018
Date

Promulgated Under: 119.03
Statutory Authority: 3704.03(E)
Rule Amplifies: 3704.03(A), 3704.03(E)
Prior Effective Dates: 6/14/91, 12/6/91, 11/15/95, 1/31/98, 1/22/08

3745-17-13 Additional restrictions on particulate emissions from specific air contaminant sources in Jefferson county.

[Comment: For dates and availability of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (C) of rule 3745-17-01 of the Administrative Code titled "referenced materials."]

(A) Compliance with the emission limitations and control requirements specified in this rule shall be achieved in accordance with the time schedules contained in rule 3745-17-04 of the Administrative Code.

(B) The "Cyprus Amax Minerals Company" (OEPA premise number 0641000060) or any subsequent owner or operator of the "Cyprus Amax Minerals Company" facility located at 4243 County road 74, Cross Creek township, Jefferson county, Ohio shall comply with the following:

(1) For the unpaved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

(2) For the paved roadways and parking areas (OEPA source number F001), there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

(C) [Reserved.]

(D) The "Mingo Junction Steel Works LLC" (OEPA premise number 0641090010) or any subsequent owner or operator of the "Mingo Junction Steel Works LLC" south facility located at 540 Commercial avenue, Mingo Junction, Ohio shall comply with all the following:

(1) For the roadways and parking areas (OEPA source number F001), this facility shall comply with the work practice plan in the appendix to this rule for the control of fugitive dust.

(2) For the hot metal transfer operation from railcar to charge ladle (OEPA source number F009), the particulate emissions from the baghouse serving this source shall not exceed 3.5 pounds per hour.

(3) For the reheat furnaces number 2 through 4 (OEPA source numbers P006 to P008), the particulate emissions from each furnace shall not exceed 6.0 pounds per hour.

(4) [Reserved.]

(5) For the basic oxygen furnaces (OEPA source numbers P904 and P905), the total particulate emissions from the scrubbers serving these sources shall not exceed 8.86 pounds per hour.

(6) For the desulfurization station (OEPA source number P907), the particulate emissions

from the baghouse serving this source shall not exceed 3.71 pounds per hour.

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Statutory Authority: 3704.03(E)
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Prior Effective Dates: 6/14/91, 12/6/91, 11/15/95, 1/31/98, 1/22/08

Appendix

Work Practice Plan for the Control of Fugitive Dust Emissions
From Roadways and Parking Areas at the Mingo Junction Steel Works LLC,
Mingo Junction (South) Facility

A. Allowable Emission Rates

1. [Reserved.]

2. Total combined emissions of PM_{10} from unpaved roads, parking lots, laydown, entrance, unloading areas and berms, and irregular paved surfaces, and from paved roads, which are located at the Mingo Junction facility and are identified in Sections B and C of this Appendix, shall not exceed 7.67 pounds per hour.

3. Compliance with the emission limitation specified in Section A.2. of this Appendix shall be determined by the methodology set forth in the U.S. Environmental Protection Agency reference document Control of Open Fugitive Dust Sources (EPA-450/3-88-008), Sections 2.0 and 3.0, and using the dust control plans identified in Sections B and C of this Appendix.

B. Unpaved Roads, Parking Lots, Laydown, Entrance, Unloading Areas and Berms, and Irregular Paved Surfaces–Chemical Suppression

1. The Company shall employ dust control measures on all unpaved surfaces, and irregular paved surfaces that cannot be adequately cleaned under the provisions of Section C of this Appendix, identified in this Section and in accordance with the following:

   a. All unpaved surfaces and irregular paved surfaces identified in Attachment 1 (map) shall be treated in accordance with the schedule in Attachment 1, following the initial establishment of chemical ground inventory, with a chemical dust suppressant (petroleum resin emulsions, asphalt emulsions or acrylic cements) on a year-round (twelve-month) basis, except as provided under Sections B.1.e., B.1.f. and D below. The dust suppressant application intensity and frequency during the first two months of this program shall be sufficient to achieve the ground inventory specified in Section B.1.d. by the end of the two-month period.

   b. Tri-weekly, monthly and quarterly applications shall be accomplished before the end of the first full week of the tri-week/month/quarter except as provided under Sections B.1.e., B.1.f. and D below.

   c. For each dust suppressant application during the initial two-month period of the dust control program, the concentrated dust suppressant shall be diluted at a ratio of not more than five (5) parts water to one (1) part concentrate and the resulting solution shall be applied at a minimum rate of 1.0 gallon per square yard of

unpaved or irregular paved surface. The dust suppressant shall be applied at sufficient intervals and intensities after the initial two-month period as to maintain the ground inventory. Except as provided in Sections B.1.f. and D below, the continuing program shall provide for the application of dust suppressant specified in Attachment 1 diluted by no more than seven (7) parts water to one part chemical and applied at a rate of not less than 0.5 gallon per square yard of unpaved or irregular paved surface.

d. A minimum ground inventory of 0.25 gallon of concentrate per square yard of road surface, as specified in Section 3.0 of the USEPA reference document Control of Open Fugitive Dust Sources (EPA-450/3-88-008) shall be maintained.

e. Applications of dust suppressant may be delayed by not more than three (3) days for any scheduled date upon which the unpaved or irregular paved surface is snow orice covered or has experienced > 0.25 inch of rainfall.

f. In the event of persistent adverse weather conditions such as snow orice cover or excessive rainfall, the Company may petition the Director or his representative verbally with written confirmation within three (3) days for extended exemptions which may be granted as deemed appropriate by the Director or his representative.

g. Applications of chemical dust suppressant for the second year (after establishment of the ground inventory specified in Section B.1.d.) and beyond may follow the revised schedule, application intensities, and application concentrations shown in Table 11 of Attachment 1.

2. Compliance with Section B.1. shall be determined in accordance with procedures set forth in this Appendix.

3. Control Equipment

The Company shall ensure the availability, required scheduling, and proper maintenance of spray trucks that are designed and equipped, at minimum, with a 2,000 gallon capacity tank, a spray bar system capable of applying the dust suppressant solution at a coverage rate of at least 1.3 gallons per square yard of surface, a certified flow metering device calibrated in units of gallons per minute, and an apparatus that will facilitate manual applications of the solution to areas not readily accessible by the spray truck.

4. Recordkeeping and Reporting

a. The Company shall maintain records relative to the program to control emissions from unpaved roads, parking lots, laydown, entrance, unloading areas and berms, and irregular paved surfaces identified in Attachment 1. These records shall include, at a minimum, the following:

i. Control equipment maintenance records.

ii. Scheduled and unscheduled equipment malfunctions and downtime.

iii. Meteorological log to include average daily temperature, daily precipitation and unusual meteorological occurrences.

iv. The date, type and quantity received for each delivery of chemical dust suppressant.

v. For each dust suppressant application date and for each unpaved road, area, or berm, or irregular paved surface identified in Attachment 1, start and stop times, average truck speed, number of passes, amount of solution applied, and the dilution ratio of the solution.

vi. Identification of areas where manual spraying was utilized.

b. These records shall be retained by the Company for five (5) years and shall be made available to the Director or his representative upon request.

c. A calendar quarterly report shall be submitted to the Director or his representative. The report shall contain the information cited above and a description of any deviations from the control program and the reasons for such deviations. The report shall be certified to be accurate by management and shall be submitted within fifteen (15) days after the end of the quarter.

d. The Company shall notify the Director or his representative, in writing, of any noncompliance with Section B of this Appendix. Such notice shall be submitted within five (5) days of the non-compliance occurrence and shall include a detailed explanation of the cause of such noncompliance, all remedial actions required, and the date by which compliance was or will be reestablished.

e. The Company shall submit to the Director or his representative an annual report which demonstrates compliance with the PM_{10} emission rate specified in Section A.2. of this Appendix for the unpaved surfaces, and the irregular paved surfaces that cannot be adequately cleaned under the provisions of Section B of this Appendix, at the Mingo Junctionfacility. The PM_{10} emission rate for each individual network segment identified in Attachment 1 shall be reported along with the total PM_{10} emission rate for the facility. The PM_{10} emission rates shall be calculated using the methodology specified in Section A.3. of this Appendix and shall reflect the road network as it exists at the end of each calendar year. Each annual report shall be submitted by no later than January 31 of the succeeding year.

5. The Company shall implement the dust control measures of Section B no later than the effective date of this rule.

C. Paved Roads–Vacuum Sweeping

1. The Company shall employ dust control measures on all paved roads identified in this Section and in accordance with the following:

a. All paved roads identified in Attachment 1 (map) of this Appendix shall be cleaned via vacuum sweeping on a daily, year-round (twelve-month) basis except as provided under Sections C.1.a.i., C.1.a.ii., and D below.

i. Daily sweeping may be suspended only when there is snow, ice cover, or standing water on the surface. All such suspensions shall be reported and verified as required under Section C.4. (Recordkeeping and Reporting).

ii. Irregular paved surfaces that cannot feasibly or adequately be cleaned by vacuum sweeping shall be chemically sprayed in accordance with provisions of Section B.

2. Compliance with Section C.1. shall be determined in accordance with procedures set forth in this Appendix.

3. Control Equipment

a. The Company shall ensure the availability, required scheduling, and proper maintenance of vacuum sweeping trucks. The collection hopper of the vacuum truck shall be designed and maintained so as to prevent fugitive dust emissions.

b. Material collected by the vacuum sweeping truck shall be handled and disposed of in a manner that minimizes fugitive dust emissions, including but not limited to, wet dumping and chemical treatment or stabilization of stored material.

4. Recordkeeping and Reporting

a. The Company shall maintain daily records for the paved road cleaning program. These records shall include, at a minimum, the following:

i. Control equipment maintenance records.

ii. Scheduled and unscheduled equipment malfunctions and downtime.

iii. Meteorological log to include average daily temperature, daily precipitation and unusual meteorological occurrence.

iv. Qualitative description of the road surface conditions.

v. Start and stop time, average truck speed, number of passes for each paved road identified in Attachment 1.

vi. Identification of areas where chemical treatment was utilized.

vii. Qualitative descriptions of areas of unusually high silt loadings from spills and track-ons.

viii. Total amount of dust collected by vacuum trucks in pounds or tons.

b. These records shall be retained by the Company for five (5) years and shall be made available to the Director or his representative upon request.

c. A calendar quarterly report shall be submitted to the Director or his representative. The report shall contain all of the information cited above and a description of any deviation from the control program and the reasons for such deviation. The report shall be certified to be accurate by Company management and shall be submitted within fifteen (15) days after the end of the quarter.

d. The Company shall notify the Director or his representative, in writing, of any non-compliance with Section C of this Appendix. Such notice shall be submitted within five (5) days of the non-compliance occurrence and shall include a detailed explanation of the cause of such non-compliance, all remedial actions required and the date by which compliance was or will be reestablished.

e. The Company shall submit to the Director or his representative an annual report which demonstrates compliance with the PM_{10} emission rate specified in Section A.1. of this Appendix for the paved roads (excluding irregular paved surfaces that cannot be adequately cleaned under the provisions of Section C of this Appendix) at the Mingo Junction facility. The PM_{10} emission rate for each individual network segment identified in Attachment 1 shall be reported along with the total PM_{10} emission rate for each facility. The PM_{10} emission rates shall be calculated using the methodology specified in Section A.3. of this Appendix and shall reflect the road network as it exists at the end of each calendar year. Each annual report shall be submitted by no later than January 31 of the succeeding year.

5. The Company shall implement the dust control measures of Section C no later than the effective date of this rule.

D. Changes to Paved and Unpaved Road/Area Dust Control Programs

1. The Company has the right to petition the Ohio EPA for written approval of definitive treatment methods, treatment schedules and procedures or reporting requirements different from those required herein. No action shall be taken by the Company in employing the alternative practices until the Director or his representative issues a written approval to the Company. Such alternative practices must be demonstrated to the Director or his representative to result in equivalent dust control effectiveness in accordance with Control of Open Fugitive Dust Sources (EPA-450/3-88-008). The Company reserves the right to contest any disapproval of such petition in the appropriate judicial forum.

2. In the event that the Company certifies that all of a roadway or area identified in Attachment 1 has been discontinued, the dust suppression or surface cleaning program for that road or area may be terminated or reduced. If the Company begins to utilize any new roadway, parking lot or other vehicular activity area not shown in Attachment 1, it shall notify the Director or his representative in the reports required under this Appendix and treat or clean the road or area in accordance with the procedures contained herein, unless more stringent requirements are specified in any permit to install issued by the Ohio EPA for such roadway or area.

3. The Director or his representative shall not be precluded from requesting adjustments, including increased chemical suppressant application or cleaning, if on-site inspections reveal that the program contained herein does not prevent excessive visible dust entrainment and emissions from a particular road or area.

4. In the event that an unpaved road or area that has been chemically treated becomes completely hardened and cemented by such treatment so as to become like a paved road as demonstrated by observation, by compaction tests and silt analyses, or in the event that the Company paves any unpaved road or area, that road or area may be treated as a paved surface and cleaned in accordance with the procedures outlined in Section C.

Attachment 1
Figure 1: [Reserved]

Attachment 1 Continued

Tables 1 and 2

[Reserved]

Attachment 1 Continued

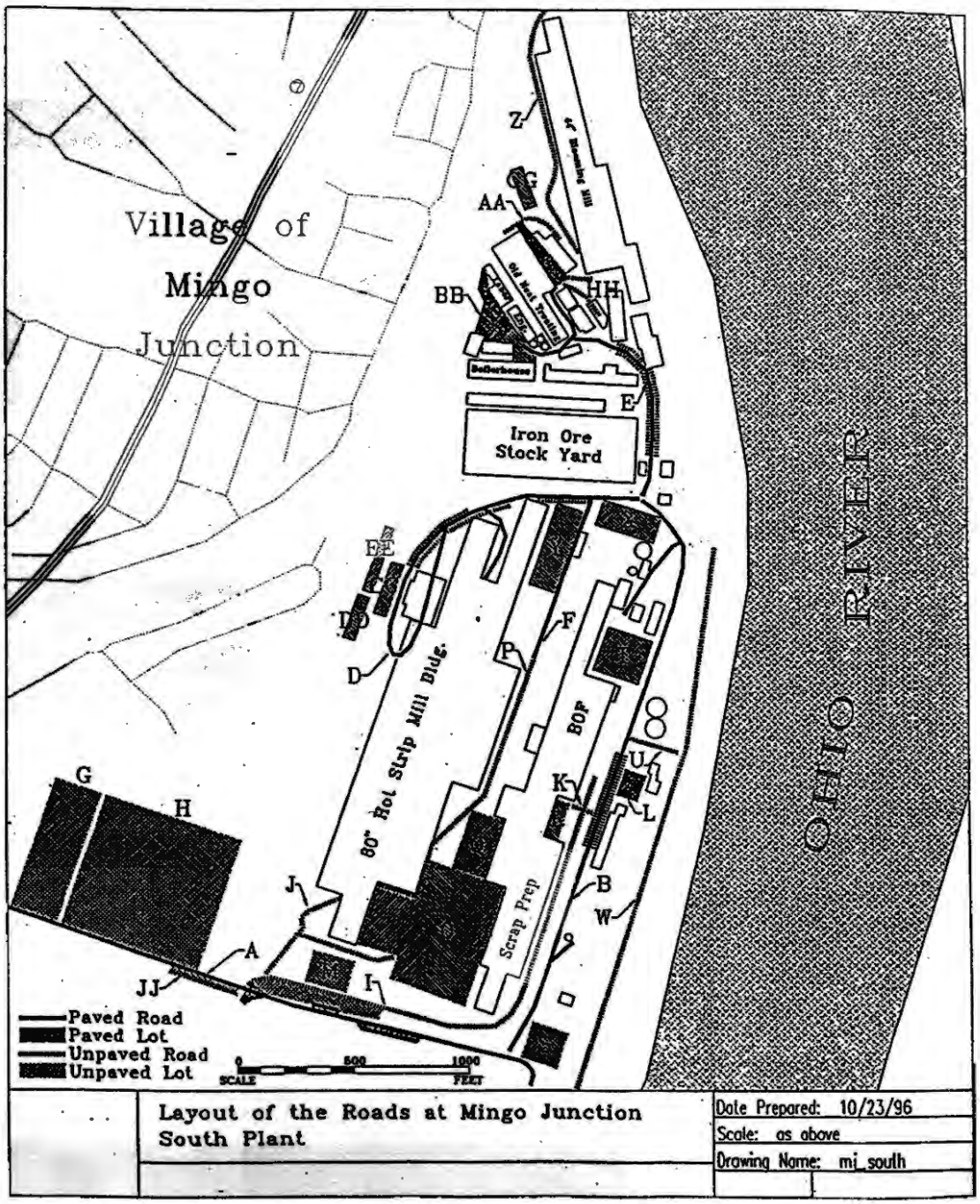
Table 3: [Reserved]

Attachment 1 Continued

Table 4: [Reserved]

Attachment 1 Continued

Figure 2: Layout of the Roads at Mingo Junction Steel Works LLCSouth Plant



Attachment 1 Continued

Tables 5 and 6:Mingo Junction Steel Works LLC,
Mingo Junction South Plant Roads

Table 1 - Paved Roads

Road Section	Length (feet)	Width (feet)	Area (sq. yds.)	Description
A	2,700	25	7,500	Entrance Road
B	1,165	16	2,071	BOF – Scrap Handling Road
D	1,800	16	3,200	80” Hot Strip Mill Road
E	900	16	1,600	Blast Furnace – Labor Office Road
F	375	16	667	Center Road Section
BB	600	16	1,067	Office Road
HH	700	15	1,167	Fork Truck Road, Paved Section

Table 2 - Unpaved Roads, Areas and Wide Berms

Road Section	Length (feet)	Width (feet)	Area (sq. yds.)	Description
B	980	6	653	Scrap Handling Road Berms
D	1,650	6	1,100	80” Hot Strip Mill Road Wide Berms
E	590	8	524	Blast Furnace – Labor Office Road Berms
G	600	200	13,333	Truck Turnaround Area
H	650	600	43,333	Main Parking Lot
I	2,630	40	11,689	Slag Haul Road and Berms
J	513	30	1,710	Strip Mill Road
K	80	20	178	Caster Access Road
M	138	180	2,760	Strip Mill Area
O	2,340	12	3,120	Slab Laydown
P	1,614	12	2,152	Middle Road
Q	175	75	1,458	Lab Parking
R	170	60	1,133	BOF 4 Parking
S	160	160	2,844	IMS Corner
T	200	200	4,444	Lime Area
U	225	15	375	Short Road
W	2,700	12	3,600	River Road
X	260	115	3,322	Used Machine Parts Storage Area
Y	380	120	5,067	Cooling Tower Area
Z	1,070	20	2,378	44” Blooming Mill Road
AA	200	20	444	Old Heat Treat Road
CC	240	55	1,467	Cold Storage Yard
DD	200	50	1,111	State Street Parking Lot 1
EE	300	40	1,333	State Street Parking Lot 2
GG	185	55	1,131	44” Blooming Mill Storage Yard
HH	275	15	458	Fork Truck Road, Unpaved Section
JJ	300	30	1,000	Visitor’s Parking Area

Attachment 1 Continued

Table 7: Initial Application of Chemical Dust Suppressant at the Mingo Junction Steel Works LLC Mingo Junction South Facility

Mixture = 1 part Chemical
5 part water
Application Intensity = 1 gal./yd^2

Road Section	Area (sq. yds.)	Chemical (gal./appl.)	Mixture (gal./appl.)	Application Frequency	Initial Application (gal.)	
					Chemical	Mixture
B	653	109	653	1	109	653
D	1,100	183	1,100	1	183	1,100
E	524	87	524	1	87	524
G	13,333	2,222	13,333	1	2,222	13,333
H	9,285	1,547	9,285	3	4,641	27,855
I*	11,689	1,948	11,689	2	3,896	23,378
J	2,338	390	2,338	3	1,169	7,014
K	178	30	178	2	59	356
M	2,760	460	2,760	1	460	2,760
O	3,120	520	3,120	1	520	3,120
P	1,818	303	1,818	1	303	1,818
Q	1,458	243	1,458	2	486	2,917
R	1,133	189	1,133	2	378	2,267
S	2,844	474	2,844	3	1,422	8,533
T	4,444	741	4,444	3	2,222	13,333
U	375	63	375	3	188	1,125
W	3,600	600	3,600	3	1,800	10,800
X	3,322	554	3,322	1	554	3,322
Y	5,067	844	5,067	1	844	5,067
Z	2,378	396	2,378	3	1,189	7,133
AA	444	74	444	3	222	1,333
CC	1,467	244	1,467	1	244	1,467
DD	1,111	185	1,111	2	370	2,222
EE	1,333	222	1,333	2	444	2,667
GG	1,131	188	1,131	1	188	1,131
HH	458	76	458	3	228	1,375
JJ	1,000	167	1,000	2	334	2,000
Total gal./application		12,952	77,712	gal/initial appl	24,658	147,950

* This road is treated as a paved road supplemented with chemical dust suppressant.

Attachment 1 Continued

Table 8: Follow-up Application of Chemical Dust Suppressant at the Mingo Junction Steel Works LLC Mingo Junction South Facility
Based on 52 Week/Year Season During Initial Year

Mixture = 1 part Chemical
7 part water
Application Intensity = 0.5 gal./yd^2

Road Section	Area (sq. yds.)	Chemical (gal./appl.)	Mixture (gal./appl.)	Application Frequency	Yearly Total (gal.)	
					Chemical	Mixture
B	653	41	327	4/yr.-Quarterly application	163	1,307
D	1,100	69	550	4/yr.-Quarterly application	275	2,200
E	524	33	262	4/yr.-Quarterly application	131	1,049
G	13,333	833	6,667	4/yr.-Quarterly application	3,333	26,667
H	9,285	580	4,642	4/yr.-Quarterly application	2,321	18,570
I*	11,689	731	5,844	4/yr.-Quarterly application	2,922	23,378
J	2,338	146	1,169	15/yr.-24-day application	2,192	17,538
K	178	11	89	15/yr.-24-day application	167	1,333
M	2,760	173	1,380	15/yr.-24-day application	2,588	20,700
O	3,120	195	1,560	15/yr.-24-day application	2,925	23,400
P	1,818	114	909	15/yr.-24-day application	1,704	13,632
Q	1,458	91	729	4/yr.-Quarterly application	365	2,917
R	1,133	71	567	4/yr.-Quarterly application	283	2,267
S	2,844	178	1,422	15/yr.-24-day application	2,667	21,333
T	4,444	278	2,222	15/yr.-24-day application	4,167	33,333
U	375	23	188	12/yr.-monthly application	281	2,250
W	3,600	225	1,800	12/yr.-monthly application	2,700	21,600
X	3,322	208	1,661	4/yr.-Quarterly application	831	6,644
Y	5,067	317	2,533	4/yr.-Quarterly application	1,267	10,133
Z	2,378	149	1,189	15/yr.-24-day application	2,229	17,833
AA	444	28	222	12/yr.-monthly application	333	2,667
CC	1,467	92	733	4/yr.-Quarterly application	367	2,933
DD	1,111	69	556	4/yr.-Quarterly application	278	2,222
EE	1,333	83	667	12/yr.-monthly application	1,000	8,000
GG	1,131	71	565	12/yr.-monthly application	848	6,783
HH	458	29	229	4/yr.-Quarterly application	115	917
JJ	1,000	63	500	15/yr.-24-day application	938	7,500
Total gal./application		4,898	39,183	Total gal./yr. =	37,388	299,106

* This road is treated as a paved road supplemented with chemical dust suppressant.

Attachment 1 Continued

Tables 9 and 10: Control Efficiencies for On-going Control Programs

Table 5 – Control Efficiencies for Monthly Applications				
Averaging Period	Application Concentration	Ground Inventory (gal/yd^2 chemical) at start of period	1-Month Average Control Efficiency From EPA-450/3-88-008 Figure 3-4 (%)	Running Average Control Efficiency (%)
Jan 1–Feb 1	1.00 gal/yd^2 of 1:6 solution	0.143	78	78
Feb 1–Mar 1	0.50 gal/yd^2 of 1:12 solution	0.181	84	81
Mar 1–Apr 1	0.50 gal/yd^2 of 1:12 solution	0.220	89	84
Apr 1–May 1	0.50 gal/yd^2 of 1:12 solution	0.258	90	85
May 1–Jun 1	0.50 gal/yd^2 of 1:12 solution	0.297	90	86
Jun 1–Jul 1	0.50 gal/yd^2 of 1:12 solution	0.335	90	87
Jul 1–Aug 1	0.50 gal/yd^2 of 1:12 solution	0.374	90	87
Aug 1–Sep 1	0.50 gal/yd^2 of 1:12 solution	0.412	90	88
Sep 1–Oct 1	0.50 gal/yd^2 of 1:12 solution	0.451	90	88
Oct 1–Nov 1	0.50 gal/yd^2 of 1:12 solution	0.489	90	88
Nov 1–Dec 1	0.50 gal/yd^2 of 1:12 solution	0.527	90	88
Dec 1–Jan 1	0.50 gal/yd^2 of 1:12 solution	0.566	90	89

Table 6 – Control Efficiencies for Bimonthly Applications				
Averaging Period	Application Concentration	Ground Inventory (gal/yd^2 chemical) at start of period	1-Month Average Control Efficiency From EPA-450/3-88-008 Figure 3-4 (%)	Running Average Control Efficiency (%)
Jan 1–Mar 1	1.00 gal/yd^2 of 1:6 solution	0.143	58	58
Mar 1–May 1	0.50 gal/yd^2 of 1:12 solution	0.181	62	60
May 1–Jul 1	0.50 gal/yd^2 of 1:12 solution	0.220	67	62
Jul 1–Sep 1	0.50 gal/yd^2 of 1:12 solution	0.258	67	64
Sep 1–Nov 1	0.50 gal/yd^2 of 1:12 solution	0.297	67	64
Nov 1–Jan 1	0.50 gal/yd^2 of 1:12 solution	0.335	67	65

Attachment 1 Continued

Table 11: Chemical Applications for On-going Programs Based on "Control of Open Fugitive Dust Sources"

Road	Description	Daily Vehicle Passes[1]					Length (mi)	VMT /day	Speed (mph)	Avg. No. Wheels	Avg. Weight (tons)	Application Frequency	Worst Case Uncontrolled PM10 (g/s)	Control Efficiency (%)	Controlled PM10 (g/s)	
		A	B	C	D	Total									Worst Case	Annual
	SOUTH PLANT															
B	Scrap Handling Road Berms	7	3	11		21	0.1856	3.90	5	8	24	Bimonthly	2.602597E-02	65	9.176779E-03	5.067222E-03
D	80" Hot Strip Mill Road Wide Berms	2		6		8	0.3125	2.50	5	9	31	Bimonthly	2.125125E-02	65	7.493210E-03	4.137591E-03
E	BF–Labor Office Road Berms	56				56	0.1117	6.26	5	4	2	Bimonthly	5.194226E-03	65	1.831489E-03	1.011309E-03
G	Truck Turnaround Area	229				229	0.1136	26.01	5	4	2	Bimonthly	2.159377E-02	65	7.613984E-03	4.204279E-03
H	Main Parking Lot	213	34			247	0.0609	15.04	5	3	4	Bimonthly	1.691390E-02	65	5.963857E-03	3.293115E-03
J	Strip Mill Road				84	84	0.1329	11.16	5	4	92	Monthly	1.351196E-01	89	1.551779E-02	8.568593E-03
K	Caster Access Road		13	114	3	130	0.0151	1.97	5	11	37	Monthly	2.065485E-02	89	2.372103E-03	1.309825E-03
M	Strip Mill Area (3)				12	12	0.0261	0.31	15	4	92	Monthly	1.139181E-02	89	1.308291E-03	7.224106E-04
O	Slab Laydown (2)				72	72	0.1108	7.98	5	4	92	Monthly	9.658277E-02	89	1.109204E-02	6.124786E-03
P	Center Road Section (2)	44				44	0.2582	11.36	15	4	2	Bimonthly	2.829078E-02	65	9.975354E-03	5.508177E-03
Q	Lab Parking (2)	20				20	0.0331	0.66	5	4	2	Bimonthly	5.502358E-04	65	1.940136E-04	1.071302E-04
R	BOF 4 Parking (2)	66	30			96	0.0322	3.09	5	5	6	Bimonthly	6.195263E-03	65	2.184455E-03	1.206210E-03
S	IMS Corner	273	46	229		548	0.0303	16.61	15	7	19	Monthly	2.675367E-01	89	3.072522E-02	1.696581E-02
T	Lime Area	7		86		93	0.0379	3.52	15	10	37	Monthly	1.097210E-01	89	1.260089E-02	6.957943E-03
U	Short Road	2				2	0.0426	0.09	15	4	2	Monthly	2.122338E-04	89	2.437397E-05	1.345878E-05
W	River Road	2				2	0.5114	1.02	15	4	2	Bimonthly	2.546806E-03	65	8.980060E-04	4.958597E-04
X	Used Machine Parts Storage Area (2)	10	5			15	0.0492	0.74	5	5	6	Bimonthly	1.538109E-03	65	5.416335E-04	2.990784E-04
Y	Cooling Tower Area (2)	15	8			23	0.0720	1.66	5	5	7	Monthly	3.529074E-03	89	4.052960E-04	2.237958E-04
Z	44" Blooming Mill Road	9				9	0.2027	1.82	15	4	2	Monthly	4.541803E-03	89	5.216029E-04	2.880180E-04
AA	Old Heat Treat Road	18				18	0.0379	0.68	15	4	2	Bimonthly	1.698821E-03	65	5.990059E-04	3.307583E-04
CC	Cold Storage Yard (2)	5				5	0.0455	0.23	5	4	2	Bimonthly	1.886523E-04	65	6.651896E-05	3.673035E-05
DD	State Street Parking Lot 1 (4)	20				20	0.0379	0.75	5	4	2	Monthly	6.288409E-04	89	7.221916E-05	3.987788E-05
EE	State Street Parking Lot 2 (4)	30				30	0.0568	1.70	5	4	2	Monthly	1.414892E-03	89	1.624931E-04	8.972523E-05
GG	44" Blooming Mill Storage Yard (2)	18				18	0.0350	0.63	5	4	2	Bimonthly	5.235101E-04	65	1.845901E-04	1.019267E-04
HH	Fork Truck Road, Unpaved Section	27				27	0.0521	1.41	15	4	2	Monthly	3.501858E-03	89	4.021705E-04	2.220699E-04
JJ	Visitor's Parking Area (2)	60	12			72	0.0568	4.09	5	5	4	Monthly	6.020630E-03	89	6.914386E-04	3.817976E-04
													7.933652E-01		1.226188E-01	6.770749E-02

1. Vehicle types and specifications are as follows:

Type	Weight (tons)	Wheels
A	2	4
B	15	7
C	40	11
D	55 empty 130 full	4

153 Mean Annual Days With Rain
347 Working Days per Year
Bimonthly means every 2 months.

2. Parking lot traffic is based on Daily Vehicle Passes of nearest road.
3. Type D vehicles (slab handlers) travel these areas only.

4. Capacity estimated by size.

3745-17-14 Contingency plan requirements for Cuyahoga and Jefferson counties.

(A) By not later than April 1, 1992, the owner or operator of each facility identified below shall submit to the Ohio EPA approvable control strategies and compliance schedules which meet the following:

(1) The control strategies shall be capable of reducing the particulate emissions from each of the facilities identified in this paragraph by each of the two levels specified in this paragraph for each facility:

Facility Name (premise number)	Total, required particulate emission reductions for the facility (in pounds per hour at the maximum operating rates)	
	Fifteen per cent reduction level	Twenty-five per cent reduction level
United Ready Mix (1318005960)	1.1	1.1
International Mill Service, Incorporated (1741090068)	0.8	0.8

(2) Except as otherwise provided in this paragraph, the particulate emission reductions specified in paragraph (A)(1) of this rule shall be obtained from the sources identified for each affected facility in rules 3745-17-12 and 3745-17-13 of the Administrative Code. If the required reductions cannot reasonably be obtained from those sources, control strategies may be developed for other sources at the facility in order to meet the required reductions for the facility.

(3) In calculating the control strategy, hourly particulate emission rate for a source, the maximum operating rate for the source shall be used. In addition, for a source identified in rule 3745-17-12 or 3745-17-13 of the Administrative Code, the baseline, hourly particulate emission rate shall be based upon the allowable emission rate specified in those rules and the maximum operating rate; and the control strategy shall be designed to reduce the particulate emissions below that baseline, hourly particulate emission rate. For a source which is not identified in rule 3745-17-12 or 3745-17-13 of the Administrative Code, the baseline, hourly particulate emission rate shall be based upon the actual or allowable emission rate, whichever is lower, and the maximum operating rate; and the control strategy shall be designed to reduce the particulate emissions below that baseline, hourly particulate emission rate.

(4) The following information shall be submitted for each source for which a control strategy is developed:

(a) A description of the source and the existing control equipment or control measures.

(b) The Ohio EPA application number.

(c) The hourly, baseline particulate emission rate, and the assumptions and calculations which were used to derive the emission rate.

(d) A description of the type of control equipment or control measures which will be employed to reduce the hourly emission rate, including the general design specifications or operating parameters.

(e) The hourly particulate emission rate that will be achieved by employing the proposed control equipment or control measures, and the assumptions and calculations which were used to derive the emission rate.

(f) The approximate total installed cost and annual operating cost for the proposed control equipment or control measures, and the assumptions and calculations which were used to derive the costs.

(5) The schedule for implementing each control strategy shall commence upon a formal determination and notification by the Ohio EPA or the United States environmental protection agency that the county where the facility is located is not in compliance with the ambient air quality standards for PM_{10}, as specified in rule 3745-25-02 of the Administrative Code. The schedule shall include dates for the following milestones:

(a) Award contracts for emission control systems or process modifications, or issue orders for the purchase of component parts to accomplish emission control or process modification.

(b) Initiate on-site construction or installation of emission control equipment or process change.

(c) Complete on-site construction or installation of emission control equipment or process change.

(d) Achieve final compliance.

The owner or operator shall demonstrate to the satisfaction of the director that the schedule is as expeditious as practicable.

(B) The control strategies and compliance schedules submitted in accordance with paragraph (A) of this rule shall be approved by the director through the issuance, pursuant to division (R) of section 3704.03 of the Revised Code, of administrative findings and orders. The findings and orders shall be submitted to and approved by the United States environmental protection agency as a revision to the Ohio state implementation plan for particulates.

(C) Upon a formal determination and notification by the Ohio EPA or the United States environmental protection agency that Cuyahoga county or Jefferson county is not in compliance with the ambient air quality standards for PM_{10}, as specified in rule 3745-25-02 of the Administrative Code, the owner or operator of each facility identified in

paragraph (A)(1) of this rule shall implement the control strategies and schedules which have been approved by the director. (Such formal determination and notification of nonattainment shall not occur prior to January 1, 1994.) If the determination and notification of nonattainment are based upon a twenty-four-hour average ambient air concentration of PM_{10} of greater than one hundred fifty micrograms per cubic meter and less than or equal to one hundred seventy-two and one half micrograms per cubic meter, the owner or operator of each affected facility shall implement the set of approved control strategies and compliance schedules which are designed to reduce the hourly particulate emission rate by fifteen per cent or more. If the determination and notification of nonattainment are based upon a twenty-four-hour average ambient air concentration of PM_{10} of greater than one hundred seventy-two and one half micrograms per cubic meter, the owner or operator of each affected facility shall implement the approved control strategies and compliance schedules which are designed to reduce the hourly particulate emission rate by twenty-five per cent or more.

(D) Notwithstanding paragraph (C) of this rule, if the determination and notification of nonattainment referenced in paragraph (C) of this rule reflects continued nonattainment in only a portion of the county, the director may limit the requirement for implementation of contingency measures to those facilities which are identified in paragraph (A)(1) of this rule and which are located either in that portion of Jefferson county within a two-kilometer radius from the ambient air quality monitor showing continued nonattainment or in that portion of Cuyahoga county within a three-kilometer radius from the ambient air quality monitor showing continued nonattainment.

(E) For purposes of this rule, PM_{10} shall be defined and determined in accordance with paragraph (B)(21) of rule 3745-17-01 of the Administrative Code.

Effective: 1/20/2018

Five Year Review (FYR) Dates: 6/1/2017 and 01/20/2023

CERTIFIED ELECTRONICALLY
Certification

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